

IR_Gv720

I

Test Suite Overview

Test Suite Structure

Suite Name : IR_Gv720
Standards Ref :
PICS Ref :
PIXIT Ref :
Test Method(s) :
Comments :

Test Group Reference	Selection Ref	Test Group Objective	Page Nr
IntersytemHO/			1049
CellReselection/			1096
Classmark_Interrogation/			1114
DTM/			1123

Detailed Comments :

Test Case Index				
Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
IntersystemHO/	tc_60_1	GERAN_Band_SpeechAnyRate	Inter system handover to UTRAN/From GSM/Speech/Success	1049
IntersystemHO/	tc_60_2a	GERAN_C286	Inter system handover to UTRAN/From GSM/Data/Same data rate/Success	1058
IntersystemHO/	tc_60_3a	GERAN_C287	Inter system handover to UTRAN/From GSM/Data/Data rate upgrading/Success	1065
IntersystemHO/	tc_60_4	GERAN_Band_SpeechFR	Inter system handover to UTRAN/From GSM/Speech/Establishment/Success	1073
IntersystemHO/	tc_60_5	GERAN_Band_SpeechFR	Inter system handover to UTRAN/From GSM/Speech/Blind HO/Success	1079
IntersystemHO/	tc_60_6	GERAN_Band_SpeechFR	Inter system handover to UTRAN/From GSM/Speech/Failure	1084
IntersystemHO/	tc_60_10	GERAN_Band_SpeechAnyRate	Inter system handover to UTRAN/From GSM/Speech/Success	1088
CellReselection/	tc_20_22_29	UMTS_GPRS	Packet Measurement order procedure / Downlink transfer / Normal case / 3G cell reselection dedicated parameters	1096
CellReselection/	tc_20_25_2	GERAN_Band_SpeechAllBands	Intersystem Cell Reselection / Idle Mode / FDD_Qmin	1105
CellReselection/	tc_20_25_3	GERAN_Band_SpeechAllBands	Intersystem Cell Reselection / Idle Mode / FDD_Qoffset	1108
CellReselection/	tc_20_25_4	GERAN_Band_SpeechAllBands	Intersystem Cell Reselection / Idle Mode / Qsearch_I	1111
Classmark_Interrogation/	tc_26_6_11_3	GERAN_Band_SpeechAnyRate	Test of Classmark interrogation / UTRAN Classmark Change	1114
Classmark_Interrogation/	tc_26_6_11_4	GERAN_Band_SpeechAnyRate	Test of Early UTRAN Classmark Sending	1118
DTM/	tc_41_5_1_1_1_4	RRC_FDD_DTM	Uplink TBF establishment with no reallocation of CS resources / Abnormal cases / Inter System to UTRAN Handover Command	1123
Detailed Comments :				

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
UMTS_Specific/	ts_2DCH_ModifyStreamUnknown14_4_IR_G		1129
UMTS_Specific/	ts_2DCH_ModifyStreamUnknown28_8_IR_G		1131
UMTS_Specific/	ts_ActivateCiphering_NoSRB4		1133
UMTS_Specific/	ts_ActivateIntegrity_NoSRB4		1136
UMTS_Specific/	ts_CRLC_DL_CipherCfgSRB1_3		1139
UMTS_Specific/	ts_CRLC_UL_Integrity_NoSRB4		1140
UMTS_Specific/	ts_CellChange_RAUpdate_NoSRB4		1141
UMTS_Specific/	ts_GetHFN		1142
UMTS_Specific/	ts_GetRRC_MessageSN_NoSRB4		1143
UMTS_Specific/	ts_ModifyPDP_Context_AcceptOrDeactivate		1144
UMTS_Specific/	ts_RRC_ConnRel_RelDPCH		1146
UMTS_Specific/	ts_RRC_Security_NoSRB4		1148
UMTS_Specific/	ts_SS_1DCH_DCCH_Cfg_DPCH_Offset		1157
UMTS_Specific/	ts_SS_1DCH_DCCH_Modify_IR_G		1159
UMTS_Specific/	ts_SS_4DCH_Modify_IR_G		1160
UMTS_Specific/	ts_SS_CreateCellDCH_DPCH_Offset		1162
UMTS_Specific/	ts_SS_RB2_RB3_ReCfg		1163
UMTS_Specific/	ts_SS_RB2_RB3_ReCfg_DefCfg1		1164
UMTS_Specific/	ts_SS_Reconf_DPCH_Speech		1165
UMTS_Specific/	ts_SS_Reconf_DPCH_StreamingUnknown14_4k_28_8k_57_6k		1166
UMTS_Specific/	ts_SS_Reconf_DPCH_StreamingUnknown28_8k_57_6k		1168
UMTS_Specific/	ts_SSconfigToInitialState_DPCH_Offset		1169
UMTS_Specific/	ts_SendDefSysInfoMulRatHo		1170
UMTS_Specific/	ts_SendNoSegMulRatHo		1172
UMTS_Specific/	ts_SendSIB16_MulRatHo		1173
UMTS_Specific/	ts_SendSIB5_MulRatHo		1185
UMTS_Specific/	ts_SetDL_RRC_MessageSN_NoSRB4		1189
UMTS_Specific/	ts_U_GPRSAttach		1190
UMTS_Specific/	ts_RAUpdate_AuthCiph_NoSRB4		1192
UMTS_Specific/	ts_CellChange_RAUpdate		1194
GSM_Specific/	ts_G_CC_EnterU1		1197
GSM_Specific/	ts_G_CC_EnterU10_MT		1199
GSM_Specific/	ts_G_CC_EnterU10_MT_Speech		1202
GSM_Specific/	ts_InitAssignmentCmd_HR		1203
GSM_Specific/	ts_G_CheckTimeFrames		1204
GPRS_Specific/	ts_GERANIdleUpdated		1205
GPRS_Specific/	ts_GPRSAttach		1207
GPRS_Specific/	ts_GPRS_Authentication		1209
GPRS_Specific/	ts_EstablishGPRSPDPContext2		1212

Continued on next page

Continued from previous page

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
GPRS_Specific/Others/	ts_AT_OrgPS_Call_Type2		1214
GPRS_Specific/Others/	ts_AT_SetQoS_Type2		1217
GPRS_Specific/Others/	ts_triggerMSToSend1KBytes		1217
GPRS_Specific/Others/	ts_GetFNFromRFN		1218
DTM_Specific/	ts_DTM_IdleUpdated		1219
DTM_Specific/	ts_DTM_GPRSAttach		1221
DTM_Specific/	ts_DTM_GPRS_Authentication		1222
DTM_Specific/	ts_DTM_EstablishGPRSPDPCont ext2		1225
RRCM_CC_StepsForMultiRAT/	ts_CC_InitTCV_MT_ForMultiRAT		1227
RRCM_Steps/	ts_DL_InitTurboSupport		1231
RRCM_Steps/	ts_InitCapability		1231
RRCM_Steps/	ts_InitPDCP_Capability		1232
RRCM_Steps/	ts_InitSimultaneousSCCPCH_DP CH_Reception		1232
RRCM_Steps/	ts_UL_InitTurboSupport		1233
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSB1_MulRatOrBMC		1234
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB11_MulRatOrBMC		1236
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB18_MulRatOrBMC		1239
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB1_MulRatOrBMC		1240
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB2_MulRatOrBMC		1241
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB3_MulRatOrBMC		1242
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB4_MulRatOrBMC		1243
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB7_MulRatOrBMC		1244
L3M_CC_Steps/	ts_CC_BS20_MT		1245
L3M_CC_Steps/	ts_CC_BS30_MT		1250
L3M_CC_Steps/	ts_CC_BasicServMO		1254
L3M_CC_Steps/	ts_CC_BasicServMT		1255
L3M_CC_Steps/	ts_CC_CheckServSupported		1256
L3M_CC_Steps/	ts_CC_InitTCV_MO		1261
L3M_CC_Steps/	ts_CC_InitTCV_MT		1263
L3M_CC_Steps/	ts_CC_TS61_MT		1265
L3M_CC_Steps/	ts_CC_Disconnect		1266
L3M_MM_GMM_Steps/	ts_MM_IMSI_Detach		1267
L3M_MM_GMM_Steps/	ts_GMM_DetachOnSwitchOff		1270
L3M_MM_GMM_Steps/	ts_RegistrationOnCS		1275
L3M_RRC_Steps/	ts_RRC_ConnRejectGMM_Detach		1276
L3M_RRC_Steps/	ts_RRC_ConnRel_AfterSwitchOff		1277
L3M_SM_Steps/	ts_DeactivatePDP_ContextMT		1282
L3M_SM_Steps/	ts_InitialiseDlyAndTrafficClass		1283
L3M_SM_Steps/	ts_SetTI_Rsp		1283

Continued on next page

Continued from previous page

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
L3M_SS_ConfigSteps/	ts_SS_RB10_TM_Cfg		1284
L3M_SS_ConfigSteps/	ts_SS_RB10_ToRB12_TM_Cfg		1285
L3M_SS_ConfigSteps/	ts_SS_SwitchBackCellOn		1286
L3M_SS_ConfigSteps/	ts_SS_SwitchCellOff		1287
L3M_UT_Steps/	ts_AT_AnswerCall		1287
L3M_UT_Steps/	ts_AT_CmdCBST		1288
L3M_UT_Steps/	ts_AT_InitCallCS		1290
L3M_UT_Steps/	ts_UT_ConfigUE_MO		1291
L3M_UT_Steps/	ts_UT_ConfigUE_MT		1293
BasicM_General_Steps/	ts_EmptyPCO_AfterSwitchOff		1294
BasicM_General_Steps/	ts_AssignCN_Domain		1295
BasicM_General_Steps/	ts_CalculateActTime		1296
BasicM_General_Steps/	ts_CountConfiguredCell		1298
BasicM_General_Steps/	ts_RRC_Delay		1298
BasicM_General_Steps/	ts_RRC_InitVariables		1299
BasicM_General_Steps/	ts_RRC_InitVariablesCS		1300
BasicM_General_Steps/	ts_RRC_InitVariablesPS		1301
BasicM_General_Steps/	ts_SaveCellInfo		1302
BasicM_General_Steps/	ts_SetAttenuationLevel		1303
BasicM_General_Steps/	ts_SetCellCfg		1304
BasicM_General_Steps/	ts_SetTmpCellInfo		1304
BasicM_General_Steps/	ts_InitVariables		1305
BasicM_MM_GMM_Steps/	ts_GMM_Authentication		1311
BasicM_MM_GMM_Steps/	ts_GMM_AuthenticationInit		1313
BasicM_MM_GMM_Steps/	ts_MM_Authentication		1317
BasicM_MM_GMM_Steps/	ts_MM_AuthenticationInit		1319
BasicM_MM_GMM_Steps/	ts_MM_PwrOrUSIM_Off		1322
BasicM_MM_GMM_Steps/	ts_MM_PwrOrUSIM_On		1323
BasicM_Postambles/	po_ConnectionAndSS_Rel		1324
BasicM_Postambles/	po_ConnectionAndSS_Rels		1327
BasicM_RRC_Steps/	ts_RRC_ConnEst		1328
BasicM_RRC_Steps/	ts_RRC_ConnRel		1332
BasicM_RRC_Steps/	ts_RRC_ReceiveConnSetupCmpl		1337
BasicM_Security_Steps/	ts_CRRLC_GetRLC_SeqNumSecurity		1340
BasicM_Security_Steps/	ts_InitSystemSpecificCap		1343
BasicM_Security_Steps/	ts_CMAC_DL_CipherCfg		1344
BasicM_Security_Steps/	ts_CMAC_UL_CipherCfg		1345
BasicM_Security_Steps/	ts_CRRLC_DL_CipherCfgRB		1346
BasicM_Security_Steps/	ts_CRRLC_DL_CipherCfgSRB		1347
BasicM_Security_Steps/	ts_CRRLC_DL_Integrity		1348
BasicM_Security_Steps/	ts_CRRLC_UL_CipherCfg		1348
BasicM_Security_Steps/	ts_CRRLC_UL_Integrity		1349
BasicM_Security_Steps/	ts_SS_ResetSecurityKey		1349
BasicM_Security_Steps/	ts_SS_DownloadSecurityKey		1350
BasicM_Security_Steps/	ts_SS_SecurityDownloadStart		1354
BasicM_Security_Steps/	ts_SetDL_RRC_MessageSN		1355

Continued on next page

Continued from previous page

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
BasicM_Security_Steps/	ts_RB2_UL_IntegrityActivate		1356
BasicM_Security_Steps/	ts_CMAC_CipherCfg		1357
BasicM_Security_Steps/	ts_GetRRC_MessageSN		1358
BasicM_Security_Steps/	ts_RRC_Security		1359
BasicM_SS_Configuration_Steps/	ts_CMAC_Rel		1368
BasicM_SS_Configuration_Steps/	ts_CPHY_ActTime		1369
BasicM_SS_Configuration_Steps/	ts_CPHY_TrChRelDCH_NoSHO		1369
BasicM_SS_Configuration_Steps/	ts_CPHY_TrChRelNonDch		1370
BasicM_SS_Configuration_Steps/	ts_CRLC_Rel		1370
BasicM_SS_Configuration_Steps/	ts_CRLC_RelReconfSRB		1370
BasicM_SS_Configuration_Steps/	ts_CRLC_ResumeSecurity		1371
BasicM_SS_Configuration_Steps/	ts_CRLC_SuspendSecurity		1373
BasicM_SS_Configuration_Steps/	ts_ReconfigFACH_ToNoDedicated		1376
BasicM_SS_Configuration_Steps/	ts_SS_1DCH_DCCH_Cfg		1377
BasicM_SS_Configuration_Steps/	ts_SS_2DCH_Modify		1379
BasicM_SS_Configuration_Steps/	ts_SS_AddDPCH		1380
BasicM_SS_Configuration_Steps/	ts_SS_BCH_SCH_CPICH_Cfg		1381
BasicM_SS_Configuration_Steps/	ts_SS_CellCfg		1382
BasicM_SS_Configuration_Steps/	ts_SS_CreateCellDCH		1384
BasicM_SS_Configuration_Steps/	ts_SS_CreateCellFACH		1385
BasicM_SS_Configuration_Steps/	ts_SS_PCH_2FACH_CCCH_DC CH_BCCH_DTCH_Cfg		1387
BasicM_SS_Configuration_Steps/	ts_SS_PCH_FACH_CCCH_Cfg		1389
BasicM_SS_Configuration_Steps/	ts_SS_PrepareCellRRC_ConnEst		1390
BasicM_SS_Configuration_Steps/	ts_SS_RACH_CCCH_Cfg		1398
BasicM_SS_Configuration_Steps/	ts_SS_RACH_CCCH_DCCH_DT CH_Cfg		1399
BasicM_SS_Configuration_Steps/	ts_SS_RB0_Cfg		1400
BasicM_SS_Configuration_Steps/	ts_SS_RB1_ToRB4_Cfg		1401
BasicM_SS_Configuration_Steps/	ts_SS_RB20_AM_PS_Cfg		1402
BasicM_SS_Configuration_Steps/	ts_SS_RB_BCCH_BCH_Cfg		1402
BasicM_SS_Configuration_Steps/	ts_SS_RB_BCCH_FACH_Cfg		1403
BasicM_SS_Configuration_Steps/	ts_SS_RB_PCCH_Cfg		1403
BasicM_SS_Configuration_Steps/	ts_SS_ReconfNoDedicatedToCellF ACH		1404
BasicM_SS_Configuration_Steps/	ts_SS_ReconfigRAB_ToSRB		1405
BasicM_SS_Configuration_Steps/	ts_SS_Rel		1406
BasicM_SS_Configuration_Steps/	ts_SS_RelDPCH		1422
BasicM_SS_Configuration_Steps/	ts_SS_StopRL		1427
BasicM_SysInfoHandling_Steps/	ts_CellDependentPara		1428
BasicM_SysInfoHandling_Steps/	ts_ChangeMIB_ValueTag		1429
BasicM_SysInfoHandling_Steps/	ts_ChangeSB1_ValueTag		1429
BasicM_SysInfoHandling_Steps/	ts_Scheduling		1430
BasicM_SysInfoHandling_Steps/	ts_SendMIB		1431
BasicM_SysInfoHandling_Steps/	ts_UTRAN_GERAN_Paralnit		1432
BasicM_UT_Steps/	ts_AT_TriggerGMM_Attach		1432
BasicM_UT_Steps/	ts_MMI_UE_PwrOff		1433

Continued on next page

Continued from previous page

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
BasicM_UT_Steps/	ts_MMI_UE_PwrOn		1433
BasicM_UT_Steps/	ts_MMI_UE_SwitchOff		1434
BasicM_UT_Steps/	ts_MMI_UE_SwitchOn		1434
BasicM_UT_Steps/	ts_MMI_USIM_Insert		1435
BasicM_UT_Steps/	ts_MMI_USIM_Remove		1435
M_RAT_HO_CellConfig/	ts_CreateCell_GSM_Comb		1436
M_RAT_HO_CellConfig/	ts_SetBS_IdCode		1436
M_RAT_HO_CellConfig/	ts_GERANCreateCell		1437
M_RAT_HO_ChannelConfig/	ts_SS_CreatePhyChOfCombType 11		1438
M_RAT_HO_ChannelConfig/	ts_SS_CreatePhyChOfCombType 5		1439
M_RAT_HO_ChannelConfig/	ts_SS_CreatePhyChOfTrafficChTy pe		1440
M_RAT_HO_ChannelConfig/	ts_SS_CreatePhyChOfCombType 13		1443
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendGSMSysInfo		1444
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendGSMSysInfo_SI2qBCCH Ext		1447
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendGSMSACCHSysInfo		1449
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType1		1450
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType13		1450
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType15		1451
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType2		1451
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType2bis		1452
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType2quarter		1452
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType3		1453
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType4		1454
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType5		1454
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType5bis		1455
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType6		1455
M_RAT_HO_SysInfoBroadcastGP RS/	ts_SendDefPacketSysInfo		1456
M_RAT_HO_SysInfoBroadcastGP RS/	ts_SendPacketSysInfoType		1458
M_RAT_HO_GPRS_Specific/	ts_G_DetachOnSwitchOff		1459
M_RAT_HO_GPRS_Specific/	ts_ULTBFOnePhase_PBCCH		1461
M_RAT_HO_GPRS_Specific/	ts_UplinkTBFOnePhase_MMPProc_ PBCCH		1462

Continued on next page

Continued from previous page

Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
M_RAT_HO_GPRS_Specific/	ts_ULTBFOnePhase		1463
M_RAT_HO_GPRS_Specific/	ts_UplinkTBFOnePhase		1464
M_RAT_HO_GPRS_Specific/	ts_DownlinkTBFEstablishment		1465
M_RAT_HO_GPRS_Specific/	ts_U2GCellChange_RAUpdate		1467
M_RAT_HO_GPRS_Specific/	ts_Delete_GPRS_Entities		1469
M_RAT_HO_GPRS_Specific/	po_GPRS_SS_CellRelease		1469
M_RAT_HO_GPRS_Specific/	ts_CreateRLC_MAC_Entity		1470
M_RAT_HO_GPRS_Specific/	ts_Create_LLE_Entity		1470
M_RAT_HO_GPRS_Specific/	ts_LLC_TLLI_Assign		1470
M_RAT_HO_GPRS_Specific/	ts_LLC_XID		1471
M_RAT_HO_GSM_Specific/	ts_G_Assignment		1472
M_RAT_HO_GSM_Specific/	ts_G_CMServiceReq_MO		1473
M_RAT_HO_GSM_Specific/	ts_G_IMSIDetach		1474
M_RAT_HO_GSM_Specific/	ts_G_Rcv_SetUp		1475
M_RAT_HO_GSM_Specific/	ts_InitAssignmentCmd		1476
M_RAT_HO_GSM_Specific/	ts_G_DisableCiphering		1477
M_RAT_HO_GSM_Specific/	ts_G_Disconnect		1478
M_RAT_HO_GSM_Specific/	ts_GSM_SetChPowerLevel		1478
M_RAT_HO_GSM_Specific/	ts_G_SetTmpCellConfigInfo		1479
M_RAT_HO_GSM_Specific/	ts_G_ReceiveOptSuspend		1479
M_RAT_HO_GSM_Specific/	ts_GSM_ChannelRelease		1480
M_RAT_HO_GSM_Specific/	po_GSM_SS_CellRelease		1480
IdleUpdate/	ts_G_Authentication		1481
IdleUpdate/	ts_G_ChannelRelease		1482
IdleUpdate/	ts_G_Ciphering_Mode_Setting		1483
IdleUpdate/	ts_G_Loc_UpdatingAccept		1484
IdleUpdate/	ts_G_Loc_UpdatingRequest		1484
IdleUpdate/	ts_G_LocationUpdate		1485
IdleUpdate/	ts_G_RR_Con_Est		1487
Other/	ts_GSM_InitVariablesSpecific26_6_5_1_2		1488
Other/	ts_GSM_InitVariablesAllBands		1490
Other/	ts_GSM_InitVariablesSpecific40		1492
Other/	ts_GPRS_InitVariablesDef		1494
M_RAT_HO_DTM_Specific/	ts_GERANCreateCell_DTM		1497
M_RAT_HO_DTM_Specific/	ts_SS_CreatePhyChOfTrafficChType_DTM		1498
M_RAT_HO_DTM_Specific/	ts_SendGSMsSysInfo_DTM		1499
M_RAT_HO_DTM_Specific/	ts_ULTBFOnePhase_DTM		1502
M_RAT_HO_DTM_Specific/	ts_UplinkTBFOnePhase_DTM		1503
M_RAT_HO_DTM_Specific/	ts_DownlinkTBFEstablishment_DTM		1504
Detailed Comments :			

Default Index			
Default Group Reference	Default Id	Description	Page Nr
Init_Defaults/	InitOtherwiseFail		1506
NAS_Defaults/	NAS_OtherwiseFail		1507
RRC_Defaults/	RRC_Def1		1509
RRC_Defaults/	RRC_DefConnEst		1512
UT_Defaults/	UT_OtherwiseFail		1514
SS_Defaults/	SS_Def_Special		1515
SS_Defaults/	SS_Def		1517
InterSystem/	IntersystemDef		1519
InterSystem/	IntersystemGPRS		1521
Detailed Comments :			

II

Declarations Part

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
ITC_Int	INTEGER (0,1,2,3)		Type of ITC 0 -> UDI 1 -> RDI 2 -> Other
PktFlowId	OCTETSTRING[1]		This can take values as per 24.008, section 10.5.6.11
AccessPtN	OCTETSTRING[1..100]		This is the DNS name. This can take values as per 24.008, 10.5.6.1
AddressInfo	OCTETSTRING[0..16]		Address information, this is the DNS server name. this will be converted into
AM_SeqNum	BITSTRING[12]		Sequence number for an AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.3
AuthRsp	BITSTRING [32]		Authentication Response Prarameter 3G TS 24.008 cl. 10.5.3.2
B1	BITSTRING [1]		Generic type for 1 bit value
B128	BITSTRING [128]		Generic type for 128 bit value
B16	BITSTRING [16]		Generic type for 16 bits value
B2	BITSTRING [2]		Generic type for 2 bits value
B20	BITSTRING [20]		Generic type for 20 bits value
B3	BITSTRING [3]		Generic type for 3 bits value
B4	BITSTRING [4]		Generic type for 4 bits value
B48	BITSTRING [48]		Generic type for 48 bit value
B5	BITSTRING [5]		Generic type for 5 bits value
B6	BITSTRING [6]		Generic type for 6 bits value
B7	BITSTRING [7]		Generic type for 7 bits value
B8	BITSTRING [8]		Generic type for 8 bits value
B80	BITSTRING [80]		Generic type for 80 bit value
Bitmap	OCTETSTRING[1..16]		The bitmap within a Bitmap super-field. Ref 3G TS 25.322 clause 9.2.2.11.5
BitmapLen	BITSTRING[4]		The length of a bitmap super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.5
BitRate	OCTETSTRING[1]		Maximum bit rates supported
CauseValue	OCTETSTRING[1]		SM Cause Value
CLIR_Invocation	BITSTRING('10100010'B)		CLIR invocation 3G TS 24.008 cl. 10.5.4.11b
CLIR_Suppression	BITSTRING('10100001'B)		CLIR suppression 3G TS 24.008 cl. 10.5.4.11a
CMServType	B4		CM Service Type 3G TS 24.008 cl. 10.5.3.3

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
CtrlPDU_Type	BITSTRING[3]		PDU type for AM STATUS PDUs. Ref 3G TS 25.322 clause 9.2.2.2
CTSPerm	IEI8		CTSPerm 3G TS 24.008 cl. 10.5.3.10 value "10100010"B
CW_NumberPart	BITSTRING[3]		The number part (X1X2X3) of a codeword in an RLIST SUFI. Ref 3G TS 25.322 clause 9.2.2.11.6
DC_Field	BITSTRING[1]		Control / Data type indicator for AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.1
FlowControl	INTEGER (0,1,2,3,4)		type of flow control. 0--outband flow control 1--inband flow control 2-- no flow control
FollowOnProceed	IEI8		Follow On Proceed 3G TS 24.008 cl. 10.5.3.7 value "10100001"B
Fresh	BITSTRING[32]		
GSM_CipheringKey	BITSTRING [64]		
IEI4	B4		information element identifier, type 1
IEI8	B8		information element identifier, type 2-4
IntegrityKey	BITSTRING[128]		
KeySeq	B3		ciphering key sequence 3G TS 24008 cl. 10.5.1.2
Length	OCTETSTRING [1]		IE length
LIST_Len	BITSTRING[4]		The length of a LIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.4
LogicChGERAN	IA5String		Logical channel (used for Interworking with GERAN)
MaxBitRate	OCTETSTRING[1]		Gaurented Bit rate
MaxSDU_Size	OCTETSTRING[1]		Maximum SDU size
MM_RAND	BITSTRING [128]		Authentication parameter RAND 3G TS 24.008 cl. 10.5.3.1
MRW_Len	BITSTRING[4]		The length of a MRW super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.8
MsgType	B8		Message Type 3G TS 24.008 cl. 10.4. This type is also used by the BMC protocol.
N_Length	BITSTRING[4]		The N_Length field within an MRW superfield. Ref 3G TS 25.322 clause 9.2.2.11.8
O0_8	OCTETSTRING[0..8]		Generic type for 0 to 8 byte value
O3	OCTETSTRING [3]		Generic type for 3 byte value

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
Padding	HEXSTRING[2..8192]		Padding for RLC UM or AM PDU. Ref 3G TS 25.322 clause 9.2.2.10 Note that this type should ideally be an OCTETSTRING[1..4096], but since TTCN does not have a predefined operator for INT_TO_OCT, a HEXSTRING is used instead.
PDP_TypeNo	OCTETSTRING[1]		PDP Type number, this will take values 00000001: PDP Type PPP 00000010: PDP Type IHOSS 01000001: IPv5 01010111: IPv6 This can take values as per 24.008, clause 10.5.6.4
ProtocolDiscriminator	B4		Protocol Discriminator 3G TS 24.008 cl. 10.2
RejCau	OCTETSTRING[1]		Reject Cause 3G TS 24.008 cl. 10.5.3.6
RLIST_Len	BITSTRING[4]		The length of a RLIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.6
SapId	OCTETSTRING [1]		SAP Identifier ??? defined in several places GERAN 04.06 and 3G TS 24.008 as bitstring[2] ?
Services	IA5String ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Facsimile")		
SkipIndicator	B4		Skip Indicator 3G TS 24.008 cl. 10.3.1
SS_CN_DomainIdentity	INTEGER (0..1)		CN domain identity type in TTCN tabular format
SS_RB_Identity	INTEGER (-31..32)		RB identity type in TTCN tabular format
SUFI_ListLi	BITSTRING[4]		Number of consecutive PDUs not correctly received following PDU with sequence number SNi. Used in List super field. Ref 3G TS 25.322 clause 9.2.2.11.4
SUFI_SN_MRWi	BITSTRING[12]		SN_MRWi field to be used within move receiving window super fields. Ref 3G TS 25.322 clause 9.2.2.11.7

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
SUFI_Type	BITSTRING[4]		The type of a super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11
UTRAN_GERAN	IA5String ("UTRAN and GERAN", "UTRAN only")		
ProtoldContents	OCTETSTRING[1..250]		3G TS 24.008 cl. 10.5.6.3
Redial	BITSTRING('10100011'B)		Redial 3G TS 24.008 cl. 10.5.4.34
MBMS_ProtoldContents	OCTETSTRING[1..251]		3G TS 24.008 cl. 10.5.6.15
LLMEID	INTEGER		The identifier of the Logical Link Management Entity in SGSN
B10	BITSTRING [10]		A BitString with a length of 10
B11	BITSTRING [11]		A BitString with a length of 11
B12	BITSTRING [12]		A BitString with a length of 12
B14	BITSTRING [14]		A BitString with a length of 14
B24	BITSTRING [24]		A BitString with a length of 24
B32	BITSTRING [32]		A BitString with a length of 32
B36	BITSTRING [36]		A BitString with a length of 36
B64	BITSTRING [64]		A BitString with a length of 64
B9	BITSTRING [9]		A BitString with a length of 9
BCCHFreq	BITSTRING [5]		position of a bcch carrier in the bcch channel list
CellId	INTEGER		
Channel	BITSTRING [2]		needed channel type
ChannelCoding	INTEGER		1 – CS–1; 2 – CS–2; 3 – CS–3; 4 – CS–4; 5 – MCS–1; 6 – MCS–2; 7 – MCS–3; 8 – MCS–4; 9 – MCS–5; 10 – MCS–6; 11 – MCS–7; 12 – MCS–8; 13 – MCS–9; 14 – MCS–5–7; 15 – MCS–6–9

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
ChannelCombination	INTEGER		<p>The value of channelCombination permitted currently:</p> <p>1 TCH/F + FACCH/F + SACCH/TF</p> <p>2 TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1)</p> <p>3 TCH/H(0,0) + FACCH/H(0,1) + SACCH/TH(0,1) + TCH/H(1,1)</p> <p>4 FCCH + SCH + BCCH + CCCH</p> <p>5 FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)</p> <p>6 BCCH + CCCH</p> <p>7 SDCCH/8(0..7) + SACCH/C8(0..7)</p> <p>8 TCH/F + FACCH/F + SACCH/M</p> <p>9 TCH/F + SACCH/M</p> <p>10 TCH/FD + SACCH/MD</p> <p>11 PBCCH+PCCCH+PDTCH/F+PACCH/F+PTCCH/F</p> <p>12 PCCCH+PDTCH/F+PACCH/H/F+PTCCH/F</p> <p>13 PDTCH/F+PACCH/F+PTCCH/H/F</p> <p>18 E-TCH/F + E-IACCH/F + E-FACCH/F + SACCH/TF</p> <p>19 E-TCH/F + E-IACCH/F + E-FACCH/F + SACCH/M</p> <p>20 E-TCH/F + E-IACCH/F + SACCH/M</p> <p>21 E-TCH/FD + E-IACCH/F + SACCH/MD</p>
EGPRSWindowSize	BITSTRING [5]		3GPP TS 44.060 clause 12.5.2
EstMode	OCTETSTRING [1]		establish mode
GPRS_CipherAlg	BITSTRING[3]		3GPP TS 24.008 section 10.5.5.3

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
G_LogicChType	INTEGER		logical channel types in GERAN: 0-BCCH; 1-RACH; 2-PCH; 3-AGCH; 4-SDCCH/4; 5-SACCH/C4; 6-SDCCH/8; 7-SACCH/C8; 8-TCH/F; 9-FACCH/F; 10-SACCH/TF; 11-TCH/H; 12-FACCH/H; 13-SACCH/TH; 14-PBCCH; 15-PRACH; 16-PPCH; 17-PAGCH; 18-PDTCH/F; 19-PACCH/F; 20-PTCCH/F; 21-E-TCH/F; 22-E-IACCH/F; 23-E-FACCH/F; 24-SACCH/M; 25-SACCH/MD
H3	HEXSTRING [3]		Generic type for 3 hex value
IEI_4	BITSTRING [4]		information element identifier, type 1
IEI_8	BITSTRING [8]		information element identifier, type 2-4
MessageType	BITSTRING[6]		message type for GPRS RLC/MAC control messages. 3GPP TS 44.060 clause 11.2.0
NCCPermitted	OCTETSTRING [1]		ncc permitted
O1	OCTETSTRING [1]		Generic type for 1 octet value
O15	OCTETSTRING [15]		Generic type for 15 octet value
O16	OCTETSTRING [16]		Generic type for 16 octet value
O2	OCTETSTRING [2]		Generic type for 2 octet value
O4	OCTETSTRING [4]		Generic type for 4 octet value
O8	OCTETSTRING [8]		Generic type for 8 octet value
PAGING_GROUP	INTEGER		see 3GPP TS 45.002 clause 6.5.2 and 6.5.6
PSI1_REPEAT_PERIOD	BITSTRING[4]		The repeat period of packet system information Type 1. See 3GPP TS 44.060 section 11.2.18

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
PSI_COUNT_HR	BITSTRING[4]		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
PSI_COUNT_LR	BITSTRING[6]		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18
PSI_Category	INTEGER(0..2)		3GPP TS 05.02 or 3GPP TS 45.002 clause 6.3.2.4
PagingMode	INTEGER		
PhysicalChId	INTEGER(0..31)		Physical channel identifier in GERAN emulator
PositionInList	INTEGER		0 is the first position; 1 is the second, and so on.
RRBP	BITSTRING[2]		relativ reserved block period 3GPP TS 04.60 or 3GPP TS 44.060 clause 10.4.5
RxLevel	BITSTRING [6]		received signal strength
SAPI	INTEGER		Service access point of GERAN L2 or GERAN LLC
S_P_Bit	BITSTRING[1]		supplementary/polling bit for downlink RLC/MAC control message 0 – RRBP field is not valid; 1 – RRBP field is valid.
SubChannelNumber	INTEGER		Subchannel number for TCH/H, FACCH/H, SACCH/TH, SDCCH/4, SDCCH/C4, SDCCH/8 and SDCCH/C8. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); For SDCCH/4 and SACCH/C4 value is (0..3).
SysInfoType	INTEGER		25--SYSTEM INFORMATION TYPE 1 26--SYSTEM INFORMATION TYPE 2 27--SYSTEM INFORMATION TYPE 3 28--SYSTEM INFORMATION TYPE 4 29--SYSTEM INFORMATION TYPE 5 30--SYSTEM INFORMATION TYPE 6

Continued on next page

Continued from previous page

Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments
			31--SYSTEM INFORMATION TYPE 7
			24--SYSTEM INFORMATION TYPE 8
			4--SYSTEM INFORMATION TYPE 9
			0--SYSTEM INFORMATION TYPE 13
			61--SYSTEM INFORMATION TYPE 16
			62--SYSTEM INFORMATION TYPE 17
			64--SYSTEM INFORMATION TYPE 18
			65--SYSTEM INFORMATION TYPE 19
			66--SYSTEM INFORMATION TYPE 20
			2--SYSTEM INFORMATION TYPE 2bis
			3--SYSTEM INFORMATION TYPE 2ter
			7--SYSTEM INFORMATION TYPE 2quater
			5--SYSTEM INFORMATION TYPE 5bis
			6--SYSTEM INFORMATION TYPE 5ter
TFI	BITSTRING[5]		temporary flow identity
TL LI	OCTETSTRING[4]		temporary logical link identifier
TN	B3		time slot number
TSC	B3		Training sequence code,GSM 04.08 10.5.2.5
TX_Power	INTEGER		transmission power level of a physical channel. the unit is dBuVemf
XID_Info	OCTETSTRING		may be defined as a structured type in the future
LLMEId	INTEGER		Logical Layer Management Entity Id
Detailed Comments :			

Structured Type Definition			
Type Name : AddFreqList			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b. All repeated structures are only repeated twice. If more repetitions are required, definition must be modified			
Element Name	Type Definition	Field Encoding	Comments
startFreq	B10		
bSIC	B6		
cellSelMask1	B1		
cellSel1	PMO_CellSel		not present if cellSelMask1 = 0
nrOfFreqs	B5		
freqDiffLen	B3		
freqDiff2	BITSTRING[0..7]		
bSIC2	B6		
cellSelMask2	B1		
cellSel2	PMO_CellSel		not present if cellSelMask2 = 0
freqDiff3	BITSTRING[0..7]		
bSIC3	B6		
cellSelMask3	B1		
cellSel3	PMO_CellSel		not present if cellSelMask3 = 0
Detailed Comments :			

Structured Type Definition			
Type Name : AddluModeOnlyCellList			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
startFreq	B10		
bSIC	B6		
cellSelMask1	B1		
cellSel1	luModeOnlyCellSelection		not present if cellSelMask1 = 0
nrOfFreqs	B5		
freqDiffLen	B3		
freqDiff2	BITSTRING[0..7]		
bSIC2	B6		
cellSelMask2	B1		
cellSel2	luModeOnlyCellSelection		not present if cellSelMask2 = 0
cellSelMask3	B1		
cellSel3	luModeOnlyCellSelection		not present if cellSelMask3 = 0
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : AdditionalInfoFor1xAuxPilot			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
qOF	B2		
wALSH_LEN_A	B3		
aUX_PILOT_WALSH	BITSTRING[6..13]		the length of this field is (6+ val(wALSH_LEN_A))
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : AdditionalInfoFor1xAuxPilotDiversity			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
qOF	B2		
wALSH_LEN_B	B3		
aUX_TD_WALSH	BITSTRING[6..13]		the length of this field is (6+ val(wALSH_LEN_B))
aUX_TD_POWER_LEVEL	B2		
tD_MODE	B2		
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : AdditionalInfoFor1xCommonPilotDiversity			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
tD_MODE	B2		
tD_POWER_LEVEL	B3		
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : AdditionalInfoFor3xAuxPilot			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
sR3_PRIM_PILOT	B2		
sR3_PILOT_POWER1	B3		
sR3_PILOT_POWER2	B3		
qOF	B2		
wALSH_LEN_C	B3		
aUX_WALSH_LEN	BITSTRING[6..13]		the length of this field is (6+val(wALSH_LEN_C))
qof1Mask	B1		
qOF1	B2		not present if qof1Mask = 0
wALSH_LEN_1	B3		not present if qof1Mask = 0
aUX_PILOT_WALSH1	BITSTRING[6..13]		not present if qof1Mask = 0 the length of this field is (6+val(wALSH_LEN_1))
qof2Mask	B1		
qOF2	B2		not present if qof2Mask = 0
wALSH_LEN_2	B3		not present if qof2Mask = 0
aUX_PILOT_WALSH2	BITSTRING[6..13]		not present if qof2Mask = 0 the length of this field is (6+val(wALSH_LEN_2))
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : AdditionalInfoFor3xCommonPilot			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
sR3_PRIM_PILOT	B2		
sR3_PILOT_POWER1	B3		
sR3_PILOT_POWER2	B3		
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition

Type Name : BSIC_Descr

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
baIndexMask	B1		
baIndexStartBSIC	B5		not present if baIndexMask = 0
bSIC	B6		
numberRemainingBSIC	B7		
freqScrolling1	B1		
			the number of repetition of following two fields is val(numberRemainingBSIC). the maximum repetition is 127. if more than 16 repetition is required in the constraint the TTCN definition shall be modified.
bSIC1	B6		
freqScrolling2	B1		
bSIC2	B6		
freqScrolling3	B1		
bSIC3	B6		
freqScrolling4	B1		
bSIC4	B6		
freqScrolling5	B1		
bSIC5	B6		
freqScrolling6	B1		
bSIC6	B6		
freqScrolling7	B1		
bSIC7	B6		
freqScrolling8	B1		
bSIC8	B6		
freqScrolling9	B1		
bSIC9	B6		
freqScrolling10	B1		
bSIC10	B6		
freqScrolling11	B1		
bSIC11	B6		
freqScrolling12	B1		
bSIC12	B6		
freqScrolling13	B1		
bSIC13	B6		
freqScrolling14	B1		
bSIC14	B6		
freqScrolling15	B1		
bSIC15	B6		
freqScrolling16	B1		
bSIC16	B6		

Detailed Comments : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition			
Type Name : CDMA2000CellDescr			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
pilotPN_Offset	B9		
mask	B1		
additionalInfoMask	B3		
additionalInfoFor1xCommonPilot_Diversity	AdditionalInfoFor1xCommonPilotDiversity		not present if mask = 0 or additionalInfoMask <> 000
additionalInfoFor1xAuxPilot	AdditionalInfoFor1xAuxPilot		not present if mask = 0 or additionalInfoMask <> 001
additionalInfoFor1xAuxPilot_Diversity	AdditionalInfoFor1xAuxPilotDiversity		not present if mask = 0 or additionalInfoMask <> 010
additionalInfoFor3xCommonPilot	AdditionalInfoFor3xCommonPilot		not present if mask = 0 or additionalInfoMask <> 011
additionalInfoFor3xAuxPilot	AdditionalInfoFor3xAuxPilot		not present if mask = 0 or additionalInfoMask <> 110
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : CDMA2000Descr			
Encoding Variation :			
Comments : Only 1 repetition has been included. If more are required, the TTCN will be changed			
Element Name	Type Definition	Field Encoding	Comments
cdma2000FreqBand	B5		
cdma2000Freq	B11		
numberCDMA2000Cells	B5		
cdma2000CellDescr1	CDMA2000CellDescr		
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : ChReqDescr2			
Encoding Variation :			
Comments : used in DTM Request 3GPP TS 44.018 clause 10.5.2.8b			
Element Name	Type Definition	Field Encoding	Comments
length	Length		
pktEstCause	B2		Packet Establishment Cause
chReqDescr	ChannelRequestDescription		
mask	B1		
pFI	B7		not present if mask=0
multiTBFCap	B1		
sparepadding	BITSTRING		uplink message
Detailed Comments :			

Structured Type Definition			
Type Name : ChannelRequestDescription			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.7			
Element Name	Type Definition	Field Encoding	Comments
peakThroughputClass	B4		0 – RLC acknowledged mode 1 – RLC unacknowledged mode
radioPriority	B2		
rlcMode	B1		
llcType	B1		0 – LLC PDU is SACK or ACK 1 – LLC PDU is not SACK or ACK
rlcOctetCount	B16		
Detailed Comments :			

Structured Type Definition			
Type Name : ENH_MeasParam			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
mask	B1		not present if mask = 1 not present if mask = 1 not present if mask = 0 not present if neighCellMask = 0 not present if gPRS_RepPriorityMask = 0 not present if gPRS_MeasParamDescrMask = 0 not present if gPRS_3G_MeasParamDescrMask = 0
bAInd	B1		
bAInd3G	B1		
psi3ChangeMark	B2		
pmoInd	B1		
reportType	B1		
rREPORTING_RATE	B1		
iINVALID_BSIC_REPORTING	B1		
neighCellMask	B1		
neighCellDescr3G	NeighCellDescr3G_PMO		
gPRS_RepPriorityMask	B1		
gPRS_RepPriority	ReportPriorityDescr		
gPRS_MeasParamDescrMask	B1		
gPRS_MeasureParamDescr	GPRS_MeasParamDescr_PMO		
gPRS_3G_MeasParamDescrMask	B1		
gPRS_3G_MeasParamDescr	GPRS_3G_MeasParamDescr_PMO		
Detailed Comments :			

Structured Type Definition

Type Name : GPRS_3G_MeasParamDescr_PMO

Encoding Variation :

Comments : ref: 44.060 v5a0 clause 11.2.9b

Element Name	Type Definition	Field Encoding	Comments
qsearchP	B4		
searchPrio3G	B1		
fDD_REP_QUANT_Mask	B1		
fDD_REP_QUANT	B1		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTI NG	B2		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	B1		
fDD_REPORTING_OFFSE T	B3		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRES HOLD	B3		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	B1		
tDD_MULTIRAT_REPORTI NG	B2		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	B1		
tDD_REPORTING_OFFSE T	B3		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRES HOLD	B3		not present if tDD_ReportingMask = 0
cdma_MultiratReportingMas k	B1		
cdma_MULTIRAT_REPORTI NG	B2		not present if cdma_MultiratReportingMas k = 0
cdma_ReportingMask	B1		
cdma_REPORTING_OFFSE T	B3		not present if cdma_ReportingMask = 0
cdma_REPORTING_THRES HOLD	B3		not present if cdma_ReportingMask = 0

Detailed Comments :

Structured Type Definition

Type Name : GPRS_MeasParamDescr_PMO

Encoding Variation :

Comments : ref: 44.060 v5a0 clause 11.2.9b

Element Name	Type Definition	Field Encoding	Comments
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
ServingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD	B2		
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask400	B1		
rEPORTING_OFFSET_400	B3		not present if mask400 = 0
rEPORTING_THRESHOLD_400	B3		not present if mask400 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments :

Structured Type Definition			
Type Name : IuModeNeighCellParams			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b Only 2 repetitions included. If more repetitions are required, definition will be changed			
Element Name	Type Definition	Field Encoding	Comments
iuModeMask	B1		
iuModeCellSel	IuModeCellSelection		not present if iuModeMask = 0
nrFreqs	B5		
iuModeMask1	B1		
iuModeCellSel1	IuModeCellSelection		not present if iuModeMask1 = 0
iuModeMask2	B1		
iuModeCellSel2	IuModeCellSelection		not present if iuModeMask2 = 0
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : IuModeOnlyCellSelection			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
cELL_BAR_QUALIFY3	B2		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_PwrMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_PwrMask = 0
gPRS_SelectMask	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_ReselectMask = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
sl13_Mask	B1		
sl13AltPBCCH_LOCATION	SI13PBCCH_Location		not present if sl13_Mask = 0
Detailed Comments :			

Structured Type Definition

Type Name : MeasParamDescr3GMI
Encoding Variation :
Comments : 3G MEASUREMENT PARAMETERS description struct in MEASUREMENT INFORMATION message

Element Name	Type Definition	Field Encoding	Comments
qsearchsh_C	B4		
sEARSCH_PRIO_3G	B1		
fDD_REP_QUANT	B1		
multiRatFddMask	B1		
fDD_MULTIRAT_REPORTING	B2		not present if multiRatFddMask = 0
fDDMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDDMask = 0
fDD_REPORTING_THRESHOLD	B3		not present if fDDMask = 0
multiRatTddMask	B1		
tDD_MULTIRAT_REPORTING	B2		not present if multiRatTddMask = 0
tDDMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDDMask = 0
tDD_REPORTING_THRESHOLD	B3		not present if tDDMask = 0
multiRat2000Mask	B1		
cDMA2000MULTIRAT_REPORTING	B2		not present if multiRat2000Mask = 0
cdma2000Mask	B1		
cDMA2000REPORTING_OFFSET	B3		not present if cdma2000Mask = 0
cDMA2000REPORTING_THRESHOLD	B3		not present if cdma2000Mask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 9.1.54

Structured Type Definition			
Type Name : MeasParamDescrMI			
Encoding Variation :			
Comments : measurement parameters description struct			
Element Name	Type Definition	Field Encoding	Comments
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
servingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD	B2		not present if sSCALE_ORD_Mask = 0
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask450	B1		
rEPORTING_OFFSET_450	B3		not present if mask450 = 0
rEPORTING_THRESHOLD_450	B3		not present if mask450 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0
Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : NCluModeCapCellList			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
addluModeOnly1	AddluModeOnlyCellList		
prefix2	B1		
addluModeOnly2	AddluModeOnlyCellList		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : NC_FreqList			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b. All repeated structures are only repeated twice. If more repetitions are required, definition must be modified			
Element Name	Type Definition	Field Encoding	Comments
remFreqMask	B1		
nrOfRemFreq	B5		not present if remFreqMask = 0
RemFreqIndex1	B6		not present if remFreqMask = 0
RemFreqIndex2	B6		not present if remFreqMask = 0
addFreqMask1	B1		
addFreq1	AddFreqList		present if addFreqMask1 = 1
addFreqMask2	B1		
addFreq2	AddFreqList		present if addFreqMask2 = 1
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : NeighCellDescr3G_MI			
Encoding Variation :			
Comments : 3G neighbour cell description in MEASUREMENT INFORMATION message			
Element Name	Type Definition	Field Encoding	Comments
waitMask	B1		
wait3G	B3		not present if waitMask = 0
indexMask	B1		
indexStart3G	B7		not present if indexMask = 0
absoluteIndexMask	B1		
absoluteIndexStartEMR	B7		not present if absoluteIndexMask = 0
fDDMask	B1		
uTRAN_FDD_Description	UTRAN_FDD_Descr		not present if fDDMask = 0
tDDMask	B1		
uTRAN_TDD_Description	UTRAN_TDD_Descr		not present if tDDMask = 0
cdma2000Mask	B1		
cDMA2000Descr	CDMA2000Descr		not present if cdma2000Mask = 0
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : NeighCellDescr3G_PMO			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
indexMask	B1		
indexStart3G	B7		not present if indexMask = 0
absoluteIndexMask	B1		
absoluteIndexStartEMR	B7		not present if absoluteIndexMask = 0
fDDMask	B1		
uTRAN_FDD_Description	UTRAN_FDD_Descr		not present if fDDMask = 0
tDDMask	B1		
uTRAN_TDD_Description	UTRAN_TDD_Descr_PMO		not present if tDDMask = 0
cdmaMask	B1		
cdma2000_Descr	CDMA2000Descr		not present if cdmaMask = 0
rem3GCellMask	B1		
rem3GCell_Descr	Removed3GCell_Descr		not present if rem3GCellMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : PMO_CellSel			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_PwrMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_PwrMask = 0
gPRS_SelectMask	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_ReselectMask = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
sl13_Mask	B1		
sl13_PBCCH_LOCATION	SI13PBCCH_Location		not present if sl13_Mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : RealTimeDiffDescr_MI			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
rtd6Mask	B1		
indexMask1	B1		not present if rtd6Mask = 0
bAIndexStartRTD1	B5		not present if rtd6Mask = 0 or indexMask1 = 0
rTD6_List	RTD6_List_List		not present if rtd6Mask = 0
rtd12Mask	B1		
indexMask2	B1		not present if rtd12Mask = 0
bAIndexStartRTD2	B5		not present if rtd12Mask = 0 or indexMask2 = 0
rTD12_List	RTD12_List_List		not present if rtd12Mask = 0
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : Removed3GCell_Descr			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b Only 2 repetitions have been done. if more are required, the definition will be changed			
Element Name	Type Definition	Field Encoding	Comments
n1	B2		
n2	B5		
rem3GCellIndex	B7		
cellDiffLen	B3		
cellDiff	BITSTRING[0..7]		
rem3GCellIndex2	B7		
cellDiffLen2	B3		
cellDiff2	BITSTRING[0..7]		
n2_1	B5		
rem3GCellIndex3	B7		
cellDiffLen3	B3		
cellDiff3	BITSTRING[0..7]		
rem3GCellIndex4	B7		
cellDiffLen4	B3		
cellDiff4	BITSTRING[0..7]		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : RepeatedUTRAN_TDD_NeighCells_PMO			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b			
Element Name	Type Definition	Field Encoding	Comments
tDD_Indic0	B1		
arfcnIndexMask	B1		
tDD_ARFCN	B14		not present if arfcnIndexMask = 0
nR_OF_TDD_CELLS	B5		
tDD_CELL_INFORMATION	BITSTRING		length of this bitstring = p(nR_OF_TDD_CELLS)
Detailed Comments : function p(x) is: p(0) = 0, p(1) = 10, p(2) = 19, p(3) = 28, p(4) = 36, p(5) = 44, p(6) = 52, p(7) = 60, p(8) = 67, p(9) = 74, p(10) = 81, p(11) = 88, p(12) = 95, p(13) = 102, p(14) = 109, p(15) = 116, p(16) = 122, p(x) = 0 for x = 17–31.			

Structured Type Definition			
Type Name : ReportPriorityDescr			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 9.1.54. Only 1 repetition has been included. If more are required, the TTCN will be changed			
Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
reportPriority1	B1		this field is repeated for val(numberCells) times
Detailed Comments :			

Structured Type Definition			
Type Name : UTRAN_TDD_Descr_PMO			
Encoding Variation :			
Comments : Only 2 repetitions have been done. If more are needed, the definition will be updated			
Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		
bandwidthTDD	B3		not present if bandwidthMask = 0
prefix1	B1		value = 1 if present
repeatedUTRAN_TDD_NeighCells1	RepeatedUTRAN_TDD_NeighCells_PMO		
prefix2	B1		value = 1 if present
repeatedUTRAN_TDD_NeighCells2	RepeatedUTRAN_TDD_NeighCells_PMO		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition

Type Name : AlertPattern
Encoding Variation :
Comments : Alerting pattern (used for NIA)
3G TS 24.008 cl. 10.5.4.26

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011001'B
iel	Length		length
spare4	B4		4 spare bits
val	B4		alerting pattern value

Detailed Comments :

Structured Type Definition

Type Name : BuBcap
Encoding Variation :
Comments : Backup Bearer capability
 3G TS 24.008 cl. 10.5.4.4a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000001'B (41 hex)
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue->n, GSM, octet 3
codingStd	B1		coding standard, '0'B, octet 3
transferMode	B1		transfer mode octet 3
itc	B3		information transfer capability, octet 3
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue->network, octet 4
structure	B2		structure, '0, 3', octet 4
duplexMode	B1		duplex mode, '1'B, octet 4
cfg	B1		configuration, '0'B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, '0'B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, '00'B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	B3		signalling access protocol, '1 - 6', octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC , octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	B3		spare bits - 3 bits
extBit6	B1		extension bit, octet 6
layer1Id	B2		Layter 1 identity, '01'B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, '0000'B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet 6a
nego	B1		negotiation bit, '0'B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
intermRate	B2		intermediate rate, octet 6b
nicTx	B1		network independent clock on transmission, GSM, octet 6b
nicRx	B1		network independent clock on reception, GSM, octet 6b
parity	B3		parity information, octet 6b
extBit6c	B1		extension bit, octet 6c
connectElem	B2		connection element, octet 6c
modemType	B5		modem type, octet 6c
extBit6d	B1		extension bit, octet 6d
OtherModemType	B2		Other Modem type, octet 6d
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d
extBit6e	B1		extension bit, octet 6e
acceptChCoding	B4		acceptable channel coding, octet 6e
maxNumTrafficCh	B3		maximum number of traffic channel, octet 6e
extBit6f	B1		extension bit, octet 6f
ulMI	B3		User initiated modification indication, octet 6f
wAIUR	B4		wanted air interface user rate, octet 6f
extBit6g	B1		extension bit, octet 6g
acceptChCodingExt	B3		acceptable channel coding extended, octet 6g
asymInd	B2		asymmetry indication, octet 6g
spare2	B2		spare 2 bits , octet 6g
extBit7	B1		extension bit, octet 7
layer2id	B2		L2 identity, octet 7
userInfoLayer2	B5		user information L2 protocol, octet 7
Detailed Comments :			

Structured Type Definition			
Type Name : CGPN Encoding Variation : Comments : Calling party BCD number (CC information element) 3G TS 24.008 cl. 10.5.4.9			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011100'B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[0..10]		numbers
Detailed Comments :			

Structured Type Definition			
Type Name : CauNoCLI Encoding Variation : Comments : Cause of no CLI information elemnt 3G TS 24.008 cl. 10.5.4.30			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00111010'B
iel	Length		length
causeNoCLI	B8		cause of no CLI
Detailed Comments :			

Structured Type Definition			
Type Name : ConnectedSubAdrs Encoding Variation : Comments : Connected subaddress 3G TS 24.008 cl. 10.5.4.14			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01001101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition			
Type Name : NtwCCCapabilities			
Encoding Variation :			
Comments : Network Call Control Capabilities 3G TS 24.008 cl. 10.5.4.29			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00101111'B
iel	Length		length
spare7	B7		spare
mCS	B1		MCS
Detailed Comments :			

Structured Type Definition			
Type Name : PktDataProtoAddr			
Encoding Variation :			
Comments : 24.007, clause 10.5.6.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101011'B (2Bhex)
length	Length		
spare	B4		
pDP_TypeOrg	B4		PDP type organisation
pDP_TypeNo	PDP_TypeNo		PDP type number
addrInfo	AddressInfo		Address Information
Detailed Comments :			

Structured Type Definition			
Type Name : PktFlowIdentifier			
Encoding Variation :			
Comments : 24.007, section 10.5.6.11			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110100'B (34hex)
length	Length		
pktFlowIdentifier	PktFlowId		spare + 7 bits
Detailed Comments :			

Structured Type Definition			
Type Name : PresentIndScreeningInd			
Encoding Variation :			
Comments : Presentation indicator & screening indicator 3G TS 24.008 cl. 10.5.4.9, 10.5.4.13			
Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
presentInd	B2		presentation indicator
spare3	B3		3 spare bits
screeningInd	B2		screening indicator
Detailed Comments :			

Structured Type Definition			
Type Name : RedirectingPN			
Encoding Variation :			
Comments : Redirecting party BCD number 3G TS 24.008 cl. 10.5.4.21b			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01110100'B (74hex)
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[0..15]		numbers
Detailed Comments :			

Structured Type Definition			
Type Name : RedirectingPS			
Encoding Variation :			
Comments : redirecting party subaddress 3G TS 24.008 cl. 10.5.4.21c			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01110101'B (75hex)
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition			
Type Name : Signal			
Encoding Variation :			
Comments : Signal information element 3G TS 24.008 cl. 10.5.4.23			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00110100'B
val	B8		Value
Detailed Comments :			

Structured Type Definition			
Type Name : AC_ReferenceNumber			
Encoding Variation :			
Comments : Cipher Algorithm 3GPP 24.008 / 10.5.5.19			
Element Name	Type Definition	Field Encoding	Comments
value	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : AUTN			
Encoding Variation :			
Comments : Authentication Parameter AUTN 3G TS 24.008 cl. 10.5.3.1.1			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100000'B
iel	Length		'10'O
aUTN	BITSTRING[128]		Authentication Parameter AUTN
Detailed Comments :			

Structured Type Definition			
Type Name : AccessPtName			
Encoding Variation :			
Comments : 3G TS 24.008, section 10.5.6.1			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B (28hex)
length	Length		
accessPtName	AccessPtN		Access point name value 3–102 octets
Detailed Comments :			

Structured Type Definition			
Type Name : AllowedAction			
Encoding Variation :			
Comments : Allowed actions 3G TS 24.008 cl. 10.5.4.27			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111011'B
iel	Length		Length
cCBS_Act	B1		CCBS Activation
spare7	B7		7 spare bits
Detailed Comments :			

Structured Type Definition			
Type Name : AttachResult			
Encoding Variation :			
Comments : Attach result 3GPP 24.008 / 10.5.5.1			
Element Name	Type Definition	Field Encoding	Comments
fOP	B1		Follow-on Proceed
result	B3		Attach result
Detailed Comments :			

Structured Type Definition			
Type Name : AttachType			
Encoding Variation :			
Comments : Attach type 3GPP 24.008 / 10.5.5.2			
Element Name	Type Definition	Field Encoding	Comments
for	B1		Follow-on request
type	B3		Type of attach
Detailed Comments :			

Structured Type Definition			
Type Name : AuthRspExt Encoding Variation : Comments : Authentication Response parameter (extension) 3G TS 24.008 cl. 10.5.3.2.1			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100001'B for MM (21 hex) '00101001'B for GMM (29 hex)
iel rES	Length BITSTRING[1..96]		Authentication Parameter RES
Detailed Comments :			

Structured Type Definition			
Type Name : AuthRsp_tv Encoding Variation : Comments : Authentication Response parameter (TV, 5 octets) 3G TS 24.008 cl. 10.5.3.2			
Element Name	Type Definition	Field Encoding	Comments
iei value	IEI8 BITSTRING[32]		'00100010'B (22 hex) Authentication Parameter RES
Detailed Comments :			

Structured Type Definition			
Type Name : AuthenticationFailureParameter Encoding Variation : Comments : Authentication Failure Parameter (TLV) 3G TS 24.008 cl. 10.5.3.2.2			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100010'B for MM (22 hex) '00110000'B for GMM (30 hex)
iel	Length		M 1 octet
auts	BITSTRING[112]		AUTS, 14 octets
Detailed Comments :			

Structured Type Definition

Type Name : AuthenticationParamterRAND
Encoding Variation :
Comments : Authentication Parameter RAND (TV, 17 octets)
3G TS 24.008 cl. 10.5.3.1

Element Name	Type Definition	Field Encoding	Comments
iei randValue	IEI8 BITSTRING[128]		'00100001'B (21 hex) Authentication Parameter RAND value

Detailed Comments :

Structured Type Definition

Type Name : Bcap
Encoding Variation :
Comments : Bearer capability (CC information element)
 3G TS 24.008 cl. 10.5.4.5

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00000100'B
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue->n, GSM, octet 3
codingStd	B1		coding standard, '0'B, octet 3
transferMode	B1		transfer mode octet 3
itc	B3		information transfer capability, octet 3
bcap3aEtc1	Bcap3aEtc		octet 3a etc no.1
bcap3aEtc2	Bcap3aEtc		octet 3a etc no.2
bcap3aEtc3	Bcap3aEtc		octet 3a etc no.3
bcap3aEtc4	Bcap3aEtc		octet 3a etc no.4
bcap3aEtc5	Bcap3aEtc		octet 3a etc no.5
bcap3aEtc6	Bcap3aEtc		octet 3a etc no.6
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue->network, octet 4
structure	B2		structure, '0, 3', octet 4
duplexMode	B1		duplex mode, '1'B, octet 4
cfg	B1		configuration, '0'B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, '0'B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, '00'B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	B3		signalling access protocol, '1 - 6', octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC , octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	B3		spare bits – 3 bits
extBit5b	B1		extension bit, '1'B, octet 5b
rateAdaptHeader	B1		rate adaptation header, octet 5b
multiFrame	B1		Multi frame, octet 5b
mode	B1		Mode of operation, octet 5b
logLinkId	B1		logical link identifier negotiation, octet 5b

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
assignorAssignee	B1		assignor/assignee, octet 5b
inBandOutBand	B1		in band/out band negotiation, octet 5b
spare1	B1		spare bit – 1 bit
extBit6	B1		extension bit, octet 6
layer1Id	B2		Layer 1 identity, '01'B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, '0000'B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet 6a
nego	B1		negotiation bit, '0'B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b
intermRate	B2		intermediate rate, octet 6b
nicTx	B1		network independent clock on transmission, GSM, octet 6b
nicRx	B1		network independent clock on reception, GSM, octet 6b
parity	B3		parity information, octet 6b
extBit6c	B1		extension bit, octet 6c
connectElem	B2		connection element, octet 6c
modemType	B5		modem type, octet 6c
extBit6d	B1		extension bit, octet 6d
OtherModemType	B2		Other Modem type, octet 6d
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d
extBit6e	B1		extension bit, octet 6e
acceptChCoding	B4		acceptable channel coding, octet 6e
maxNumTrafficCh	B3		maximum number of traffic channel, octet 6e
extBit6f	B1		extension bit, octet 6f
ulMI	B3		User initiated modification indication, octet 6f
wAIUR	B4		wanted air interface user rate, octet 6f
extBit6g	B1		extension bit, octet 6g
acceptChCodingExt	B3		acceptable channel coding extended, octet 6g
asymInd	B2		asymmetry indication, octet 6g
spare2	B2		spare 2 bits , octet 6g

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
extBit7	B1		extension bit, octet 7
layer2id	B2		L2 identity, octet 7
userInfoLayer2	B5		user information L2 protocol, octet 7
Detailed Comments :			

Structured Type Definition			
Type Name : Bcap3aEtc			
Encoding Variation :			
Comments : Speech Versions preferences as supported by the EFR mobile – see 3G TS 24.008 cl. 10.5.4.5/octet 3a etc/"speech version indication"			
Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit ('0'B)
coding	B1		Octet a1, Coding ('0'B)
spare2	B2		Octet a1, Spare bits ('00'B)
speechVersion	B4		Octet a1, Speech version indication
Detailed Comments :			

Structured Type Definition			
Type Name : CC_Capabilities			
Encoding Variation :			
Comments : Call Control Capabilities 3G TS 24.008 cl. 10.5.4.5a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00010101'B
iel	Length		length
maxNumBearer	B4		maximum number of supported bearer
spare	B1		spare bit
enicm	B1		ENICM
pcp	B1		PCP
dtmf	B1		indication of supporting DTMF
spare4	B4		spare bits
maxNumSpeechBearer	B4		maximum number of speech bearers
Detailed Comments :			

Structured Type Definition			
Type Name : CDPN Encoding Variation : Comments : Called party BCD number (CC information element) 3G TS 24.008 cl. 10.5.4.7			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011110'B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
digits	OCTETSTRING[0..40]		BCD numbers
Detailed Comments :			

Structured Type Definition			
Type Name : CDPS Encoding Variation : Comments : Called party subaddress (CC information element) 3G TS cl. 10.5.4.8			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01101101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition			
Type Name : CGPS Encoding Variation : Comments : Calling party subaddress (CC information element) 3G TS 24.008 cl. 10.5.4.10			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition			
Type Name : Cau			
Encoding Variation :			
Comments : Cause (CC information element) 3G TS 24.008 cl. 10.5.4.11			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00001000'B
iel	Length		length
extBit3	B1		extension bit, octet 3
codingStd	B2		coding standard
spare1	B1		spare bit
loc	B4		location
extBit3a	B1		extension bit, '1'B, octet 3a
recommend	B7		recommendation
extBit4	B1		extension bit, '1'B
cauValue	B7		cause value
diagnostic	OCTETSTRING [0..27]		Diagnostics
Detailed Comments :			

Structured Type Definition			
Type Name : Cau_lv			
Encoding Variation :			
Comments : Cause (CC information element) 3G TS 24.008 cl. 10.5.4.11			
Element Name	Type Definition	Field Encoding	Comments
iel	Length		length
extBit3	B1		extension bit, octet 3
codingStd	B2		coding standard
spare1	B1		spare bit
loc	B4		location
extBit3a	B1		extension bit, '1'B, octet 3a
recommend	B7		recommendation
extBit4	B1		extension bit, '1'B
cauValue	B7		cause value
diagnostic	OCTETSTRING [0..27]		Diagnostics
Detailed Comments :			

Structured Type Definition

Type Name : CellIndependentInfo
Encoding Variation :
Comments : This structure contains relevant information independant from the cell

Element Name	Type Definition	Field Encoding	Comments
cs_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
ps_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
recentSecureDomain	CN_DomainIdentity		the domain on which security was recently started, and hence the SRB are ciphered and Integrity protected with this domain.
dL_CipherMode	CipheringModeCommand		To hold the DL cipher mode to be used in RAB Steps.
uL_CipherMode	RB_ActivationTimeInfoList		To hold the UL cipher mode to be used in RAB Steps.
cipheringAlgorithmCapability	BITSTRING		BITSTRING that hold the ciphering algorithm capability supported by UE
integrityStarted	BOOLEAN		Set to TRUE when integrity is started
dL_Integrity	IntegrityProtectionModelInfo		To hold the DL integrity protection active during a test case
uL_Integrity	IntegrityProtActivationInfo		To hold the UL integrity protection active during a test case
dL_IntegrityCheckInfo	IntegrityCheckInfo		To hold the integrity information to be sent
start_CS	START_Value		To hold the START value for CS Domain
start_PS	START_Value		To hold the START value for PS Domain

Detailed Comments :

Structured Type Definition

Type Name : CellInfoCfg

Encoding Variation :

Comments :

This structure contains relevant information describing a cell configuration as needed for basic test Steps like ts_CreateCell and ts_IdleUpdated.

NOTE: this information is not related to any PDUs, IEs or ASPs

Element Name	Type Definition	Field Encoding	Comments
cellId	INTEGER		Cell Id
frequencyInfo	FrequencyInfo		Frequency information for current cell
attenuationLevel	INTEGER		Value of RF attenuator
priScrmCode	PrimaryScramblingCode		Primary Scrambling Code
powerpCPICH	DL_TxPower_PCPICH		Absolute Tx Power of (primary) CPICH
powerpSCH	DL_TxPower		Tx power level of primary SCH relative to CPICH
powersSCH	DL_TxPower		Tx power level of secondary SCH relative to CPICH
powerpCCPCH	DL_TxPower		Tx power level of primary CCPCH relative to CPICH
powersCCPCH	DL_TxPower		Tx power level of secondary CCPCH relative to CPICH
powersCCPCH1	DL_TxPower		Tx power level of secondary CCPCH1 relative to CPICH
timingsCCPCH1	INTEGER		Timing offset for secondary CCPCH1
powerAICH	AICH_PowerOffset		Tx power level of AICH relative to CPICH
powerPICH	PICH_PowerOffset		Tx power level of PICH relative to CPICH
cellTxPowerLevel	CellTxPowerLevel		Total cell power level (>= sum of all configured physical channels)
tCell	Tcell		Cell timing offset (in chips)
sfnOffset	INTEGER		SFN offset (in frames)
puncLimit	PuncturingLimit		Puncturing limit for PRACH
sf_PRACH	SF_PRACH		Spreading factor for PRACH
slotFormatsCCPCH1	SCCPCHSlotFormat		Slot format for secondary CCPCH1
mcc	HEXSTRING		MCC
mnc	HEXSTRING		MNC
lac	OCTETSTRING		LAC
rac	OCTETSTRING		RAC
attFlag	INTEGER		Attach flag (as broadcasted in BCCH)
nmo	OCTETSTRING		Network mode of operation
ura_Identity	BITSTRING		URA Identity (3GPP 25.331 clause 10.3.2.6)
t3212	OCTETSTRING		T3212 value

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
cRNTI	C_RNTI		cell radio network temporary identity assigned to the UE under test, this initial value is for ts_SS_CreateCellFACH. (from 34.123-1)
uRNTI	U_RNTI		srcn_Identity and s_RNTI
cellConfig	RB_ConfigType		Current configuration of the cell
dRX_CycleLength	DRX_CycleLengthStructure		To hold the 3 dRX_CycleLength
uL_ScramblingCode	UL_ScramblingCode		To hold the UL scrambling to be used in the cell
DL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
UL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
dl_DPCH_2ndScrCode	SecondaryScramblingCode		Secondary scrambling code for the DL DPCH
operationBand	FrequencyBandFDD		
Detailed Comments :			

Structured Type Definition			
Type Name : CellNotification			
Encoding Variation :			
Comments : Cell notification 3GPP 24.008 / 10.5.5.21			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'10001100'B (8C hex)
Detailed Comments :			

Structured Type Definition			
Type Name : CiphAlgorithm			
Encoding Variation :			
Comments : Cipher Algorithm 3GPP 24.008 / 10.5.5.3			
Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
algorithm	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : CiphKeySeqNum			
Encoding Variation :			
Comments : Ciphering Key Sequence Number 3G TS 24.008 cl. 10.5.1.2			
Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
keySeq	KeySeq		
Detailed Comments :			

Structured Type Definition			
Type Name : CiphKeySeqNum_tv			
Encoding Variation :			
Comments : Ciphering Key Sequence Number 3G TS 24.008 cl. 10.5.1.2			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1000'B
spare1	B1		
keySeq	KeySeq		
Detailed Comments :			

Structured Type Definition			
Type Name : CodeWord			
Encoding Variation :			
Comments : Code word within an RList super field. Ref 3G TS 25.322 clause 9.2.2.11.6			
Element Name	Type Definition	Field Encoding	Comments
numberPart	CW_NumberPart		
statusInd	BITSTRING[1]		
Detailed Comments :			

Structured Type Definition			
Type Name : Codec			
Encoding Variation :			
Comments : Codec 3G TS 24.008 cl. 10.5.4.32			
Element Name	Type Definition	Field Encoding	Comments
sysId	OCTETSTRING[1]		system identification
len	Length		length
bitMap1to8	BITSTRING[8]		codec bitmap bits 1–8
bitMap9to16	BITSTRING[8]		codec bitmap bits 9–16
Detailed Comments :			

Structured Type Definition			
Type Name : CodecList Encoding Variation : Comments : Supported Codec List 3G TS 24.008 cl. 10.5.3.32			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000000'B (40 hex)
iel	Length		length
codec1	Codec		Codec
codec2	Codec		Codec
codec3	Codec		Codec
codec4	Codec		Codec
codec5	Codec		Codec
Detailed Comments :			

Structured Type Definition			
Type Name : DRX_CycleLengthStructure Encoding Variation : Comments : Structure taht contains CN DRX cycle length (CS and PS) and the UTRAN DRX Cycle length. This type is to be used in the CellInfoCfg in order to keep all DRX values.			
Element Name	Type Definition	Field Encoding	Comments
cN_CS_DRX_CycleLength	CN_DRX_CycleLengthCoefficient		
cN_PS_DRX_CycleLength	CN_DRX_CycleLengthCoefficient		
uTRAN_DRX_CycleLength	UTRAN_DRX_CycleLengthCoefficient		
Detailed Comments :			

Structured Type Definition			
Type Name : DRXparamter Encoding Variation : Comments : DRX paramter 3GPP 24.008 / 10.5.5.6			
Element Name	Type Definition	Field Encoding	Comments
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non-DRX timer
Detailed Comments :			

Structured Type Definition			
Type Name : DRXparamter_tv			
Encoding Variation :			
Comments : DRX paramter 3GPP 24.008 / 10.5.5.6			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100111'B (hex 27)
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non-DRX timer
Detailed Comments :			

Structured Type Definition			
Type Name : DetachType			
Encoding Variation :			
Comments : Detach type 3GPP 24.008 / 10.5.5.5			
Element Name	Type Definition	Field Encoding	Comments
powOff	B1		
type	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : EmergNum			
Encoding Variation :			
Comments : Emergency Number 3G TS 24.008 cl. 10.5.3.13			
Element Name	Type Definition	Field Encoding	Comments
len	Length		length
emergServCat	EmergServCat		Emergency Service Category
digits	OCTETSTRING[0..10]		BCD numbers
Detailed Comments :			

Structured Type Definition			
Type Name : EmergNumList Encoding Variation : Comments : Emergency Number List 3G TS 24.008 cl. 10.5.3.13			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110100'B (34 hex)
iel	Length		length
emergNum1	EmergNum		Emergency Number
emergNum2	EmergNum		Emergency Number
emergNum3	EmergNum		Emergency Number
emergNum4	EmergNum		Emergency Number
emergNum5	EmergNum		Emergency Number
Detailed Comments :			

Structured Type Definition			
Type Name : EmergServCat Encoding Variation : Comments : Emergency Service Category 3GPP 24.008 / 10.5.4.33			
Element Name	Type Definition	Field Encoding	Comments
spare	B3		
value	B5		Emergency Service Category value
Detailed Comments :			

Structured Type Definition			
Type Name : Facility Encoding Variation : Comments : Facility information element 3G TS 24.008 cl. 10.5.4.15			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011100'B
iel	Length		length
comps	OCTETSTRING		Component
Detailed Comments :			

Structured Type Definition			
Type Name : ForceToStandby			
Encoding Variation :			
Comments : Force to standby 3GPP 24.008 / 10.5.5.7			
Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Force to standby value
Detailed Comments :			

Structured Type Definition			
Type Name : GMM_AUTN			
Encoding Variation :			
Comments : Authentication Parameter AUTN– to be used in GMM constraints 3G TS 24.008 cl. 10.5.3.1.1			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B
iel	Length		'10'O
aUTN	BITSTRING[128]		Authentication Parameter AUTN
Detailed Comments :			

Structured Type Definition			
Type Name : GMM_Cause			
Encoding Variation :			
Comments : GMM cause 3GPP 24.008 / 10.5.5.14			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100101'B (25 hex)
value	B8		Cause value
Detailed Comments :			

Structured Type Definition			
Type Name : GMM_MS_Identity			
Encoding Variation :			
Comments : Mobile Identity 3G TS 24.008 cl. 10.5.1.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100011'B
iel	Length		
iDigit1	B4		1st identity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Definition			
Type Name : GMM_MS_IdentityPTMSI			
Encoding Variation :			
Comments : Mobile Identity 3G TS 24.008 cl. 10.5.1.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00011000'B
iel	Length		
iDigit1	B4		1st identity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Definition			
Type Name : GPRS_Timer			
Encoding Variation :			
Comments : GPRS timer 3GPP 24.008 / 10.5.7.3			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		00010111'B (17 hex)
unit	B3		Unit
value	B5		Timer value
Detailed Comments :			

Structured Type Definition			
Type Name : GPRS_Timer2			
Encoding Variation :			
Comments : GPRS timer 3GPP 24.008 / 10.5.7.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101010'B (2A hex)
iel	Length		length
unit	B3		Unit
value	B5		Timer value
Detailed Comments :			

Structured Type Definition			
Type Name : GPRS_Timer_v			
Encoding Variation :			
Comments : GPRS timer 3GPP 24.008 / 10.5.7.3			
Element Name	Type Definition	Field Encoding	Comments
unit	B3		Unit
value	B5		Timer value
Detailed Comments :			

Structured Type Definition			
Type Name : HLC			
Encoding Variation :			
Comments : High layer compatibility (CC information element) 3G TS 24.008 cl. 10.5.4.16, ITU Q.931			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111101'B
iel	Length		length
extBit3	B1		extension bit ('1'B)
codingStd	B2		coding standard
interpretation	B3		interpretation
presentModeProtocolProfile	B2		presentation method of protocol profile
extBit4	B1		extension bit, octet 4
hlcd	B7		high layer characteristics identification
extBit4a	B1		extension bit, '1'B, octet 4a
exteHlcd	B7		extended high layer characteristics identification
Detailed Comments :			

Structured Type Definition			
Type Name : IMEISVRequest			
Encoding Variation :			
Comments : IMEISV Request 3GPP 24.008 / 10.5.5.10			
Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
value	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : InterRAT_HO_Info			
Encoding Variation :			
Comments : 3G TS 24.008, section 10.5.5.24			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100111'B (27 hex)
length	Length		
value	OCTETSTRING[1..38]		Inter RAT Handver Information Container octets 1-38
Detailed Comments :			

Structured Type Definition

Type Name : LLC
Encoding Variation :
Comments : Low layer compatibility (CC information element)
 3G TS 24.008 cl. 10.5.4.18 and ETS DE/SPS-5034-1 (update of ETS 300 102-1)

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111100'B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard, octet 3
itc	B5		information transfer capability, octet 3
extBit3a	B1		extension bit, octet 3a
negoInd	B1		negotiation indicator, octet 3a
spare6	B6		6 spare bits
extBit4	B1		extension bit, octet 4
transferMode	B2		transfer mode
infoTransferRate	B5		information transfer rate, octet 4
extBit4_1	B1		extension bit, octet 4.1
rateMultiplier	B7		rate multiplier, octet 4.1
extBit5	B1		extension bit, octet 5
layer1Id	B2		Layer 1 identity, '01'B, octet 5
userInfoLayer1	B5		user information Layer 1 protocol, '0000'B, octet 5
extBit5a	B1		extension bit, octet 5a
syncAsync	B1		synchronous bit, octet 5a
nego	B1		negotiation bit, octet 5a
userRate	B5		user rate, octet 5a
extBit5b1	B1		extension bit, octet 5b1
intermRate	B2		intermediate rate, octet 5b1
nicTx	B1		network independent clock on transmission, octet 5b1
nicRx	B1		network independent clock on reception, octet 5b1
flowCtrlTx	B1		flow control on transmission, octet 5b1
flowCtrlRx	B1		flow control on reception, octet 5b1
spare1	B1		1 spare bit, '0'B, octet 5b1
extBit5b2	B1		extension bit, octet 5b2
rateAdaptHeader	B1		rate adaptation header, octet 5b2
multiFrame	B1		Multi frame, octet 5b2
mode	B1		Mode of operation, octet 5b2
logLinkId	B1		logical link identifier negotiation, octet 5b2
assignorAssignee	B1		assignor/assignee, octet 5b2

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
inBandOutBand	B1		in band/out band negotiation, octet 5b2
spare1_5b2	B1		spare bit – 1 bit, octet 5b2
extBit5c	B1		extension bit, octet 5c
numStopBits	B2		number of stop bits, octet 5c
numDataBits	B2		number of data bits, octet 5c
parity	B3		parity, octet 5c
extBit5d	B1		extension bit, octet 5d
duplexMode	B1		duplex mode, octet 5d
modemType	B6		modem type, octet 5d
extBit6	B1		extension bit, octet 6
layer2id	B2		L2 identity, octet 6
userInfoLayer2	B5		user information L2 protocol, octet 6
extBit6a1	B1		extension bit, octet 6a1
modeLayer2	B2		mode, octet 6a1
spare3	B3		spare bits , '000'B, octet 6a1
q933	B2		Q.933 use, octet 6a1
extBit6a2	B1		extension bit, octet 6a2
userSpecifLayer2	B7		user specified layer 2 protocol information, octet 6a2
extBit6b	B1		extension bit, octet 6b
windowSize	B7		window size, octet 6b
extBit7	B1		extension bit, octet 7
layer3id	B2		L3 identity, octet 7
userInfoLayer3	B5		user information L3 protocol, octet 7
extBit7a1	B1		extension bit, octet 7a2
OptionUserSpecifLayer3	B7		user specified layer 3 protocol information, octet 7a2
extBit7a2	B1		extension bit, '1'B, octet 7a2
modeLayer3	B2		mode, octet 7a2
spare5	B5		spare bits , '00000'B, octet 7a2
extb7b	B1		extension bit, octet 7b
spare3_7b	B3		spare bits , '000'B, octet 7b
defaultPacketSize	B4		default packet size, octet 7b
extBit7c	B1		extension bit, '1'B, octet 7c
packetWindowSize	B7		packet window size, octet 7bc
extBit7a3	B1		extension bit, octet 7a3
spare3_7a3	B3		3 spare bits

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
addLayer3ProtocolInfo	B4		additional layer 3 protocol information (most significant bits), octet 7a3
extBit7a4	B1		extension bit, octet 7a4
spare3_7a4	B3		3 spare bits
addLayer3ProtocolInfoL	B4		additional layer 3 protocol information (least significant bits), octet 7a4
Detailed Comments :			

Structured Type Definition			
Type Name : LLC_SAPI_v			
Encoding Variation :			
Comments : 24.007, clause 10.5.6.9			
Element Name	Type Definition	Field Encoding	Comments
spare	B4		
ILC_SAPI_Value	B4		LLC SAPI Value
Detailed Comments :			

Structured Type Definition			
Type Name : LocAreald_v			
Encoding Variation :			
Comments : Location Area Identification Value 3G TS 24.008 cl. 10.5.1.3			
Element Name	Type Definition	Field Encoding	Comments
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each
lac	OCTETSTRING[2]		LAC
Detailed Comments :			

Structured Type Definition			
Type Name : LocUpdType			
Encoding Variation :			
Comments : Location Updating Type 3G TS 24.008 cl. 10.5.3.5			
Element Name	Type Definition	Field Encoding	Comments
fOR	B1		Follow-On Request
spare1	B1		
IUT	B2		Location Updating Type
Detailed Comments :			

Structured Type Definition			
Type Name : MBMS_ContextStatus Encoding Variation : Comments : MBMS_ContextStatus 3G TS 24.008 cl. 10.5.7.6			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110101'B (35 hex)
iel	Length		
nSAPI	BITSTRING[0..128]		NSAPI(x)
Detailed Comments :			

Structured Type Definition			
Type Name : MBMS_ProtoCfgOpt Encoding Variation : Comments : 3G TS 24.008 cl. 10.5.6.15			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110101'B (35hex)
length	Length		
protocollIdContents	MBMS_ProtoldContents		information related to additional external protocols
Detailed Comments :			

Structured Type Definition			
Type Name : MM_MS_Identity Encoding Variation : Comments : Mobile Identity 3G TS 24.008 cl. 10.5.1.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00010111'B
iel	Length		
iDigit1	B4		1st identity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Definition			
Type Name : MSRadioAccessCap_Iv Encoding Variation : Comments : MS radio access capability 3GPP 24.008 / 10.5.5.12a			
Element Name	Type Definition	Field Encoding	Comments
iel value	Length OCTETSTRING[0..50]		MS radio access capability value (CSN.1 coding)
Detailed Comments :			

Structured Type Definition			
Type Name : MS_Clsmk1 Encoding Variation : Comments : Mobile Station Classmark 1 3G TS 24.008 cl. 10.5.1.5			
Element Name	Type Definition	Field Encoding	Comments
spare1 revLvl eSIND a5_1 rFPwrCap	B1 B2 B1 B1 B3		Spare bit Revision Level Early Sending Indication Algorithm A5/1 supported RF Power Capability
Detailed Comments :			

Structured Type Definition

Type Name : MS_Clsmk2
Encoding Variation :
Comments : Mobile Station Classmark 2
 3G TS 24.008 cl. 10.5.1.6

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
iel	Length		
spare1_1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	B3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCAp	B1		Short Message Capability
vBS	B1		VBS Capability
VGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
ICSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support

Detailed Comments :

Structured Type Definition			
Type Name : MS_Clsmk2_lv			
Encoding Variation :			
Comments : Mobile Station Classmark 2 3G TS 24.008 cl. 10.5.1.6			
Element Name	Type Definition	Field Encoding	Comments
iel	Length		
spare1_1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	B3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCap	B1		Short Message Capability
vBS	B1		VBS Capability
vGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
ICSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support
Detailed Comments :			

Structured Type Definition			
Type Name : MS_Identity_lv			
Encoding Variation :			
Comments : Mobile Identity LV 3G TS 24.008 cl. 10.5.1.4			
Element Name	Type Definition	Field Encoding	Comments
iel	Length		
iDigit1	B4		1st identity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Definition			
Type Name : MS_NetworkCap_lv			
Encoding Variation :			
Comments : MS network capabilityt LV 3GPP 24.008 / 10.5.5.12			
Element Name	Type Definition	Field Encoding	Comments
iel value	Length OCTETSTRING[0..8]		MS network capability value (CSN.1 coding)
Detailed Comments :			

Structured Type Definition			
Type Name : MS_NetworkCap_tlv			
Encoding Variation :			
Comments : MS network capabilityt T LV 3GPP 24.008 / 10.5.5.12			
Element Name	Type Definition	Field Encoding	Comments
iei iel value	IEI8 Length OCTETSTRING[0..8]		'00110001'B (hex 31) MS network capability value (CSN.1 coding)
Detailed Comments :			

Structured Type Definition			
Type Name : NSAPI_v			
Encoding Variation :			
Comments : 24.007, clause 10.5.6.2			
Element Name	Type Definition	Field Encoding	Comments
spare nSAPI_Value	B4 B4		NSAPI value
Detailed Comments :			

Structured Type Definition			
Type Name : NtwFeatureSupport_tv Encoding Variation : Comments : Network Feature Support 3G TS 24.008 cl. 10.5.5.23			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1011'B (B- hex)
iCS_MOLR	B1		
mBMS	B1		
spare2	B2		
Detailed Comments :			

Structured Type Definition			
Type Name : PDP_ContextStatus Encoding Variation : Comments : PDP_ContextStatus 3G TS 24.008 cl. 10.5.7.1			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110010'B
iel	Length		
nSAPI	BITSTRING[16]		
Detailed Comments :			

Structured Type Definition			
Type Name : PLMN_List Encoding Variation : Comments : PLMN list 3G TS 24.008 cl. 10.5.1.13			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01001010'B
iel	Length		
plmn1	OCTETSTRING[3]		PLMN 1
plmn2	OCTETSTRING[3]		PLMN 2
plmn3	OCTETSTRING[3]		PLMN 3
plmn4	OCTETSTRING[3]		PLMN 4
plmn5	OCTETSTRING[3]		PLMN 5
plmn6	OCTETSTRING[3]		PLMN 6
plmn7	OCTETSTRING[3]		PLMN 7
plmn8	OCTETSTRING[3]		PLMN 8
plmn9	OCTETSTRING[3]		PLMN 9
plmn10	OCTETSTRING[3]		PLMN 10
plmn11	OCTETSTRING[3]		PLMN 11
plmn12	OCTETSTRING[3]		PLMN 12
plmn13	OCTETSTRING[3]		PLMN 13
plmn14	OCTETSTRING[3]		PLMN 14
plmn15	OCTETSTRING[3]		PLMN 15
Detailed Comments :			

Structured Type Definition			
Type Name : PS_LCS_Capability Encoding Variation : Comments : PS LCS Capability 3GPP 24.008 / 10.5.5.22			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110011'B (33 hex)
iel	Length		'01'O
spare	B3		
oTD_A	B1		
oTD_B	B1		
gPS_A	B1		
gPS_B	B1		
gPS_C	B1		
Detailed Comments :			

Structured Type Definition			
Type Name : PTMSI_Signature			
Encoding Variation :			
Comments : P-TMSI signature 3GPP 24.008 / 10.5.5.8			
Element Name	Type Definition	Field Encoding	Comments
iei value	IEI8 OCTETSTRING[3]		'00011001'B (19 hex) P-TMSI signature value
Detailed Comments :			

Structured Type Definition			
Type Name : PTMSI_Signature_tlv			
Encoding Variation :			
Comments : P-TMSI signature 3GPP 24.008 / 10.5.5.8			
Element Name	Type Definition	Field Encoding	Comments
iei iel value	IEI8 Length OCTETSTRING[3]		'00011001'B (19 hex) P-TMSI signature value
Detailed Comments :			

Structured Type Definition			
Type Name : PktDataProtoAddr_lv			
Encoding Variation :			
Comments : 24.007, clause 10.5.6.4			
Element Name	Type Definition	Field Encoding	Comments
length spare pDP_TypeOrg pDP_TypeNo addrInfo	Length B4 B4 PDP_TypeNo AddressInfo		PDP type organisation PDP type number Address Information
Detailed Comments :			

Structured Type Definition			
Type Name : PriorityLvl			
Encoding Variation :			
Comments : Priority Level 3G TS 24.008 cl. 10.5.1.11			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1000'B
spare1	B1		
callPrio	B3		Call Priority
Detailed Comments :			

Structured Type Definition			
Type Name : ProgInd			
Encoding Variation :			
Comments : Progrees indicator information element 3G TS 24.008 cl. 10.5.4.21			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011110'B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard
spare	B1		spare bit
location	B4		location
extBit4	B1		extension bit
progressDescr	B7		progress description
Detailed Comments :			

Structured Type Definition			
Type Name : ProtoCfgOpt			
Encoding Variation :			
Comments : 3G TS 24.008 cl. 10.5.6.3			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B (27hex)
length	Length		
ext	B1		extension bit
spare	B4		
configprotocol	B3		configuration protocol
protocoldContents	ProtoldContents		information related to additional external protocols
Detailed Comments :			

Structured Type Definition			
Type Name : QualityOfService_lv Encoding Variation : Comments : 24.008, clause 10.5.6.5			
Element Name	Type Definition	Field Encoding	Comments
length	Length		
spare	B2		
dlyClass	B3		Delay Class
reliabilityClass	B3		Reliability Class
peakThroughput	B4		Peak Throughput
spare1	B1		
precedenceClass	B3		Precedence Class
spare2	B3		
meanThroughput	B5		Mean Throughput
trafficClass	B3		Traffic Class
deliveryOrder	B2		Delivery Order
deliveryErrorSDU	B3		Delivery of erroneous SDU
maxSDUSize	MaxSDU_Size		Maximum SDU Size
maxBitRateUplink	MaxBitRate		Maximum Bit Rate for Uplink
maxBitRateDnlink	MaxBitRate		Maximum Bit Rate for Downlink
residualBER	B4		Residual BER
sduErrRatio	B4		SDU Error Ratio
transDly	B6		Transfer Delay
trafficHandpro	B2		Traffic Handling Priority
bitRateUplink	BitRate		Guaranteed bit rate for uplink
bitRateDnlink	BitRate		Guaranteed bit rate for downlink
spare3	B3		
signallingInd	B1		Signalling Indication
srcStatsDescr	B4		Source Statistics Descriptor
maxBitRateDnlinkExt	BitRate		Maximum bit rate for downlink (extended)
bitRateDnlinkExt	BitRate		Guaranteed bit rate for downlink (extended)
Detailed Comments :			

Structured Type Definition			
Type Name : RAI_v Encoding Variation : Comments : Routing Area Identification 3GPP 24.008 / 10.5.5.15			
Element Name	Type Definition	Field Encoding	Comments
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each
lac	OCTETSTRING[2]		LAC
rac	OCTETSTRING[1]		RAC
Detailed Comments :			

Structured Type Definition			
Type Name : RadioPriority2_v			
Encoding Variation :			
Comments : Radio priority 2 3GPP 24.008 / 10.5.7.5			
Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value
Detailed Comments :			

Structured Type Definition			
Type Name : RadioPriority_v			
Encoding Variation :			
Comments : Radio priority 3GPP 24.008 / 10.5.7.2			
Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value
Detailed Comments :			

Structured Type Definition			
Type Name : ReceiveN_PDU_Numbers_tlv			
Encoding Variation :			
Comments : Receive N-PDU Numbers list 3GPP 24.008 / 10.5.5.11			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100110'B (hex 26)
iel	Length		
value	OCTETSTRING[0..17]		MS network capability value (CSN.1 coding)
Detailed Comments :			

Structured Type Definition			
Type Name : RepeatInd			
Encoding Variation :			
Comments : Repeat indicator 3G TS 24.008 cl. 10.5.4.22			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		
repeatInd	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : RequestedMS_Info_tv			
Encoding Variation :			
Comments : Requested MS Information 3G TS 24.008 cl. 10.5.5.25			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1010'B (A- hex)
I_RAT	B1		Inter RAT information container IE requested
spare3	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : SM_Cause_v			
Encoding Variation :			
Comments : Ref 24.008, 10.5.6.6			
Element Name	Type Definition	Field Encoding	Comments
causeValue	CauseValue		
Detailed Comments :			

Structured Type Definition			
Type Name : SNiLiPair			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
sNi	AM_SeqNum		
li	SUFI_ListLi		
Detailed Comments :			

Structured Type Definition			
Type Name : SS_VersionInd Encoding Variation : Comments : SS version indicator 3G TS 24.008 cl. 10.5.4.24			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111111'B
iel	Length		length
sS_VersionInfo	OCTETSTRING [1]		ss version information 1.
Detailed Comments : 1. Usually this IE has only one octet of content. Exact definition see TS 24.080			

Structured Type Definition			
Type Name : SUFI_Ack Encoding Variation : Comments : Acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.2. The ACK SUFI shall always be placed as the last SUFI if it is included in a STATUS PDU.			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_Ack
lsn	AM_SeqNum		1.
Detailed Comments : 1. Acknowledges the reception of all PDUs with sequence numbers < LSN that are not indicated to be erroneous in earlier parts of the STATUS PDU.			

Structured Type Definition			
Type Name : SUFI_Bitmap Encoding Variation : Comments : Bitmap super field. Ref 3G TS 25.322 clause 9.2.2.11.5			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_Bitmap
len	BitmapLen		1.
fsn	AM_SeqNum		2.
bitmap	Bitmap		3.
Detailed Comments : 1. The size of the bitmap in octets = len+1. len='0000'B means that the bitmap is one octet, and len='1111'B means that the bitmap is the maximum size of 16 octets 2. The sequence number for the first bit in the bitmap. 3. Status of the SNs in the interval [FSN, FSN + (len + 1) * 8 -1] where each bit_position can take on the following values:- * '1'B indicates that FSN + bit_position has been correctly received * '0'B indicates that FSN + bit_position has not been correctly received			

Structured Type Definition			
Type Name : SUFI_List			
Encoding Variation :			
Comments : List super field. Ref 3G TS 25.322 clause 9.2.2.11.4 This type definition assumes that a maximum of 3 (SNI, Li) pairs will be required for RLC test purposes.			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_List
len	LIST_Len		1.
sN1L1	SNiLiPair		2.
sN2L2	SNiLiPair		2.
sN3L3	SNiLiPair		2.
Detailed Comments : 1. The number of (SNI, Li) pairs in the super field. 2. SNI: Sequence number of PDU which was not correctly received; Li: The number of consecutive PDUs not correctly received following PDU with sequence number SNI.			

Structured Type Definition			
Type Name : SUFI_MRW			
Encoding Variation :			
Comments : Move receiving window super field. Ref 3G TS 25.322 clause 9.2.2.11.8 This type definition assumes that a maximum of three SN_MRWi will be required for RLC testing.			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW
len	MRW_Len		1.
sN_MRW1	SUFI_SN_MRWi		2.
sN_MRW2	SUFI_SN_MRWi		2.
sN_MRW3	SUFI_SN_MRWi		2.
nLength	N_Length		3.
Detailed Comments : 1. The number of SN_MRWi fields in the super-field. 2. Each SN_MRWi is used to indicate the end of each discarded SDU. SN_MRWi is the sequence number of the PDU that contains the LI of the i:th discarded SDU. 3. nLength is used together with SN_MRW_Length to indicate the end of the last discarded SDU			

Structured Type Definition			
Type Name : SUFI_MRW_ACK			
Encoding Variation :			
Comments : Move receiving window acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.7			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW_ACK
n	N_Length		1.
sN_ACK	AM_SeqNum		2.
Detailed Comments : 1. The N field shall be set equal to the N_Length field in the received MRW SUFI if the SN_ACK field is equal to the SN_MRW_Length field. Otherwise N shall be set to 0. 2. The SN_ACK field indicates the updated value of VR(R) after the reception of the MRW SUFI.			

Structured Type Definition			
Type Name : SUFI_NoMore			
Encoding Variation :			
Comments : No more data super field. Ref 3G TS 25.322 clause 9.2.2.11.1			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_NoMore
Detailed Comments :			

Structured Type Definition			
Type Name : SUFI_RList			
Encoding Variation :			
Comments : Relative list super field. Ref 3G TS 25.322 clause 9.2.2.11.6 This type definition assumes that a maximum of three codewords will be required for RLC testing			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_RList
len	RLIST_Len		1.
fsn	AM_SeqNum		2.
CW1	CodeWord		3.
CW2	CodeWord		3.
CW3	CodeWord		3.
Detailed Comments : 1. The number of codewords in the super-field 2. The sequence number of the first erroneous PDU in the RLIST. Note that len = '0000'B means that only FSN is present in the SUFI. 3. Each CW consists of 4 bits where the first three bits are part of a number, and the last bit is a status indicator. see 3G TS 25.25.322 clause 9.2.2.11.6 for a detailed description.			

Structured Type Definition			
Type Name : SUFI_WindowSize			
Encoding Variation :			
Comments : Window size super field. Ref 3G TS 25.322 clause 9.2.2.11.3			
Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_WindowSize
wsn	BITSTRING[12]		1.
Detailed Comments : 1. The allowed Tx window size to be used by the transmitter.			

Structured Type Definition			
Type Name : ServiceType_v			
Encoding Variation :			
Comments : Service type 3GPP 24.008 / 10.5.5.20			
Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
type	B3		type
Detailed Comments :			

Structured Type Definition			
Type Name : StreamId			
Encoding Variation :			
Comments : stream identifier 3G TS 24.008 cl. 10.5.4.28			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00101101'B
iel	Length		length
val	B8		stream identifier value
Detailed Comments :			

Structured Type Definition			
Type Name : Subadrs			
Encoding Variation :			
Comments : Subaddress 3G TS 24.008 cl. 10.5.4.8, 10.5.4.10, 10.5.4.14			
Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typrOfSubadrs	B3		Type of subaddress
oddEven	B1		odd/even indicator
spare3	B3		3 spare bits
subadrsInfo	OCTETSTRING [0..20]		subaddress information
Detailed Comments :			

Structured Type Definition			
Type Name : SuperFields			
Encoding Variation :			
Comments : This type is used to represent the set of super-fields within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.1.5.			
Element Name	Type Definition	Field Encoding	Comments
windowSize	SUFI_WindowSize		1
list	SUFI_List		1
rList	SUFI_RList		1
bitmap	SUFI_Bitmap		1
mRW	SUFI_MRW		1
mRW_Ack	SUFI_MRW_ACK		1
noMore	SUFI_NoMore		2
ack	SUFI_Ack		2, 3
Detailed Comments : 1. These super fields may arrive in any order, and may or may not be present. This type definition only supports a single super-field, followed by either a NO_MORE SUFI, or an ACK SUFI. 2. The NO_MORE SUFI, and the ACK SUFI are mutually exclusive, and should never both be present in the same STATUS PDU. 3. The ACK SUFI is used to acknowledge reception of all PDUs up to LSN, EXCEPT for any PDUs indicated as incorrectly received in the previous SUFIs.			

Structured Type Definition			
Type Name : TI			
Encoding Variation :			
Comments : Transaction identifier 3G TS 24.007 cl. 11.2.3.1.3			
Element Name	Type Definition	Field Encoding	Comments
tiFlag	B1		Flag
tiVal	B3		TIO
Detailed Comments :			

Structured Type Definition			
Type Name : TMSI_Status			
Encoding Variation :			
Comments : TMSI status 3GPP 24.008 cl. 10.5.5.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1001'B
spare3	B3		
flag	B1		Flag
Detailed Comments :			

Structured Type Definition			
Type Name : TearDwnInd_tv			
Encoding Variation :			
Comments : Ref 24.008, clause 10.5.6.10			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1001'B (9 hex)
spare	B3		
tdiflag	B1		TDI Flag
Detailed Comments :			

Structured Type Definition			
Type Name : TypeOfNumPlan			
Encoding Variation :			
Comments : Type of number and numbering plan 3G TS 24.008 cl.10.5.4.7, 10.5.4.9, 10.5.4.13			
Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typeOfNum	B3		Type of number
numbPlanId	B4		Numbering plan id.
Detailed Comments :			

Structured Type Definition			
Type Name : UpdateResult_v			
Encoding Variation :			
Comments : Update result 3GPP 24.008 / 10.5.5.17			
Element Name	Type Definition	Field Encoding	Comments
fOP	B1		Follow-on Proceed
value	B3		Update result value
Detailed Comments :			

Structured Type Definition			
Type Name : UpdateType_v			
Encoding Variation :			
Comments : Update result 3GPP 24.008 / 10.5.5.18			
Element Name	Type Definition	Field Encoding	Comments
for	B1		Follow-on request
value	B3		Update type value
Detailed Comments :			

Structured Type Definition			
Type Name : UserUser Encoding Variation : Comments : User-user 3G TS 24.008 cl. 10.5.4.25			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier 01111110'B
iel	Length		length
userUserProtocolDiscr	B8		user-user protocol discriminator
userUserInfo	OCTETSTRING [1..128]		user user information
Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE messages the userUserInfo length is of 0 – 32 bytes. In USER INFORMATION messages the userUserInfo length is of 1 – 128.			

Structured Type Definition			
Type Name : ARFCN_IndexList Encoding Variation : Comments : 3GPP TS 44.060 clause 12.10a			
Element Name	Type Definition	Field Encoding	Comments
aRFCN_Index1	B6		the value of the bit is always zero to indicate the end of the structure
aRFCN_Index2	B6		
aRFCN_Index3	B6		
aRFCN_Index4	B6		
aRFCN_Index5	B6		
end_Bit	B1		
Detailed Comments : It's a recursive structure. The definition is <ARFCN index list struct> ::= <ARFCN_INDEX : bit(6)> {0 | 1 <ARFCN index list struct>}. This TTCN definition shall be modified to include more aRFCN_Index if more than 5 aRFCN_Index are required in the Constraint.			

Structured Type Definition			
Type Name : AccessTechRequest			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.16 the definition is <Access Technologies Request struct> ::= <Access Technology Type : bit(4)> {0 | 1 <Access Technology Request struct>} if more than 4 access technologies are required in the constraint the TTCN definition shall be modified.			
Element Name	Type Definition	Field Encoding	Comments
accessTechType1	B4		
prefix1	B1		always = 1
accessTechType2	B4		
prefix2	B1		always = 1
accessTechType3	B4		
prefix3	B1		always = 1
accessTechType4	B4		
endingRepetition	B1		always = 0 indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : AccessTechnology			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
accessTechnologyType1	B4		
prefix1	B1		value 1 if present
accessTechnologyType2	B4		
prefix2	B1		value 1 if present
accessTechnologyType3	B4		
endBit	B1		shall always be 0
Detailed Comments :			

Structured Type Definition			
Type Name : AdditionalMeasParam3G			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
fddQminOffset	B3		
fddRSCPmin	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : AdditionalPSIMessages			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
nON_GSM_INFORMATION	B2		
pSI8_BROADCAST	B1		
pSI3ter_BROADCAST	B1		
pSI3quater_BROADCAST	B1		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : BA_FreqList			
Encoding Variation :			
Comments : BA Freq list 3GPP TS 44.018 clause 10.5.2.1c			
Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		always = 1
bA_Freq1	B10		
prefixBit2	B1		always = 1
bA_Freq2	B10		
prefixBit3	B1		always = 1
bA_Freq3	B10		
prefixBit4	B1		always = 1
bA_Freq4	B10		
prefixBit5	B1		always = 1
bA_Freq5	B10		
prefixBit6	B1		always = 1
bA_Freq6	B10		
prefixBit7	B1		always = 1
bA_Freq7	B10		
prefixBit8	B1		always = 1
bA_Freq8	B10		
prefixBit9	B1		always = 1
bA_Freq9	B10		
prefixBit10	B1		always = 1
bA_Freq10	B10		
endingBit	B1		always = 0 indicating the end of the structure
Detailed Comments : the TTCN definition shall be modified if more than 10 BA Freq are required in the constraint			

Structured Type Definition			
Type Name : BA_ListPref			
Encoding Variation :			
Comments : BA list pref 3GPP TS 44.018 clause 10.5.2.1c			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01110101'B
iel	O1		
rangeList	RangeList		1
bA_FreqList	BA_FreqList		
spareBits	BITSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : BA_Range			
Encoding Variation :			
Comments : BA range 3GPP TS 44.018 clause 10.5.2.1a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
numberOfRanges	O1		number of ranges, at least 1
ranges	OCTETSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : CCCH_Info			
Encoding Variation :			
Comments : parameters for common control channels			
Element Name	Type Definition	Field Encoding	Comments
bS_PA_MFRMS	B3		the number of 51-multiframes between transmission of paging messages. Definition see 3GPP TS 44.018 section 10.5.2.11
bS_AG_BLKRES	B3		the number of blocks on each common control channel reserved for access grant messages. Definition see 3GPP TS 44.018 section 10.5.2.11
Detailed Comments :			

Structured Type Definition			
Type Name : CCN_SupportDescr Encoding Variation : Comments : CCN Support Description. the definition is <CCN Support Description struct> ::= <Number_Cells> : bit(7)> {CCN_SUPPORTED : bit}* (Val(Number_Cells)), the number of cells can be upto 127 from above definition. The TTCN definition here includes only 1 cell, the TTCN shall be modified if more than 1 cell is required in the test case.			
Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
cCN_SUPPORTED1	B1		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : COMPACT_NCP2_Property Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
sAME_RA_AS_SERVING_CELL	B1		
cELL_BAR_ACCESS_2	B1		
bCC	B3		
timeMask	B1		
tIME_GROUP	B2		not present if timeMask = 0
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition

Type Name : COMPACT_NCP2_Repeat

Encoding Variation :

Comments : Only 1 repetition has been included. If more are required, the TTCN will be changed

Element Name	Type Definition	Field Encoding	Comments
prefix	B1		The rest fields are all OMITted if prefix = 0
sTART_FREQUENCY1 nCP2_Property1	B10 COMPACT_NCP2_Property		
nR_OF_REMAINING_CELL S1	B4		if value is equal to 0, the rest fields except endingRepetition are all OMITted
fREQ_DIFF_LENGTH1 fFREQUENCY_DIFF2	B3 BITSTRING[1..8]		number of bits in the BITSTRING= 1+val(fREQ_DIFF_LENGTH1)
nCP2_Property2	COMPACT_NCP2_Property		
fFREQUENCY_DIFF3 nCP2_Property3	BITSTRING[1..8] COMPACT_NCP2_Property		
fFREQUENCY_DIFF4 nCP2_Property4	BITSTRING[1..8] COMPACT_NCP2_Property		
recursionBreak	B4		if present always = '0000'B indicating the end of COMPACT_NCP2 recursion, i.e NR_OF_REMAINING_CELLS = 0000
endingRepetition	B1		if present always = '0'B indicating no more START_FREQUENCY

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21

Structured Type Definition			
Type Name : COMPACT_NeighParamSet			
Encoding Variation :			
Comments : COMPACT Neighbour parameters set structure			
Element Name	Type Definition	Field Encoding	Comments
nccMask	B1		
nCC	B3		not present if nccMask = 0
eXC_ACC	B1		
rxlevMask	B1		
gPRS_RXLEV_ACCESS_M IN	B6		not present if rxlevMask = 0
txpwrMask	B1		
gPRS_MS_TXPWR_MAX_C CH	B5		not present if txpwrMask = 0
priorityMask	B1		
pRRIORITY_CLASS	B3		not present if priorityMask = 0
hcsMask	B1		
hCS_THR	B5		not present if hcsMask = 0
gPRS_TEMPORARY_OFFS ET	B3		
gPRS_PENALTY_TIME	B5		
gPRS_RESELECT_OFFSET	B5		
guarMmask	B1		
gUAR_CONSTANT_PWR_B LKS	B2		not present if guarMask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : CellAlloc			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
rFL_NUMBER	B4		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : CellAllocLists Encoding Variation : Comments : The definition in CSN.1 is {1 < Cell Allocation struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more CellAllocation if more than 1 CellAllocation are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.19			
Element Name	Type Definition	Field Encoding	Comments
prefix1 cellAlloc1 endingRepetition	B1 CellAlloc B1		not present if prefix1 = 0 Value always ZERO, indicates the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : CellChDescr Encoding Variation : Comments : Cell channel description 3GPP TS 44.018 clause 10.5.2.1b			
Element Name	Type Definition	Field Encoding	Comments
iei refFreqList	IEI_8 O16		'01100010'B reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Definition			
Type Name : CellIdentification Encoding Variation : Comments : 3GPP TS 44.060 clause 12.23			
Element Name	Type Definition	Field Encoding	Comments
locationAreaidentificationIE rAC cellIdentityIE	LocAreaid_v O1 O2		3GPP TS 44.018 3GPP TS 23.003 3GPP TS 44.018
Detailed Comments :			

Structured Type Definition			
Type Name : CellOptionBCCH			
Encoding Variation :			
Comments : Cell options (BCCH) 3GPP TS 44.018 clause 10.5.2.3			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information lelement identifier
dN_Ind	B1		dynamic ARFCN mapping indicator
pwrC	B1		power control indicator
dtx	B2		discontinuous transmission indicator
radioLinkTimeout	B4		radio link timeout
Detailed Comments :			

Structured Type Definition			
Type Name : CellOptionSACCH			
Encoding Variation :			
Comments : Cell options (SACCH) 3GPP TS 44.018 clause 10.5.2.3a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information lelement identifier
dtx8	B1		high bit of discontinuous transmission
pwrC	B1		power control indicator
dtx65	B2		lower 2 bits of discontinuous transmission indicator
radioLinkTimeout	B4		radio link timeout
Detailed Comments :			

Structured Type Definition			
Type Name : CellSelParam			
Encoding Variation :			
Comments : Cell selection parameters 3GPP TS 44.018 clause 10.5.2.4			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
cellReselHysteresis	B3		cell reselected hysteresis
mS_TXPWR_MAX_CCH	B5		MS maximum TX power for CCH
acs	B1		additional reselect parameter indicator
neci	B1		half rate support
rXLEV_ACCESS_MIN	B6		MS minimum received signal level
Detailed Comments :			

Structured Type Definition			
Type Name : CellSelection			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.20			
Element Name	Type Definition	Field Encoding	Comments
bSIC	B6		
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_PwrMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_PwrMask = 0
gPRS_SelectMask	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_ReselectMask = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
sl13_Mask	B1		
sl13_PBCCH_LOCATION	SI13PBCCH_Location		not present if sl13_Mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : CellSelInd			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.1e All the RAN Description structures can be repeated multiple times, but only one repetition is included here. If more are required, the TTCN will be updated			
Element Name	Type Definition	Field Encoding	Comments
iei	O1		
length	Length		
ranDescr	B3		
firstMaskBit	B1		if any RAN description is present, this is set to '1'
bandInd	B1		GSM Description. Only present if ranDescr = '000'
aRFCN	B10		GSM Description. Only present if ranDescr = '000'
bSIC	B6		GSM Description. Only present if ranDescr = '000'
uTRANFDDDescr	UTRAN_FDD_Descr_CR		UTRAN FDD Description. Only present if ranDescr = '001'
uTRANTDDDescr	UTRAN_TDD_Descr_CR		UTRAN TDD Description. Only present if ranDescr = '010'
endingRepetition	B1		always set to '0'
Detailed Comments :			

Structured Type Definition			
Type Name : ChMode			
Encoding Variation :			
Comments : Channel mode 3GPP TS 44.018 clause 10.5.2.6			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01100011'B
mode	B8		
Detailed Comments :			
0 0 0 0 0 0 0 0 signalling only			
0 0 0 0 0 0 0 1 speech full rate or half rate version 1			
0 0 1 0 0 0 0 1 speech full rate or half rate version 2			
0 1 0 0 0 0 0 1 speech full rate or half rate version 3			
0 1 1 0 0 0 0 1 data, 43.5 kbit/s (downlink)+14.5 kbps (uplink)			
0 1 1 0 0 0 1 0 data, 29.0 kbit/s (downlink)+14.5 kbps (uplink)			
0 1 1 0 0 1 0 0 data, 43.5 kbit/s (downlink)+29.0 kbps (uplink)			
0 1 1 0 0 1 1 1 data, 14.5 kbit/s (downlink)+43.5 kbps (uplink)			
0 1 1 0 0 1 0 1 data, 14.5 kbit/s (downlink)+29.0 kbps (uplink)			
0 1 1 0 0 1 1 0 data, 29.0 kbit/s (downlink)+43.5 kbps (uplink)			
0 0 1 0 0 1 1 1 data, 43.5 kbit/s radio interface rate			
0 1 1 0 0 0 1 1 data, 32.0 kbit/s radio interface rate			
0 1 0 0 0 0 1 1 data, 29.0 kbit/s radio interface rate			
0 0 0 0 1 1 1 1 data, 14.5 kbit/s radio interface rate			
0 0 0 0 0 0 1 1 data, 12.0 kbit/s radio interface rate			
0 0 0 0 1 0 1 1 data, 6.0 kbit/s radio interface rate			
0 0 0 1 0 0 1 1 data, 3.6 kbit/s radio interface rate			

Structured Type Definition			
Type Name : ChMode2			
Encoding Variation :			
Comments : Channel mode 2 3GPP TS 44.018 clause 10.5.2.7			
Element Name	Type Definition	Field Encoding	Comments
iei mode	IEI_8 B8		'01100110'B
Detailed Comments :			

Structured Type Definition			
Type Name : ChNeeded			
Encoding Variation :			
Comments : Channels needed 3GPP TS 44.018 clause 10.5.2.8			
Element Name	Type Definition	Field Encoding	Comments
iei ch2 ch1	B4 Channel Channel		information element identity needed channel 2 O needed channel 1 M
Detailed Comments :			

Structured Type Definition			
Type Name : ChannelDescr			
Encoding Variation :			
Comments : Channel description 3GPP TS 44.018 clause 10.5.2.5			
Element Name	Type Definition	Field Encoding	Comments
iei cht_schn tn tsc hch maio hsn spr arfcn	IEI_8 B5 B3 B3 B1 B6 B6 B2 B10		'01100100'B channel type and TDMA offset timeslot number training sequence code hch = 1 indicating hopping channel mobile allocation index offset – hopping hopping sequence number – hopping '00'B – non hopping absolute RF channel number – non hopping
Detailed Comments :			

Structured Type Definition			
Type Name : ChannelDescr2			
Encoding Variation :			
Comments : Channel description 2 3GPP TS 44.018 clause 10.5.2.5a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01100110'B
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
hch	B1		hch = 1 indicating hopping channel
maio	B6		mobile allocation index offset – hopping
hsn	B6		hopping sequence number – hopping
spr	B2		'00'B – non hopping
arfcn	B10		absolute RF channel number – non hopping
Detailed Comments :			

Structured Type Definition			
Type Name : ChannelSpecificInfo			
Encoding Variation :			
Comments : parameters for individual channel			
Element Name	Type Definition	Field Encoding	Comments
dedCH_Info	DedCH_Info		parameters for dedicated channel. valid for combinations: 1, 2, 3, 5, 7, 8, 9, 10
cCCH_Info	CCCH_Info		parameters for common control channels: PCH, SCH, ... valid for combinations: 4, 5, 6
pCCCH_Info	PCCCH_Info		parameters for packet common control channels: PCCCH, PPCH, ... valid for combinations: 11, 12
pBCCH_Info	PBCCH_Info		parameters for packet broadcast channel: PBCCH. valid for combination: 11
Detailed Comments :			

Structured Type Definition			
Type Name : CipherModeSetting			
Encoding Variation :			
Comments : Cipher mode setting 3GPP TS 44.018 clause 10.5.2.9			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_4		'1001'B
algId	B3		algorithm identifier
startingCiph	B1		starting ciphering, 1 = start
Detailed Comments :			

Structured Type Definition			
Type Name : CipherResponse			
Encoding Variation :			
Comments : Cipher response 3GPP TS 44.018 clause 10.5.2.10			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_4		'1010'B
spareBits	B3		spare bits
cipherResponse	B1		cipher response bit
Detailed Comments :			

Structured Type Definition			
Type Name : ClassmarkEnquiryMask			
Encoding Variation :			
Comments : 3GPP TS 04.08 / 3GPP TS 44.018 Section 10.5.2.7c			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		OCTETSTRING [1]
length	Length		OCTETSTRING [1]
value	O1		OCTETSTRING [1]
Detailed Comments :			

Structured Type Definition			
Type Name : CompactCellSelection			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.20			
Element Name	Type Definition	Field Encoding	Comments
bSIC	B6		
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_Mask1	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_Mask1 = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_Mask1 = 0
gPRS_Mask2	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_Mask2 = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_Mask2 = 0
gPRS_Mask3	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_Mask3 = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
tIME_GROUPMask	B1		
tIME_GROUP	B2		not present if tIME_GROUPMask = 0
gUARMask	B1		
gUAR_CONSTANT_PWR_BLOCKS	B2		not present if gUARMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : CompactControlInfo			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
largeCellOperation	B1		
numberOfIdleMask	B1		
numberOfIdleBlocks	NumberOfIdleBlocks		not present if numberOfIdleMask = 0
n_CCCH_NH_Mask	B1		
n_CCCH_NH	B4		not present if n_CCCH_NH_Mask = 0
Detailed Comments : Reference :3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : CompactInfo			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
cellIdentification	CellIdentification		
compactNeighbourCellParam	CompactNeighCellParamList		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : CompactNeighCellParam			
Encoding Variation :			
Comments : Compact Neighbour Cell Parameters Structure			
Element Name	Type Definition	Field Encoding	Comments
sTART_FREQUENCY	B10		
compactCellSelectionParams	CompactCellSelection		
nR_OF_REMAINING_CELLS	B4		
fREQ_DIFF_LENGTH	B3		
fFREQUENCY_DIFF1	BITSTRING[1..8]		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
compactCellSelectionParams 1	CompactCellSelection		
fFREQUENCY_DIFF2	BITSTRING[1..8]		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
compactCellSelectionParams 2	CompactCellSelection		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20 More fFREQUENCY_DIFF + compactCellSelectionParams shall be added in this type definition if value of nR_OF_REMAINING_CELLS is greater than 2 . In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fFREQUENCY_DIFF and compactCellSelectionParams			

Structured Type Definition			
Type Name : CompactNeighCellParam2			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
messageEscape	B2		always = '00'B
prefix1	B1		The rest fields are all OMITted if prefix1 = 0
cOMPACT_NCP2_Repeat1	COMPACT_NCP2_Repeat		
cell_PARAMS_POINTER1	B2		
prefix2	B1		The rest fields are all OMITted if prefix2 = 0
cOMPACT_NCP2_Repeat2	COMPACT_NCP2_Repeat		
cELL_PARAMS_POINTER2	B2		
endingOfRepeat	B1		if present always = '0'B indicating the end of the repetition
cOMPACT_NeighParamSet 1	COMPACT_NeighParamSet		
cOMPACT_NeighParamSet 2	COMPACT_NeighParamSet		
cOMPACT_NeighParamSet 3	COMPACT_NeighParamSet		
cOMPACT_NeighParamSet 4	COMPACT_NeighParamSet		
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : CompactNeighCellParamList			
Encoding Variation :			
Comments : The type definition is {1 < COMPACT Neighbour Cell params struct>}**0, it is an indeterminate number of repetition of <COMPACT Neighbour Cell params struct>, so the TTCN definition shall be modified to include more compactNeighbourCellParam if more 1 compactNeighbourCellParam are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefix0	B1		Always "1"
compactNeighCellParam0	CompactNeighCellParam		
endingRepetition	B1		Always "0" to indicate the end of the structure
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : CompactNeighCellParams2List Encoding Variation : Comments : this type definition is {1 < COMPACT Neighbour Cell params 2 struct>}**0 The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1 compactNeighCellParam2 endingRepetition	B1 CompactNeighCellParam2 B1		not present if prefix1 = 0 not present if prefix1 = 0. If present, always = 0 indicating the end of the repetition
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : CompactReducedMA Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
reducedMABitmapLen reducedMABitmap MAIO_2mask MAIO_2	B7 BITSTRING[0..128] B1 B6		contents of length reducedMABitmapLen not present if MAIOmask=0
Detailed Comments :			

Structured Type Definition			
Type Name : ControlChDescr			
Encoding Variation :			
Comments : Control channel description 3GPP TS 44.018 clause 10.5.2.11			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
mSCRelease	B1		MSC release
att	B1		attach-detach allowed
bS_AG_BLK_RES	B3		base station access grant blocks reservation
cCCH_CONF	B3		CCCH configuration
spareBits	B3		spare bits
cBQ2	B2		cell bar qualify 2
bS_PA_MFRMS	B3		number of multiframes for paging request
t3212	O1		t3212 value
Detailed Comments :			

Structured Type Definition			
Type Name : DYNAMIC_ARFCN_MAPPING			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
gSM_Band	B4		
aRFCN_FIRST	B10		
bAND_OFFSET	B10		
aRFCN_RANGE	B7		
Detailed Comments : 3GPP TS 44.060 clause 11.2.24; 3GPP TS 44.018 clause 10.5.2.37j;			

Structured Type Definition			
Type Name : DedCH_Info			
Encoding Variation :			
Comments : parameters for dedicated channel			
Element Name	Type Definition	Field Encoding	Comments
chMode	ChMode		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	CipherModeSetting		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	B64		Initial MS uplink transmission power level. This value is used in the L1 header of SACCH.
powerLevel	B5		
timingAdvance	B7		Initial timing advance. This value is used in the L1 header of SACCH. This field shall be set to the same value as in timingAdvance of G_CL1_CreateCell_REQ.
Detailed Comments : In addition to ciphering algorithm the cipherMode specifies the initial ciphering mode of the physical channel in both transmission and receiving direction. by startingCiph bit. During ciphering mode setting procedure the ciphering mode of receiving direction can be changed by G_CL1_CipheringControl_REQ.			

Structured Type Definition			
Type Name : DedicatedModeOrTBF			
Encoding Variation :			
Comments : Reference : 3GPP TS 44.018 clause 10.5.2.25b			
Element Name	Type Definition	Field Encoding	Comments
iei	B4		information element identifier
spareBit	B1		always = 0
twoMsgAssig	B1		two message assignment
downlink	B1		down link assignement
tBForDedicated	B1		TBF or dedicated mode
Detailed Comments :			

Structured Type Definition			
Type Name : DirectEncoding1			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8			
Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
gPRS_MobileAllocation	GPRSMobileAlloc		
Detailed Comments :			

Structured Type Definition

Type Name : DirectEncoding2

Encoding Variation :

Comments : 3GPP TS 44.060 clause 12.8

Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
hSN	B6		
lengthOfMA_FreqList	B4		
mA_FreqList	OCTETSTRING[3..18]		length of this field is indicated in lengthOfMA_FreqList

Detailed Comments :

Structured Type Definition

Type Name : DynamicAllocation

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
extendedAlloc	B1		0 – dynamic allocation; 1 – extended dynamic allocation
uSFGranularity	B1		0 – one block; 1 – four blocks
physicalChld	PhysicalChld		Single PDCH or multislot-configured PDCHs
tN0	BOOLEAN		TRUE – time slot 0 is allocated; FALSE – not allocated
uSF_TN0	B3		USF value for slot 0
tN1	BOOLEAN		TRUE – time slot 1 is allocated; FALSE – not allocated
uSF_TN1	B3		USF value for slot 1
tN2	BOOLEAN		TRUE – time slot 2 is allocated; FALSE – not allocated
uSF_TN2	B3		USF value for slot 2
tN3	BOOLEAN		TRUE – time slot 3 is allocated; FALSE – not allocated
uSF_TN3	B3		USF value for slot 3
tN4	BOOLEAN		TRUE – time slot 4 is allocated; FALSE – not allocated
uSF_TN4	B3		USF value for slot 4
tN5	BOOLEAN		TRUE – time slot 5 is allocated; FALSE – not allocated
uSF_TN5	B3		USF value for slot 5
tN6	BOOLEAN		TRUE – time slot 6 is allocated; FALSE – not allocated
uSF_TN6	B3		USF value for slot 6
tN7	BOOLEAN		TRUE – time slot 7 is allocated; FALSE – not allocated
uSF_TN7	B3		USF value for slot 7

Detailed Comments : The uSF_TNx field is not applicable when tNx = FALSE.

Structured Type Definition			
Type Name : DynamicAllocationPacket			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
extendedAllocMask	B1		0 – dynamic allocation; 1 – extended dynamic allocation
mask	B1		
p0	B4		not present if mask=0
pR_Mode	B1		not present if mask=0
uSFGranularity	B1		0 – one block; 1 – four blocks
uplinkTFImask	B1		
uplinkTFI	B5		not present if uplinkTFImask=0
spareBit	B1		set to 0
tBFStartingTimeMask	B1		
tBFStartingTime	StartingFrameNumberDscr		not present if tBFStartingTimeMask=0
timeSlotAllocMask	B1		
timeSlotAlloc	TimeSlotAllocation_UA		not present if timeSlotAllocMask=1
timeSlotAllocPowerControl	TimeSlotAllocationPowerControl		not present if timeSlotAllocMask=0
Detailed Comments :			

Structured Type Definition			
Type Name : EDGE_Struct			
Encoding Variation :			
Comments : Reference : 3GPP TS 24.008 clause 10.5.1.7			
Element Name	Type Definition	Field Encoding	Comments
modulationCapability	B1		
pwrMask1	B1		
eDGE_RF_PowerCapability 1	B2		not present if pwrMask1 = 0
pwrMask2	B1		
eDGE_RF_PowerCapability 2	B2		not present if pwrMask2 = 0
Detailed Comments :			

Structured Type Definition

Type Name : EGPRSPktUplinkAssignment

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
constantVal	B2		shall be '00'B
tLLImask	B1		
contensionResolutionTLLI	B32		not present if tLLImask=0
compactReducedMAMask	B1		
compactReducedMA	CompactReducedMA		not present if compactReducedMAMask=0
channelCodingCommand	B4		note 1
resegment	B1		0 – Retransmitted RLC data blocks shall not be re-segmented. 1 – Retransmitted RLC data blocks shall be re-segmented according to commanded MCS
windowSize	B5		
accessTechMask	B1		
accessTechnology	AccessTechnology		not present if accessTechMask = 0
aRACRetransReq	B1		0 – retransmission of an ADDITIONAL MS RADIO ACCESS CAPABILITIES message is not requested. 1 – retransmission of an ADDITIONAL MS RADIO ACCESS CAPABILITIES message is requested
tLLIBlockChannelCoding	B1		0 – MS shall use CS-1 in GPRS TBF mode and MCS-1 in EGPRS TBF mode. 1 – MS shall use the value commanded in the CHANNEL_CODING_COMMAND or EGPRS_CHANNEL_CODING_COMMAND
bep_Period2Mask	B1		
bep_Period2	B4		not present if bep_Period2Mask=0
packetTimingAdvance	PacketTimingAdvance		
packetExtTAMask	B1		
packetExtendedTA	B2		not present if packetExtTAMask=0
freqParamMask	B1		
freqParam	FreqParam		not present if freqParamMask=0
allocationMask	B2		
dynamicAllocation	DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	SingleBlockAllocationPacket		present if allocationMask=10
multiBlockAllocation	MultiBlockAllocationPacket		present if allocationMask=11

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
r5Mask	B1		
gRNTIMask	B1		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	B4		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBldMask	B1		not present if r99Mask=0 and r5Mask=0
rBld	B5		not present if r99Mask=0, r5Mask=0 and rBldMask=0
r6Mask	B1		not present if r99Mask=0, r5Mask=0
pfiMask	B1		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
pFI	B7		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and pfiMask = 0
rlcModeMask	B1		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
rlcMode	B1		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and rlcModeMask = 0
Detailed Comments : note 1 : bits 4 3 2 1 value 0 0 0 0 MCS-1 0 0 0 1 MCS-2 0 0 1 0 MCS-3 0 0 1 1 MCS-4 0 1 0 0 MCS-5 0 1 0 1 MCS-6 0 1 1 0 MCS-7 0 1 1 1 MCS-8 1 0 0 0 MCS-9 1 0 0 1 MCS-5-7 1 0 1 0 MCS-6-9			

Structured Type Definition

Type Name : EGPRS_UplinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Type Definition	Field Encoding	Comments
extendedRA	B5		
accessTechMmask	B1		
accessTechRequest	AccessTechRequest		not present if accessTechMask = 0
allocMask	B1		'0' -> multiBlock Allocation; '1' -> dynamic allocation
tFI_Assignment	B5		temporary flow identifier
pOLLING	B1		not present if allocMask = 0
spareBit	B1		not present if allocMask = 0 not present if allocMask = 0.
uSF	B3		set to 0 not present if allocMask = 0
uSFGranularity	B1		not present if allocMask = 0
p0Mask	B1		not present if allocMask = 0
p0	B4		not present if allocMask = 0 or p0Mask = 0
pR_MODE	B1		not present if allocMask = 0 or p0Mask = 0
eGPRSChannelCodingCom mand	B4		not present if allocMask = 0
tLLI_BlockChannelCodeing	B1		not present if allocMask = 0
bepPeriod2Mask	B1		not present if allocMask = 0
bepPeriod2	B4		not present if allocMask = 0 or bepPeriod2Mask = 0
resegment	B1		not present if allocMask = 0
eGPRSWindowSize	EGPRSWindowSize		not present if allocMask = 0
alphaMask	B1		not present if allocMask = 0
aLPHA	B4		not present if allocMask = 0 or alphaMask = 0
gMMA	B5		not present if allocMask = 0
taIndexMask	B1		not present if allocMask = 0
tIMING_ADVANCE_INDEX	B4		not present if allocMask = 0 or taIndexMask = 0
tbfStartingTimemask	B1		not present if allocMask = 0
tBF_STARTING_TIME	B16		not present if allocMask = 0 or tbfStartingTimemask = 0
alpha1Mask	B1		present if allocMask = 0
aLPHA1	B4		multi block allocation not present if allocMask = 1 or alpha1Mask = 0
gMMA1	B5		not present if allocMask = 1
tBF_STARTING_TIME1	B16		not present if allocMask = 1
numberOfRadioBlocks	B2		not present if allocMask = 1
p02Mask	B1		not present if allocMask = 1
p02	B4		not present if allocMask = 1 or p02Mask = 0

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
spareBit2	B1	LowHigh_Rule3	not present if allocMask = 1 or p02Mask = 0 set to 0
pR_MODE2	B1		not present if allocMask = 1 or p02Mask = 0
r6Mask	B1		not present if allocMask = 1
phiMask	B1		not present if allocMask = 1 or r6Mask = L
pFI	B7		not present if allocMask = 1, r6Mask = L or phiMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : ENH_ReportingParam			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
reportType	B1		
rEPORTING_RATE	B1		
iNVALID_BSIC_REPORTING	B1		
nccPermittedMask	B1		
nCC_PERMITTED	B8		
gPRS_MeasParamDesMask	B1		
gPRS_MeasureParamDescr	GPRS_MeasParamDescr		
gPRS_3G_MeasParamDescrMmask	B1		
gPRS_3G_MeasParamDescr	GPRS_3G_MeasParamDescr	not present if gPRS_3G_MeasParamDescrMask = 0	
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23			

Structured Type Definition			
Type Name : EnhDTMCSRelInd			
Encoding Variation :			
Comments : 44.018 clause 10.5.2.14e			
Element Name	Type Definition	Field Encoding	Comments
iei	B4		set to '000'
spareBits	B3		
ind	B1		
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : ExtInfo_NonGPRSCellOptions			
Encoding Variation :			
Comments : 44.18 v5.14.0 Table 12.27			
Element Name	Type Definition	Field Encoding	Comments
extLength	B6		
eCSC	B1		
ECSR3G	B1		
Detailed Comments :			

Structured Type Definition			
Type Name : ExtLengthDescr			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
extensionLength	B8		
sparebit	BITSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : ExtensionInfo			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.24			
Element Name	Type Definition	Field Encoding	Comments
extensionMask	B1		R99 extension
eGPRS_PACKET_CHANNEL_REQUEST	B1		not present if extensionMask = 0
bEP_PERIOD	B4		not present if extensionMask = 0
pFC_FEATURE_MODE	B1		not present if extensionMask = 0
dTM_SUPPORT	B1		not present if extensionMask = 0
bSS_PAGING_COORDINATION	B1		not present if extensionMask = 0
cCN_ACTIVE	B1		not present if extensionMask = 0, R4 extension
nW_EXT_UTBF	B1		not present if extensionMask = 0, R4 extension
multiTBFCap	B1		R6 extension
extUTBFNoData	B1		
dTMEhancCap	B1		
mbmsMask	B1		
dedModeMBMSSupprt	B1		not present if mbmsMask = 0
mNCISupport	B1		not present if mbmsMask = 0
spareBit	BITSTRING		not present if extensionMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : FreqChannelSeq			
Encoding Variation :			
Comments : Frequency channel sequence 3GPP TSS 44.018 clause 10.5.2.12			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01101001'B
larfcn	O1		lowest ARFCN (1-124)
incs	O8		increment skip ARFCN n
Detailed Comments :			

Structured Type Definition			
Type Name : FreqInfo			
Encoding Variation :			
Comments : Parameters for Description of basic physical channel in frequency domain.			
Element Name	Type Definition	Field Encoding	Comments
h	B1		h='1'B: hopping channel; h='0'B: non-hopping channel
spr	B3		'000'B
spr1	B2		'00'B, if h = '0'B, otherwise OMIT
maio	B6		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	BITSTRING [6]		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	BITSTRING [10]		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	FreqListNoIEI		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13
Detailed Comments : macLength is the length of mac field = (NF div 8) + 1. NF is the number of frequencies in the cell allocation.			
<p>mac i : mobile allocation RF channel i, i = 1, 2,..., NF. The mac i bit indicates whether or not the mobile allocation frequency list includes the i'th frequency in the cell allocation frequency list. In the cell allocation frequency list the absolute RF channel numbers are placed in increasing order of ARFCN, except that ARFCN 0, if included in the set, is put in the last position in the list. From i =1, 2,..., NF, for a RF channel belonging to the mobile allocation the mac i bit is coded with a "1"; for a RF channel not belonging to the mobile allocation the mac i bit is coded with a "0". If NF mod 8 <> 0 then bits from NF to 8*macLength must be coded with a "0" in each.</p>			

Structured Type Definition			
Type Name : FreqList			
Encoding Variation :			
Comments : Frequency list 3GPP TS 44.018 clause 10.5.2.13			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'00000101'B
iel	O1		OCTETSTRING [1]
frequencyList	OCTETSTRING		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Definition			
Type Name : FreqListNoIEI			
Encoding Variation :			
Comments : Frequency list without IEI GSM 44.018, 10.5.2.13			
Element Name	Type Definition	Field Encoding	Comments
length fl	O1 OCTETSTRING		OCTETSTRING [1] list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Definition			
Type Name : FreqParam			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8			
Element Name	Type Definition	Field Encoding	Comments
tSC	B3		
encodingMask	B2		
aRFCN	B10		present if encodingMask = '00'B
indirectEncoding	IndirectEncoding		present if encodingMask = '01'B
directEncoding1	DirectEncoding1		present if encodingMask = '10'B
directEncoding2	DirectEncoding2		present if encodingMask = '11'B
Detailed Comments :			

Structured Type Definition			
Type Name : FreqParam_bt			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.16			
Element Name	Type Definition	Field Encoding	Comments
maskBits	B2		always = 00
mAIO	B6		MAIO
mobileAloc	OCTETSTRING		length of this field is (value of lengthOfFreqParam -1), lengthOfFreqParam is defined in IARO
Detailed Comments :			

Structured Type Definition			
Type Name : GPRSMobileAlloc			
Encoding Variation :			
Comments : Reference: 3GPP TS 44.060 clause 12.10a			
Element Name	Type Definition	Field Encoding	Comments
hSN	B6		3GPP TS 45.002
rFL_Mask	B1		
rFL_NumberList	RFL_NumberList		not present if rFL_Mask = 0
mA_ARFCN_Mask	B1		
mA_LENGTH	B6		not present if mA_ARFCN_Mask = 1
mA_BITMAP	BITSTRING[1..64]		not present if mA_ARFCN_Mask = 1
aRFCN_IndexMask	B1		not present if mA_ARFCN_Mask = 0
aRFCN_IndexList	ARFCN_IndexList		not present if mA_ARFCN_Mask = 0 or aRFCN_IndexMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : GPRSMobileAllocations			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
mA_NUMBER	B4		
GPRSMobileAllocation	GPRSMobileAlloc		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition

Type Name : GPRS_3G_MeasParamDescr

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
fDD_REP_QUANT_Mask	B1		
fDD_REP_QUANT	B1		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTI NG	B2		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRES HOLD	B3		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	B1		
tDD_MULTIRAT_REPORTI NG	B2		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRES HOLD	B3		not present if tDD_ReportingMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Structured Type Definition

Type Name : GPRS_BSIC_Descr

Encoding Variation :

Comments : The CSN.1 definition for this type is
 <GPRS BSIC Description struct> ::=
 { 0 | 1 <BA_Index_Start_BSIC : bit(5) > }
 <BSIC : bit (6) >
 <Number_Remaining_BSIC : bir (7) >
 { < Frequency_Scrolling : bit >
 <BSIC : bit (6) > ** (val(Number_Remaining_BSIC)),
 the number of repetitions of "Frequency_Scrolling" is determined by "Number_Remaining_BSIC",
 the maximum repetition is 127. So the TTCN definition shall be modified to include more
 "Frequency_Scrolling" if more than 8 "Frequency_Scrolling" are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
indexMask	B1		
bA_IndexStart_BSIC	B5		not present if indexMask = 0
bSIC	B6		
numberRemainingBSIC	B7		
frequencfScrolling1	B1		
bSIC1	B6		
frequencfScrolling2	B1		
bSIC2	B6		
frequencfScrolling3	B1		
bSIC3	B6		
frequencfScrolling4	B1		
bSIC4	B6		
frequencfScrolling5	B1		
bSIC5	B6		
frequencfScrolling6	B1		
bSIC6	B6		
frequencfScrolling7	B1		
bSIC7	B6		
frequencfScrolling8	B1		
bSIC8	B6		

Detailed Comments : Reference : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : GPRS_CellOptions
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.24

Element Name	Type Definition	Field Encoding	Comments
nMO	B2		network mode of operation
t3168	B3		
t3192	B3		
dRX_TIMER_MAX	B3		
aACCESS_BURST_TYPE	B1		
cONTROL_ACK_TYPE	B1		
bS_CV_MAX	B4		
pAN_Mask	B1		
pAN_DEC	B3		not present if pAN_Mask = 0
pAN_INC	B3		not present if pAN_Mask = 0
pAN_MAX	B3		not present if pAN_Mask = 0
optionalExtMask	B1		
extensionLength	B6		not present if optionalExtMask =0
extensionInfo	ExtensionInfo		not present if optionalExtMask = 0

Detailed Comments :

Structured Type Definition

Type Name : GPRS_MeasParamDescr

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
ServingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD_Mask	B1		
sCALE_ORD	B2		not present if sCALE_ORD_Mask = 0
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask400	B1		
rEPORTING_OFFSET_400	B3		not present if mask400 = 0
rEPORTING_THRESHOLD_400	B3		not present if mask400 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Structured Type Definition			
Type Name : GPRS_MobileAllocationLists Encoding Variation : Comments : The definition in CSN.1 is {1 < GPRS Mobile Allocations struct >}**0, so the prefix bit and following structure may repeat infinite times, this struct definition shall be changed if more than 5 GPRSMobileAllocation are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.19			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 1
gPRS_MobileAllocation1	GPRSMobileAllocations		
prefix2	B1		always = 1
gPRS_MobileAllocation2	GPRSMobileAllocations		
prefix3	B1		always = 1
gPRS_MobileAllocation3	GPRSMobileAllocations		
prefix4	B1		always = 1
gPRS_MobileAllocation4	GPRSMobileAllocations		
prefix5	B1		always = 1
gPRS_MobileAllocation5	GPRSMobileAllocations		
endingRepetiton	B1		Its value is always zero and indicating the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : GPRS_PowerControlParam Encoding Variation : Comments : 3GPP TS 44.060 clause 11.2.25			
Element Name	Type Definition	Field Encoding	Comments
aLPHA	B4		
t_AVG_W	B5		
t_AVG_T	B5		
pC_MEAS_CHAN	B1		0--BCCH 1--PDCH
n_AVG_I	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : GPRS_REP_PRIORITY_Descr			
Encoding Variation :			
Comments : GPRS report priority description the number of repetition of the rEP_PRIORITY is determined by value of numberCells, the maximum repetition is 127. the TTCN definition defines 8 repetitions, it shall be modified to include more repetitions if more 8 rEP_PRIORITY are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
rEP_PRIORITY1	B1		
rEP_PRIORITY2	B1		
rEP_PRIORITY3	B1		
rEP_PRIORITY4	B1		
rEP_PRIORITY5	B1		
rEP_PRIORITY6	B1		
rEP_PRIORITY7	B1		
rEP_PRIORITY8	B1		
Detailed Comments : 3GPP TS 44.018 clause 10.5.2.33b			

Structured Type Definition			
Type Name : GPRS_RTD12_List			
Encoding Variation :			
Comments : the CSN.1 definition for RTD12_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more rTD if more than 5 rTD are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 0
rTD1	B12		
prefix2	B1		always = 0
rTD2	B12		
prefix3	B1		always = 0
rTD3	B12		
prefix4	B1		always = 0
rTD4	B12		
prefix5	B1		always = 0
rTD5	B12		
endingRepetiton	B1		always = '1'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018, 10.5.2.33b			

Structured Type Definition			
Type Name : GPRS_RTD6_List			
Encoding Variation :			
Comments : the CSN.1 definition for RTD6_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more rTD if more than 5 rTD are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		always = 0
rTD1	B6		
prefixBit2	B1		always = 0
rTD2	B6		
prefixBit3	B1		always = 0
rTD3	B6		
prefixBit4	B1		always = 0
rTD4	B6		
prefixBit5	B1		always = 0
rTD5	B6		
endingBit	B1		always = '1'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018, 10.5.2.33b			

Structured Type Definition			
Type Name : GPRS_RealTimeDiffDescr			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
rtdMask1	B1		
baIndexMask1	B1		not present if rtdMask1 = 0
baIndexStartRTD1	B5		not present if rtdMask1 = 0 or baIndexMask1 = 0
rTD6_List	RTD6_List_List		not present if rtdMask1 = 0
rtdMask2	B1		
baIndexMask2	B1		not present if rtdMask2 = 0
baIndexStartRTD2	B5		not present if rtdMask2 = 0 or baIndexMask2 = 0
rTD12_List	RTD12_List_List		not present if rtdMask2 = 0
Detailed Comments : 3GPP TS 44.018, 10.5.2.33b			

Structured Type Definition

Type Name : GPRS_Resumption
Encoding Variation :
Comments : GPRS resumption
3GPP TS 44.018 clause 10.5.2.14c

Element Name	Type Definition	Field Encoding	Comments
iei	B4		
spareBits	B3		
ack	B1		

Detailed Comments :

Structured Type Definition

Type Name : G_CellConfigInfo

Encoding Variation :

Comments : This structure contains relevant information describing a GERAN cell configuration as needed for basic test Steps.

Element Name	Type Definition	Field Encoding	Comments
bCCH_Freq	BITSTRING [10]		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping Serving cell: 20 for GSM 900 (alternative 40 or 60); 590 for DCS 1800 (alternative 690 or 830); 263 for GSM 450 (alternative 274 or 276); 310 for GSM 480 (alternative 321 or 323)
tCH_Freq	FreqInfo		frequency parameters for traffic channel
sDCCH8_Freq	FreqInfo		frequency parameters for stand alone dedicated control channel
downlinkPowerLevel	INTEGER		Downlink transmission power level in dBpVemf(). Default = 63
cellIdentity	O2		cell identity, 3GPP TS 24.008 clause 10.5.1.1. Default = '0001'O
mcc	H3		mobile country code, 3 digits. 3GPP TS 24.008 clause 10.5.1.3. Default = 001 (decimal)
mnc	H3		mobile network code, 2 BCD digits. 3GPP TS 24.008 clause 10.5.1.3. Default = 01 (desimal)
lac	O2		location area code. 3GPP TS 24.008 clause 10.5.1.3. Default = '0001'O
ncc	B3		PLMN colour code, 3GPP TS 23.003 clause 4.3.2. Default = '001'B
bcc	B3		BS colour code, 3GPP TS 23.003 clause 4.3.2. Default = '101'B
dTX	B2		Uplink discontinuous transmission indecation, 3GPP TS 44.018 clause 10.5.2.3. Dfault = MS must not use
dtx8	B1		Uplink discontinuous transmission indecation, 3GPP TS 44.018 clause 10.5.2.3a.

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
dtx65	B2		Uplink discontinuous transmission indication, 3GPP TS 44.018 clause 10.5.2.3a.
attFlag	B1		IMSI attach/detach allowed, Default = MS shall not allow
cCCH_CONF	B3		CCCH configuration, 3GPP TS 44.018 clause 10.5.2.11. Default = 1 basic physical channel for CCCH combined with SDCCH
bS_AG_BLK_RES	B3		3GPP TS 44.018 clause 10.5.2.11. Default = 0 block reserved
bS_PA_MFRMS	B3		3GPP TS 44.018 clause 10.5.2.11. Default = 5 paging subgroups
splitOnCCCH	B1		3GPP TS 24.008 clause 10.5.5.6. 0 = no split pg cycle on CCCH. value taken from PICS.
cell_BAR_ACCESS	B1		cell barred for access, 3GPP TS 44.018 clause 10.5.2.29. Default = not barred
cellBarQualify2	B2		cell bar qualify 2. 3GPP TS 44.018 clause 10.5.2.11
callReestab	B1		Call re-establishment allowed, 3GPP TS 44.018 clause 10.5.2.29.
timingAdvance	O1		timing advance value, 3GPP TS 44.018 clause 10.5.2.40
tSC	B3		training sequence code for dedicated channels. TSC of broadcast channel and common channel shall be equal to BCC.
cellAllocation	CellChDescr		cell allocation, 3GPP TS 44.018 clause 10.5.2.1b with IEI omitted
neighBCCHFreqList	NeighCellDescr		neighbour cell BCCH/CCCH ARFCN's, 3GPP TS 44.018 clause 10.5.2.22 with IEI omitted.
extNeighBCCHFreqList	NeighCellDescr		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis, 3GPP TS 44.018 clause 10.5.2.22 with IEI omitted.
extNeighBCCHFreqList2ter	NeighCellDescr2		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter, 3GPP TS 44.018 clause 10.5.2.22a with IEI omitted.
cipherKey	B64		cipher key
cipherMode	CipherModeSetting		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
emergencyCall	B1		Emergency call allowed, 3GPP TS 44.018 clause 10.5.2.29. Default = allowed
accessControlClass2	B5		Access control class 11..15, 3GPP TS 44.018 clause 10.5.2.29.
accessControlClass1	B10		Access control class 0..9, 3GPP TS 44.018 clause 10.5.2.29.
radioLinkTimeout	B4		RADIO-LINK-TIMEOUT, 3GPP TS 44.018 clause 10.5.2.3. Default = 8
t3212	O1		T3212 value, Default = infinite
maxRetrans	B2		Maximum number of retransmission, 3GPP TS 44.018 clause 10.5.2.29. Default = 1
txInteger	B4		Number of slots to spread transmission, 3GPP TS 44.018 clause 10.5.2.29. Default = 5
cELL_RESELECT_HYSTERESIS	B3		3GPP TS 44.018 clause 10.5.2.4 and 3GPP TS 45.008. Default = 12 dB,
mS_TXPWR_MAX_CCH	B5		3GPP TS 44.018 clause 10.5.2.4 and 3GPP TS 45.008. Default = minimum level
rXLEV_ACCESS_MIN	B6		minimum received signal level at MS, 3GPP TS 44.018 clause 10.5.2.4. Default = minimum
nECI	B1		New establishment causes supported, 3GPP TS 44.018 clause 10.5.2.4. Default = not supported
aCS	B1		Additional reselection parameter indication, 3GPP TS 44.018 clause 10.5.2.4. Default = no additional parameters in SI 7 and 8.
bandIndicator	B1		ARFCN band. 0= DCS1800 band; 1= PCS1900 band. This value shall be consistent with bandIndicatorAsn1
bandIndicatorAsn1	Frequency_Band		ARFCN band using the asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	O1		NCC permitted. 3GPP TS 44.018 clause 10.5.2.27
dN_Ind	B1		dynamic ARFCN mapping indicator. 3GPP TS 44.018 clause 10.5.2.3

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
pwrc	B1		power control indication, default = '0' PWRC is not set.
cellConfiguration	CellConfiguration		current configuration of the cell, used to control the behaviour of postamble
Detailed Comments :			

Structured Type Definition			
Type Name : GenCellSel			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
gPRS_CELL_RESELECT_HYSTERESIS	B3		
c31_HYST	B1		
c32_QUAL	B1		
rANDOM_ACCESS_RETRY	B1		
t_ReselMask	B1		
t_RESEL	B3		not present if t_ReselMask = 0
rA_ReselectHysteresisMask	B1		
rA_RESELECT_HYTERESIS	B3		not present if rA_ReselectHysteresisMask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : GlobalPowerControlParameters			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.9			
Element Name	Type Definition	Field Encoding	Comments
aLPHA	B4		
t_AVG_W	B5		
t_AVG_T	B5		
pb	B4		
pC_MEAS_CHAN	B1		
spareBit	B1		set to '0'
n_AVG_I	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : GlobalTFI			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.10			
Element Name	Type Definition	Field Encoding	Comments
TFImask	B1		
uplinkTFI	B5		not present if TFImask=1
downlinkTFI	B5		not present if TFImask=0
Detailed Comments :			

Structured Type Definition			
Type Name : GroupCallInfo			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 9.1.21a the definition is <Group Call information> ::= <Group Call Reference : bit(36)> {0 | 1 <Group Call Reference>} if more than 5 Group Call Reference are needed in the constraint the TTCN definition shall be modified.			
Element Name	Type Definition	Field Encoding	Comments
groupCallRef1	B36		
prefixBit1	B1		
groupCallRef2	B36		
prefixBit2	B1		
groupCallRef3	B36		
prefixBit3	B1		
groupCallRef4	B36		
prefixBit4	B1		
groupCallRef5	B36		
endingBit	B1		always = 0 indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : GroupChannelDescr			
Encoding Variation :			
Comments : Group Channel description 3GPP TS 44.018 clause 10.5.2.14b			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
hch	B1		hch = 1 indicating hopping channel
maio	B6		mobile allocation index offset – hopping
hsn	B6		hopping sequence number – hopping
spr	B2		'00'B – non hopping
arfcn	B10		absolute RF channel number – non hopping
mac_8n	B8		mac64 – mac57
mac_7n	B8		mac56 – mac49
mac_6n	B8		mac48 – mac41
mac_5n	B8		mac40 – mac33
mac_4n	B8		mac32 – mac25
mac_3n	B8		mac24 – mac17
mac_2n	B8		mac16 – mac9
mac_1n	B8		mac8 – mac1
Detailed Comments :			

Structured Type Definition			
Type Name : GroupChannelDescr2			
Encoding Variation :			
Comments : Group Channel description 3GPP TS 44.018 clause 10.5.2.14f			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
length	Length		
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
spare	B1		set to '0'
maio	B6		mobile allocation index offset – hopping
hsn	B6		hopping sequence number – hopping
freqShortList2	O8		coded as per clause 10.5.2.14a
Detailed Comments :			

Structured Type Definition			
Type Name : GroupCipherKey			
Encoding Variation :			
Comments : Group cipher key number 3GPP TS 24.008 clause 10.5.1.10			
Element Name	Type Definition	Field Encoding	Comments
iei	B4		
keyNumber	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : HCS			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
priorityClass	B3		
hCS_THR	B5		
Detailed Comments : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : HandoverToUTRANCmd			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
lengthOfContents	O1		
valuePart	OCTETSTRING		
Detailed Comments : used in INTER SYSTEM TO UTRAN HANDOVER COMMAND 3GPP TS 44.018 clause 9.1.15a and 10.5.2.51			

Structured Type Definition			
Type Name : HoppingPCCCHCarrierList Encoding Variation : Comments : The definition of this type is <Hopping PCCCH Carriers Lists struct> ::= {1<Hopping PCCCH Carriers struct>}**0. The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more hoppingPCCCHCarriers if more 3 hoppingPCCCHCarriers are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		
hoppingPCCCHCarriers1	HoppingPCCCHCarriers		not present if prefixBit1 = 0
prefixBit2	B1		
hoppingPCCCHCarriers2	HoppingPCCCHCarriers		not present if prefixBit2 = 0
prefixBit3	B1		
hoppingPCCCHCarriers3	HoppingPCCCHCarriers		not present if prefixBit3 = 0
endingBit	B1		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : HoppingPCCCHCarriers Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		
timeslotAllocation	B8		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition

Type Name : IARO
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Type Definition	Field Encoding	Comments
constructMask	B2	LowHigh_Rule3	
compressInterRATHO	B1	LowHigh_Rule3	present if constructMask = LL
reservMask1	B1		present if constructMask = LH
reservMask2	B1		present if reservMask1 = 0
eGPRS_UplinkAssign	EGPRS_UplinkAssign		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
multiBlocksPDA	MultiBlocksPacketDIAss		not present if reservMask2 = 0 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	B6		present if constructMask = HL
freqParam_bt	FreqParam_bt		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	B1	LowHigh_Rule3	present if constructMask = HL
mask1	B1		present if constructMask = HH
mask2	B1		
packetUplinkAssign	PacketUplinkAssign		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	PacketDownlinkAssign		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	SecondPacketAssign		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Definition			
Type Name : IndirectEncoding			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8			
Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
mA_NUMBER	B4		MA_NUMBER
changeMark1Mask	B1		
mA_ChangeMark1	B2		not present if changeMark1Mask = 0
changeMark2Mask	B1		not present if changeMark1Mask = 0
mA_ChangeMark2	B2		not present if changeMark1Mask = 0 or changeMark2Mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : luModeCellSelection			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
cellBarQuality3	B2		
mask	B1		
sI13AltPBCCHLocation	SI13PBCCH_Location		
Detailed Comments :			

Structured Type Definition			
Type Name : luModeNCPParams			
Encoding Variation :			
Comments : This definition includes: { 0 | 1 < lu Mode Cell Selection Params : <lu Mode Cell Selection struct>> } * (val(NR_OF_REMAINING_CELLS)) But only 1 repetition has been defined here. This TTCN definition will be modified if more repetitions are required			
Element Name	Type Definition	Field Encoding	Comments
noOfRemainingCells	B4		
mask1	B1		
luModeCellSelection1	luModeCellSelection		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : IuModeNeighbourCellParamsList Encoding Variation : Comments : The definition in CSN.1 is {1 < Iu Mode Neighbour Cell Params struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more Iu Mode Neighbour Cell Params if more than 1 Iu Mode Neighbour Cell Params are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.20.1			
Element Name	Type Definition	Field Encoding	Comments
prefix1 iuModeNCPParams1 endingRepetition	B1 IuModeNCPParams B1		not present if prefix1 = 0 Value always ZERO, indicates the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : IuModeOnlyCellSelectionParams Encoding Variation : Comments : 3GPP TS 44.060 clause 11.2.20.1			
Element Name	Type Definition	Field Encoding	Comments
bSIC cELL_BAR_QUALIFY3 sAME_RA_AS_SERVING_CELL gPRS_PwrMask gPRS_RXLEV_ACCESS_MIN gPRS_MS_TXPWR_MAX_CCH gPRS_SelectMask gPRS_TEMPORARY_OFFSET gPRS_PENALTY_TIME gPRS_ReselectMask gPRS_RESELECT_OFFSET hCS_Mask hCS_Params sI13_Mask sI13AltPBCCH_LOCATION	B6 B2 B1 B1 B6 B5 B1 B3 B5 B1 B5 B1 HCS B1 SI13PBCCH_Location		not present if gPRS_PwrMask = 0 not present if gPRS_PwrMask = 0 not present if gPRS_SelectMask = 0 not present if gPRS_SelectMask = 0 not present if gPRS_ReselectMask = 0 not present if hCS_Mask = 0 not present if sI13_Mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : luModeOnlyNCPParams Encoding Variation : Comments : This definition includes: <pre>{< FREQUENCY_DIFF : bit (1 + val(FREQ_DIFF_LENGTH)) > < lu mode Only Cell selection params : < lu mode Only Cell Selection struct > } * (val(NR_OF_REMAINING_CELLS));</pre> <p>But only 1 repetition has been defined here. This TTCN definition will be modified if more repetitions are required Reference : 3GPP TS 44.060 clause 11.2.20.1</p>			
Element Name	Type Definition	Field Encoding	Comments
startFreq	B10		
luModeOnlyCellSelectionParams	luModeOnlyCellSelectionParams		
noOfRemaingCells	B4		
freqDiffLength	B3		
freqDiff1	BITSTRING		1 + val(FREQ_DIFF_LENGTH) bits
luModeOnlyCellSelectionParams1	luModeOnlyCellSelectionParams		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : luModeOnlyNeighbourCellParamsList Encoding Variation : Comments : The definition in CSN.1 is {1 < lu Mode Only Neighbour Cell Params struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more lu Mode Only Neighbour Cell Params if more than 1 lu Mode Only Neighbour Cell Params are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.20.1			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
luModeOnlyNCPParams1	luModeOnlyNCPParams		
endingRepetition	B1		not present if prefix1 = 0 Value always ZERO, indicates the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition

Type Name : LSA_ID_Info

Encoding Variation :

Comments : The definition is < LSA ID Information struct> ::=
 {1 {0 <LSA_ID : bit(24)>
 | 1 <ShortLSA_ID : (10)>}}**0, so the TTCN definition shall be modified to include more ISA_ID
 if the constaint requires more than 5 ISA_ID.
 Reference : 3GPP TS 44.060 clause 12.28

Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		value always equal to "1"
ISA_ID_Mask1	B1		
ISA_ID1	B24		not present if ISA_ID_Mask1 = 1
ShortLSA_ID1	B10		not present if ISA_ID_Mask1 = 0
prefixBit2	B1		value always equal to "1"
ISA_ID_Mask2	B1		
ISA_ID2	B24		not present if ISA_ID_Mask2 = 1
ShortLSA_ID2	B10		not present if ISA_ID_Mask2 = 0
prefixBit3	B1		value always equal to "1"
ISA_ID_Mask3	B1		
ISA_ID3	B24		not present if ISA_ID_Mask3 = 1
ShortLSA_ID3	B10		not present if ISA_ID_Mask3 = 0
prefixBit4	B1		value always equal to "1"
ISA_ID_Mask4	B1		
ISA_ID4	B24		not present if ISA_ID_Mask4 = 1
ShortLSA_ID4	B10		not present if ISA_ID_Mask4 = 0
prefixBit5	B1		value always equal to "1"
ISA_ID_Mask5	B1		
ISA_ID5	B24		not present if ISA_ID_Mask4 = 1
ShortLSA_ID5	B10		not present if ISA_ID_Mask4 = 0
endBit	B1		value always equal to "0" to indicate the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : LSA_Param

Encoding Variation :

Comments : Reference: 3GPP TS 44.060 clause 12.28

Element Name	Type Definition	Field Encoding	Comments
nR_OF_FREQ_OR_CELLS	B5		
ISA_ID_Info_1	LSA_ID_Info		
ISA_ID_Info_2	LSA_ID_Info		
ISA_ID_Info_3	LSA_ID_Info		
ISA_ID_Info_4	LSA_ID_Info		
ISA_ID_Info_5	LSA_ID_Info		

Detailed Comments : More LSA_ID_Info shall be added into this type definition if value of nR_OF_FREQ_OR_CELLS is greater than 5.

Structured Type Definition

Type Name : MSCLSMK3
Encoding Variation :
Comments : Mobile station classmark 3
 3GPP TS 24.008 clause 10.5.1.7

Element Name	Type Definition	Field Encoding	Comments
iei	B8		'00100000'B
iel	O1		OCTETSTRING [1]
spareBit	B1		spare bit
multibandSupported	B3		
a5_7	B1		a5/7 algorithm supported
a5_6	B1		a5/6 algorithm supported
a5_5	B1		a5/5 algorithm supported
a5_4	B1		a5/4 algorithm supported
associatedRadioCapabilty2	B4		present if multibandSupported = 101 or 110
spareBits1	B4		present if multibandSupported = 001 or 010 or 100
associatedRadioCapabilty1	B4		present if multibandSupported = 001 or 010 or 100 or 101 or 110
maskBit1	B1		
rGSM_RadioCapability	B3		R-GSM band associated radio capability. not present if maskBit1 = 0
maskBit2	B1		
multiSlotClass	B5		multi slot class. not present if multiSlotClass = 0
uCS2Treatment	B1		
extMeasurementCapability	B1		extended measurement capability
maskBit3	B1		
msMeasurementCapability	MS_MeasCapability		MS measurement capability not present if maskBit3 = 0
maskBit4	B1		
msPositioningMethod	B5		MS positioning method capability not present if maskBit4 = 0
maskBit5	B1		
eDGE_MultiSlot	B5		EDGE multi slot capability not present if maskBit5 = 0
maskBit6	B1		
psk8_Struct	EDGE_Struct		8PSK struct not present if maskBit6 = 0
maskBit7	B1		
gSM400BandsSupported	B2		not present if maskBit7 = 0
gSM400AssociatedRadioCa pability	B4		not present if gSM400BandsSupported = 00 or maskBit7 = 0
maskBit8	B1		

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
gSM850AssociatedRadioCapability	B4		not present if maskBit8 = 0
maskBit9	B1		
pCS1900AssociatedRadioCapability	B4		not present if maskBit9 = 0
uMTS_FDD_RAT_Capability	B1		
uMTS384TDD_RAT_Capability	B1		
cDMA2000_RAT_Capability	B1		
maskBit10	B1		
dTM_GPRS_MultiSlotSubclasses	B2		not present if maskBit10 = 0
singleSlotDTM	B1		not present if maskBit10 = 0
maskBit11	B1		not present if maskBit10 = 0
dTM_EGPRS_MultiSlotSubclass	B2		not present if maskBit10 = 0 or maskBit11 = 0
maskBit12	B1		
singleBandSupport	B4		not present if maskBit12 = 0
maskBit13	B1		
gSM700AssociatedRadioCapability	B4		not present if maskBit13 = 0
uMTS128TDD_RAT_Capability	B1		
gERANFeatPack1	B1		
mask14	B1		
extDTM_GPRS_MultiSlotSubclass	B2		not present if maskBit14 = 0
extDTM_EGPRS_MultiSlotSubclass	B2		not present if maskBit14 = 0
mask15	B1		
highMultislotCap	B2		not present if mask15 = 0
mask16	B1		
gERANluModeLength	B4		not present if maskBit16 = 0
gERANFLOluCap	B1		
gERANluModeSpareBits	BITSTRING[0..15]		not present if maskBit16 = 0
gERANFeatPack2	B1		
gMSKMultislotPowerProfile	B2		
pSKMultislotPowerProfile	B2		
mask17	B1		rel 6 features
tGSM400BandsSupported	B2		not present if maskBit17 = 0
tGSM400AssocRadioCap	B4		not present if maskBit17 = 0
mask18	B1		
tGSM900AssocRadioCap	B4		not present if maskBit18 = 0
dlAdvancedRxPerf	B2		
dTMEhancCap	B1		
mask19	B1		
dTMGPRSHighMultislotClasses	B3		not present if maskBit19 = 0
offsetReq	B1		not present if maskBit19 = 0

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
mask20	B1		not present if maskBit19 = 0 not present if maskBit19 and maskBit20 = 0
dTMEGPRSHighMultislotClasses	B3		
rptdACCHCap	B1		
spareBits2	BITSTRING		
Detailed Comments : The information element has 14 octets maximum length			

Structured Type Definition			
Type Name : MS_MeasCapability			
Encoding Variation :			
Comments : Reference : 3GPP TS 24.008 clause 10.5.1.7			
Element Name	Type Definition	Field Encoding	Comments
sMS_VALUE	B4		
sM_VALUE	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : MeasParamDescr			
Encoding Variation :			
Comments : MEASUREMENT PARAMETERSI description in SI2quarter rest octets			
Element Name	Type Definition	Field Encoding	Comments
rREPORT_TYPE	B1		
sERVING_BAND_REPORTING	B2		
Detailed Comments :			

Structured Type Definition

Type Name : MeasResults
Encoding Variation :
Comments : measurement results
 3GPP TS 44.018 clause 10.5.2.20

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
ba_used	B1		bcch allocation used
dtx_used	B1		dtx was used
rxlev_fsc	RxLevel		received signal strength on the full serving cell
ba3G_used	B1		3G bcch allocation used
meas_valid	B1		measurement results valid
rxlev_ssc	RxLevel		received signal strength on a subset of the serving cell
spareBit1	B1		spare bit
rxqual_fsc	B3		received signal quality on the full serving cell
rxqual_ssc	B3		received signal quality on a subset of the serving cell
no_neighCells	B3		number of neighbouring cells (nc)
rxlev_nc1	RxLevel		received signal strength on nc1
bcchfrq_nc1	BCCHFreq		bcch frequency position of nc1
bsic_nc1	B6		base station identity code of nc1
rxlev_nc2	RxLevel		received signal strength on nc2
bcchfrq_nc2	BCCHFreq		bcch frequency position of nc2
bsic_nc2	B6		base station identity code of nc2
rxlev_nc3	RxLevel		received signal strength on nc3
bcchfrq_nc3	BCCHFreq		bcch frequency position of nc3
bsic_nc3	B6		base station identity code of nc3
rxlev_nc4	RxLevel		received signal strength on nc4
bcchfrq_nc4	BCCHFreq		bcch frequency position of nc4
bsic_nc4	B6		base station identity code of nc4
rxlev_nc5	RxLevel		received signal strength on nc5
bcchfrq_nc5	BCCHFreq		bcch frequency position of nc5
bsic_nc5	B6		base station identity code nc5
rxlev_nc6	RxLevel		received signal strength on nc6

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
bcchfrq_nc6	BCCHFreq		bcch frequency position of nc6
bsic_nc6	B6		base station identity code of nc6
Detailed Comments : The info element has a fixed length of 16 octets exclude IEI.			

Structured Type Definition			
Type Name : MobileAlloc			
Encoding Variation :			
Comments : Mobile allocation 3GPP TS 44.018 clause 10.5.2.21			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01110010'B
iel	O1		'00'O for non hopping
mac_8n	B8		mac64 – mac57
mac_7n	B8		mac56 – mac49
mac_6n	B8		mac48 – mac41
mac_5n	B8		mac40 – mac33
mac_4n	B8		mac32 – mac25
mac_3n	B8		mac24 – mac17
mac_2n	B8		mac16 – mac9
mac_1n	B8		mac8 – mac1
Detailed Comments :			

Structured Type Definition			
Type Name : MultiBlockAllocationPacket			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
timeslotNumber	B3		
PowerControlMask	B1		
alpha	B4		not present if PowerControlMask=0
gamma	B5		not present if PowerControlMask=0
mask	B1		
P0	B4		not present if mask=0
spareBit	B1		set to 0. not present if mask=0
prMode	B1		not present if mask=0
tBFStartingTime	StartingFrameNumberDscr		
noRadioBlocksAlloc	B2		
Detailed Comments :			

Structured Type Definition			
Type Name : MultiBlocksPacketDIAss			
Encoding Variation :			
Comments : 44.018 clause 10.5.2.16			
Element Name	Type Definition	Field Encoding	Comments
startingTime	B16		
numAllocBlks	B4		
escapeBit	B1		Set to '1'
distMask	B1		
tMGI	TMGI		not present if distMask = 1
sesIdMask	B1		not present if distMask = 1
sesId	B8		not present if distMask = 1 or sesIdMask = 0
tLLI_GRNTI	O4		not present if distMask = 0
idMask	B1		not present if distMask = 0
idLength	B2		not present if distMask = 0 or idMask = 0
mSId	BITSTRING [1..4]		not present if distMask = 0 or idMask = 0
pktTA	PacketTimingAdvance		not present if distMask = 0 or idMask = 0
aMask	B1		not present if distMask = 0 or idMask = 0
alpha	B4		not present if distMask = 0, idMask = 0 or aMask = 0
gMask	B1		not present if distMask = 0, idMask = 0 or aMask = 0
gamma	B5		not present if distMask = 0, idMask = 0, aMask = 0 or gMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : MultiRateConfig			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.21aa			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
mrVersion	B3		multirate speech version
nSCB	B1		noise suppression control bit
iCMI	B1		initial codec mode indicator
spareBit	B1		0
startMode	B2		start mode
mrSpeechPara	OCTETSTRING[1..5]		parameters for multirate speech
Detailed Comments :			

Structured Type Definition

Type Name : MultislotAlloc
Encoding Variation :
Comments : multislot allocation
 3GPP TS 44.018 clause 10.5.2.21b

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		IEI
iel	O1		OCTETSTRING [1]
ext1	B1		
da7	B1		down link time slot allocation bit
da6	B1		down link time slot allocation bit
da5	B1		down link time slot allocation bit
da4	B1		down link time slot allocation bit
da3	B1		down link time slot allocation bit
da2	B1		down link time slot allocation bit
da1	B1		down link time slot allocation bit
ext2	B1		always = 1
ua7	B1		uplink link time slot allocation bit
ua6	B1		uplink link time slot allocation bit
ua5	B1		uplink link time slot allocation bit
ua4	B1		uplink link time slot allocation bit
ua3	B1		uplink link time slot allocation bit
ua2	B1		uplink link time slot allocation bit
ua1	B1		uplink link time slot allocation bit
channelset1	O1		channel set 1
channelset2	O1		channel set 2
channelset3	O1		channel set 3
channelset4	O1		channel set 4
channelset5	O1		channel set 5
channelset6	O1		channel set 6
channelset7	O1		channel set 7
channelset8	O1		channel set 8

Detailed Comments :

Structured Type Definition			
Type Name : NCP2			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
prefixBit	B1		always = '1'B
sTART_FREQUENCY	B10		
nCP2_Property	NCP2_Property		
nR_OF_REMAINING_CELL S	B4		value shall not be equal to 0, maximum number of repetition of fields fFREQUENCY_DIFF and nCP2_Property is 15
fREQ_DIFF_LENGTH	B3		
fFREQUENCY_DIFF1	BITSTRING[1..8]		
nCP2_Property1	NCP2_Property		
fFREQUENCY_DIFF2	BITSTRING[1..8]		
nCP2_Property2	NCP2_Property		
fFREQUENCY_DIFF3	BITSTRING[1..8]		
nCP2_Property3	NCP2_Property		
Detailed Comments : 3GPP TS 44.060 clause 11.2.21 More fields fFREQUENCY_DIFF and nCP2_Property shall be added into this type definition if more than 4 neighbour cells are required.			

Structured Type Definition			
Type Name : NCP2_Property			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.21			
Element Name	Type Definition	Field Encoding	Comments
sAME_RA_AS_SERVING_ CELL	B1		
cELL_BAR_ACCESS_2	B1		
bCC	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : NCP2_Repeat			
Encoding Variation :			
Comments : if more than 8 cells are needed, the TTCN definition shall be modified			
Element Name	Type Definition	Field Encoding	Comments
nCP2_1	NCP2		
nCP2_2	NCP2		
breakRecursion	B4		always = 0000
endingBit	B1		always = 0
Detailed Comments : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : NC_MeasParams			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.33b			
Element Name	Type Definition	Field Encoding	Comments
nETWORK_CONTROL_OR DER	B2		
mask	B1		
nC_NON_DRX_PERIOD	B3		not present if mask = 0
nC_REPORTING_PERIOD_ I	B3		not present if mask = 0
nC_Reporting_PERIOD_T	B3		not present if mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : NC_MeasRpt			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9d Only 2 repetitions have only been implemented. If more are required, the definition will be changed			
Element Name	Type Definition	Field Encoding	Comments
nC_Mode	B1		
mask	B1		
baUsed	B1		not present if mask = 1
ba3GUsed	B1		not present if mask = 1
psi3ChangeMark	B2		not present if mask = 0
pmoUsed	B1		
bsicSeen	B1		
scale	B1		
servMask	B1		
servingCellData	PCCOServingCellData		not present if servMask = 0
rptdInvalidBSIC	RptdInvalidBSICInfo		
rptMask	B1		
rptQuantityMask1	B1		not present if rptMask = 0
rptQuantity1	B6		not present if rptMask or prtQuantity1Mask = 0
rptQuantityMask2	B1		not present if rptMask = 0
rptQuantity2	B6		not present if rptMask or prtQuantity2Mask = 0
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : NeighCellDescr			
Encoding Variation :			
Comments : Neighbour cells description 3GPP TS 44.018 clause 10.5.2.22			
Element Name	Type Definition	Field Encoding	Comments
rfl2	B2		bits 128–127
extind	B1		extension indication
baind	B1		bcch allocation sequence number indication
rfl4	B4		bits 124–121
rfl	O15		bits 120–0
Detailed Comments :			

Structured Type Definition			
Type Name : NeighCellDescr2			
Encoding Variation :			
Comments : Neighbour cells description2 3GPP TS 44.018 clause 10.5.2.22a			
Element Name	Type Definition	Field Encoding	Comments
b128	B1		Bit 128, format-ID
mbrpt	B2		Multiband reporting
baind	B1		bcch allocation sequence number indication
b121_124	B4		Bit 124 – 121, format ID next
rfl	O15		remaining reference frequency list
Detailed Comments :			

Structured Type Definition			
Type Name : NeighCellDescr3G			
Encoding Variation :			
Comments : 3G neighbour cell description			
Element Name	Type Definition	Field Encoding	Comments
indexMask	B1		not present if indexMask = 0
indexStart3G	B7		
absoluteIndexMask	B1		not present if absoluteIndexMask = 0
absoluteIndexStartEMR	B7		
fDDMask	B1		not present if fDDMask = 0
uTRAN_FDD_Description	UTRAN_FDD_Descr		
tDDMask	B1		not present if tDDMask = 0
uTRAN_TDD_Description	UTRAN_TDD_Descr		
Detailed Comments : 3GPP TS 44.060 clause 11.2.21b			

Structured Type Definition			
Type Name : NeighCellParam			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
sTART_FREQUENCY	B10		
cellSelectionParams	CellSelection		
nR_OF_REMAINING_CELLS	B4		
fREQ_DIFF_LENGTH	B3		
fFREQUENCY_DIFF1	BITSTRING[1..8]		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
cellSelectionParams1	CellSelection		
fFREQUENCY_DIFF2	BITSTRING[1..8]		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
cellSelectionParams2	CellSelection		
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.20. More fFREQUENCY_DIFF + cellSelectionParams shall be added into this type definition if nR_OF_REMAINING_CELLS is greater than 2. In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fFREQUENCY_DIFF and cellSelectionParams			

Structured Type Definition			
Type Name : NeighCellParam2			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
messageEscape	B2		always = '00'B
prefix1	B1		value = 1 if present
nCP2_Repeat1	NCP2_Repeat		
cELL_PARAMS_POINTER1	B2		
prefix2	B1		value = 1 if present
nCP2_Repeat2	NCP2_Repeat		
cELL_PARAMS_POINTER2	B2		
endingBit1	B1		always = '0'B indicating the end of the recursion
neighParamSet1	NeighParamSet		
neighParamSet2	NeighParamSet		
neighParamSet3	NeighParamSet		
neighParamSet4	NeighParamSet		
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21 only two repetitions are defined for the recursion of nCP2_Repeat + cELL_PARAMS_POINTER. This type definition shall be modified if more repetition is needed			

Structured Type Definition			
Type Name : NeighCellParams2List Encoding Variation : Comments : this type definition is {1 < Neighbour Cell params 2 struct>**0 The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
neighCellParam2_1	NeighCellParam2		
endingRepetition	B1		always = 0 indicating the end of the structure
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : NeighCellParamsList Encoding Variation : Comments : this type definition is {1 < Neighbour Cell params struct>**0 The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 1 indicating the start of Neighbour Cell params struct
neighCellParam1	NeighCellParam		
endingBit	B1		always = 0 indicating the end of the structure
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition

Type Name : NeighParamSet

Encoding Variation :

Comments : Neighbour parameters set structure

Element Name	Type Definition	Field Encoding	Comments
nccMask	B1		
nCC	B3		not present if nccMask = 0
eXC_ACC	B1		
rxlevMask	B1		
gPRS_RXLEV_ACCESS_M IN	B6		not present if rxlevMask = 0
txpwrMask	B1		
gPRS_MS_TXPWR_MAX_C CH	B5		not present if txpwrMask = 0
priorityMask	B1		
pRRIORITY_CLASS	B3		not present if priorityMask = 0
hcsMask	B1		
hCS_THR	B5		not present if hcsMask = 0
pbccchLocMask	B1		
sI13PBCCH_Location	S13PBCCH_Location		not present if pbccchLocMask = 0
gPRS_TEMPORARY_OFFS ET	B3		
gPRS_PENALTY_TIME	B5		
gPRS_RESELECT_OFFSET	B5		

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

Structured Type Definition			
Type Name : NonGPRSCellOptions			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.27			
Element Name	Type Definition	Field Encoding	Comments
aTT	B1		
t3212Mask	B1		
t3212	B8		not present if t3212Mask = 0
nECI	B1		
pWRC	B1		
dTX	B2		
rADIO_LINK_TIMEOUT	B4		
bS_AG_BLK_RES	B3		
cCCH_CONF	B3		
bS_PA_MFRMS	B3		
mAX_RETRANS	B2		
tX_INTEGER	B4		
eC	B1		
mS_TXPWR_MAX_CCCH	B5		
extensionBitsMask	B1		
extensionBits	ExtInfo_NonGPRSCellOptions		not present if extensionBitsMask = 0. 3GPP TS 44.060 clause 12.26
Detailed Comments :			

Structured Type Definition			
Type Name : NonHoppingPCCCHCarrier			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.19			
Element Name	Type Definition	Field Encoding	Comments
aRFCN	B10		
timeslotAllocation	B8		
Detailed Comments :			

Structured Type Definition			
Type Name : NonHoppingPCCCHCarrierList Encoding Variation : Comments : The definition of this type is <Non-hopping PCCCH Carriers Lists struct> ::= {1 <Non-Hopping PCCCH Carriers struct>}*0. The prefix bit and following structure may repeat infinite times, so this TTCN definition may shall be modified to include more nonHoppingPCCCHCarriers if more than 1 nonHoppingPCCCHCarriers are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
nonHoppingPCCCHCarrier s1	NonHoppingPCCCHCarrier		
endingRepetition	B1		the value of this bit is always zero to indicate the end of the structure
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : NumberOfIdleBlocks Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
nIB_CCCH0_Mask	B1		
nIB_CCCH0	B4		not present if nIB_CCCH0_Mask = 0
nIB_CCCH1_Mask	B1		
nIB_CCCH1	B4		not present if nIB_CCCH1_Mask = 0
nIB_CCCH2_Mask	B1		
nIB_CCCH2	B4		not present if nIB_CCCH2_Mask = 0
nIB_CCCH3_Mask	B1		
nIB_CCCH3	B4		not present if nIB_CCCH3_Mask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : P1RO			
Encoding Variation :			
Comments : paging request type 1 rest octets. 3GPP TS 44.018 clause 10.5.2.23			
Element Name	Type Definition	Field Encoding	Comments
nInMask	B1	LowHigh_Rule3	
nLN_PCH	B2		not present if nInMask = L
nLN_Status	B1		not present if nInMask = L
priority1Mask	B1	LowHigh_Rule3	
priority1	B3		not present if priority1Mask = L
priority2Mask	B1	LowHigh_Rule3	
priority2	B3		not present if priority2Mask = L
groupCallMask	B1	LowHigh_Rule3	
groupCallInfo	GroupCallInfo		not present if groupCallMask = L
packetPageInd1	B1	LowHigh_Rule3	
packetPageInd2	B1	LowHigh_Rule3	
Detailed Comments : total length is 0..17 octets			

Structured Type Definition			
Type Name : PBCCH_Descr			
Encoding Variation :			
Comments : used in SI13 rest octets			
Element Name	Type Definition	Field Encoding	Comments
pb	B4		
tSC	B3		
tN	B3		
carrierMask1	B1		
carrierMask2	B1		not present if carrierMask1 = 1. (carrierMask1= carrierMask2 = 0) indicating BCCH carrier
aRFCN	B10		present if (carrierMask1 = 0 and carrierMask2 = 1)
mAIO	B6		present if carrierMask1 = 1
Detailed Comments : 3GPP TS 44.018 clause 10.5.2.37b			

Structured Type Definition			
Type Name : PBCCH_Info			
Encoding Variation :			
Comments : parameters for packet broadcast channel			
Element Name	Type Definition	Field Encoding	Comments
pSI1_REPEAT_PERIOD	PSI1_REPEAT_PERIOD		The repeat period of packet system information Type 1. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_HR	PSI_COUNT_HR		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_LR	PSI_COUNT_LR		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18
Detailed Comments : see 3GPP TS 44.060 section 12.25			

Structured Type Definition			
Type Name : PCCCHDescription			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
tSC	B3		
nonHoppingPCCCHCarrierMask	B1		
nonHoppingPCCCHCarriers	NonHoppingPCCCHCarrierList		not present if nonHoppingPCCCH_Carriers = 1
mA_NUMBER	B4		not present if nonHoppingPCCCH_Carriers = 0
hoppingPCCCHCarriers	HoppingPCCCHCarrierList		not present if nonHoppingPCCCH_Carriers = 0
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : PCCCH_DescriptionList			
Encoding Variation :			
Comments : The definition of this type is <PCCCH Description Lists struct> ::= {1 <PCCCH Description struct>}**0, so the prefix bit and following structure may repeat infinite times. This TTCN definition shall be modified to include more pCCCHDescription if more than 1 pCCCHDescription are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
pCCCHDescription1	PCCCHDescription		
endingRepetition	B1		the value of this bit is always zero to indicate the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : PCCCH_Info			
Encoding Variation :			
Comments : parameters for packet common control channels. 3GPP TS 44.060 clause 12.25			
Element Name	Type Definition	Field Encoding	Comments
bS_PBCCH_BLKs	B2		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25
bS_PAG_BLKs_RES	B4		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25
bS_PRACH_BLKs	B4		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25
Detailed Comments :			

Structured Type Definition			
Type Name : PCCCH_OrganisationParameters			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
bS_PCC_REL	B1		
bS_PBCCH_BLKs	B2		
bS_PAG_BLKs_RES	B4		
bS_PRACH_BLKs	B4		
Detailed Comments : 3GPP TS 44.060 clause 12.25			

Structured Type Definition			
Type Name : PCCOServingCellData			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9d			
Element Name	Type Definition	Field Encoding	Comments
rxLevServingCell	B6		
spareBit	B1		set to '0' @R5s060183 sic@
Detailed Comments :			

Structured Type Definition			
Type Name : PRACH_ControlParameters			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.14			
Element Name	Type Definition	Field Encoding	Comments
aCC_CONTR_CLASS	B16		
mAX_RETRANS1	B2		
mAX_RETRANS2	B2		
mAX_RETRANS3	B2		
mAX_RETRANS4	B2		
sParameter	B4		
tX_INT	B4		
persistenceLevelMask	B1		
pPERSISTENCE_LEVEL1	B4		not present if persistenceLevelMask = 0
pPERSISTENCE_LEVEL2	B4		not present if persistenceLevelMask = 0
pPERSISTENCE_LEVEL3	B4		not present if persistenceLevelMask = 0
pPERSISTENCE_LEVEL4	B4		not present if persistenceLevelMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : PSI2Info Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
rFL_Contents_Len	B4		Length of RFL contents
rFL_Contents	OCTETSTRING		Reference : 3GPP TS 44.060 clause 11.2.19 RFL contents
mALen	B6		Length of GPRS MA contents
mABitmap	BITSTRING		Reference: 3GPP TS 44.060 clause 12.10a GPRS MA bitmap
Detailed Comments :			

Structured Type Definition			
Type Name : PSI3Info Encoding Variation : Comments :			
Element Name	Type Definition	Field Encoding	Comments
startFreq	B10		Start Frequency
freqDiffLen	B3		Reference: 3GPP TS 44.060 clause 11.2.20. Frequency Difference length
freqDiff	BITSTRING		Frequency Difference
Detailed Comments :			

Structured Type Definition

Type Name : PacketChDescr
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.25a

Element Name	Type Definition	Field Encoding	Comments
chType	B5		channel type
tN	B3		time slot
tSC	B3		training sequence code
maskBit1	B1		
maskBit2	B1		not present if maskBit1 = 1.
spareBit1	B1		not present if maskBit1 = 1 or maskBit2 = 1
aRFCN	B10		not present if maskBit1 = 1 or maskBit2 = 1
spareBit	B1		not present if maskBit1 = 1 or maskBit2 = 0
mAIO	B6		not present if maskBit1 = 1 or maskBit2 = 0
mA_NumberInd	B1		
maskBit3	B1		
spareBits	B2		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 1
CHANGE_MARK_1	B2		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 0
mIAO	B6		not present if maskBit1 = 0
hSN	B6		not present if maskBit1 = 0

Detailed Comments :

Structured Type Definition

Type Name : PacketDownlinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Type Definition	Field Encoding	Comments
tLLI	O4		TLLI
mask	B1		
tFI_Assignment	B5		temporary flow identifier
rLC_Mode	B1		not present if mask = 0 RLC mode
alphaMask	B1		not present if mask = 0
aLPHA	B4		not present if mask = 0 or alphaMask = 0
gAMMA	B5		not present if mask = 0
pOLLING	B1		not present if mask = 0
tA_VALID	B1		not present if mask = 0
taIndexMask	B1		
tIMING_ADVANCE_INDEX	B4		not present if mask = 0 or taIndexMask = 0
startingTimeMask	B1		not present if mask = 0
tBF_STARTING_TIME	B16		not present if mask = 0 or startingTimeMask = 0
pwrCtrlMask	B1		not present if mask = 0
p0	B4		not present if mask = 0 or pwrCtrlMask = 0
spareBit	B1		not present if mask = 0 or pwrCtrlMask = 0 Set to 0
pR_MODE	B1		not present if mask = 0 or pwrCtrlMask = 0
egprsMask	B1	LowHigh_Rule3	
eGPRSWindowSize	EGPRSWindowSize		not present if egprsMask = L
linkQualityMeasMode	B2		not present if egprsMask = L
bepPriod2Mask	B1		not present if egprsMask = L
BepPeriod2	B4		not present if egprsMask = L or bepPriod2Mask = 0
r6Mask	B1	LowHigh_Rule3	not present if egprsMask = L
pfiMask	B1		not present if egprsMask = L or r6Mask = L
pFI	B7		not present if egprsMask = L, r6Mask = L or pfiMask = 0

Detailed Comments :

Structured Type Definition			
Type Name : PacketRequestReference			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.11			
Element Name	Type Definition	Field Encoding	Comments
randomAccessInfo	B11		
frameNumber	RFN		
Detailed Comments :			

Structured Type Definition			
Type Name : PacketTimingAdvance			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.12			
Element Name	Type Definition	Field Encoding	Comments
taValueMask	B1		
timingAdvanceValue	B6		not present if taValueMask = 0
taIndexMask	B1		
timingAdvanceIndex	B4		not present if taIndexMask = 0
timingAdvanceSlotNumber	B3		not present if taIndexMask = 0
Detailed Comments :			

Structured Type Definition

Type Name : PacketUplinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Type Definition	Field Encoding	Comments
allocMask	B1		0 -> indicating single block allocation
tFI_Assignment	B5		temporary flow identifier
pOLLING	B1		not present if allocMask = 0
spareBit	B1		not present if allocMask = 0.
uSF	B3		Set to 0
uSFGranularity	B1		not present if allocMask = 0
p0Mask	B1		not present if allocMask = 0
p0	B4		not present if allocMask = 0 or p0Mask = 0
pR_MODE	B1		not present if allocMask = 0 or p0Mask = 0
ChannelCodingCommand	B2		not present if allocMask = 0
tLLI_BlockChannelCodeing	B1		not present if allocMask = 0
alphaMask	B1		not present if allocMask = 0
aLPHA	B4		not present if allocMask = 0 or alphaMask = 0
gMMA	B5		not present if allocMask = 0
taMask	B1		not present if allocMask = 0
tIMING_ADVANCE_INDEX	B4		not present if allocMask = 0 or taMask = 0
startingTimeMask	B1		not present if allocMask = 0
tBF_STARTING_TIME	B16		not present if allocMask = 0 or startingTimeMask = 0
alpha1Mask	B1		present if allocMask = 0
aLPHA1	B4		single block allocation not present if allocMask = 1 or alpha1Mask = 0
gMMA1	B5		not present if allocMask = 1
prefixBits	B2		not present if allocMask = 1
tBF_STARTING_TIME1	B16		the value is 01 if present not present if allocMask = 1
p02Mask	B1	LowHigh_Rule3	not present if allocMask = 1
p02	B4		not present if allocMask = 1 or p02Mask = L
spareBit2	B1		not present if allocMask = 1 or p02Mask = L Set to 0
pR_MODE2	B1		not present if allocMask = 1 or p02Mask = L
r99Mask	B1	LowHigh_Rule3	
extRAMask	B1		not present if r99Mask = L
extRA	B5		not present if r99Mask = L or extRAMask = 0

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
r6Mask	B1	LowHigh_Rule3	not present if r99Mask = L
pfiMask	B1		not present if r99Mask = L or r6Mask = L
pFI	B7		not present if r99Mask = L, r6Mask = L or pfiMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : PageModelE			
Encoding Variation :			
Comments : Page mode 3GPP TS 44.018 clause 10.5.2.26			
Element Name	Type Definition	Field Encoding	Comments
iei	B4		spare bits page mode
sprb	B2		
pgm	B2		
Detailed Comments :			

Structured Type Definition			
Type Name : PowerCommand			
Encoding Variation :			
Comments : Power command 3GPP TS 44.018 clause 10.5.2.28			
Element Name	Type Definition	Field Encoding	Comments
iei	B8		information element identifier
spareBits	B2		spare bits
fpc	B1		fast measurement reporting and power control
powerLevel	B5		power level (0–31)
Detailed Comments :			

Structured Type Definition			
Type Name : PowerControlParam			
Encoding Variation :			
Comments : Power control parameters 3GPP TS 44.018 clause 12.13			
Element Name	Type Definition	Field Encoding	Comments
aLPHA	B4		
gmmaMask0	B1		
gMMA_TN0	B5		not present if gmmaMask0 = 0
gmmaMask1	B1		
gMMA_TN1	B5		not present if gmmaMask1 = 0
gmmaMask2	B1		
gMMA_TN2	B5		not present if gmmaMask2 = 0
gmmaMask3	B1		
gMMA_TN3	B5		not present if gmmaMask3 = 0
gmmaMask4	B1		
gMMA_TN4	B5		not present if gmmaMask4 = 0
gmmaMask5	B1		
gMMA_TN5	B5		not present if gmmaMask5 = 0
gmmaMask6	B1		
gMMA_TN6	B5		not present if gmmaMask6 = 0
gmmaMask7	B1		
gMMA_TN7	B5		not present if gmmaMask7 = 0
Detailed Comments :			

Structured Type Definition			
Type Name : RACHControlParam			
Encoding Variation :			
Comments : Rach control parameters 3GPP TS 44.018 clause 10.5.2.29			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
maxretx	B2		maximum retransmissions
txInteger	B4		Tx integer, number of slots to spread transmission
cellBarAccess	B1		cell barred for access
re	B1		call reestablishment allowed
acc_2	B5		access control class 15–11
ec	B1		emergency call allowed
acc_1	B10		access control class 9–0
Detailed Comments : The info element has a fixed length of 3 octets.			

Structured Type Definition			
Type Name : RFL_NumberList			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.10a			
Element Name	Type Definition	Field Encoding	Comments
rFL_Number1	B4		
prefix2	B1		value = 1 if present
rFL_Number2	B4		
prefix3	B1		value = 1 if present
rFL_Number3	B4		
prefix4	B1		value = 1 if present
rFL_Number4	B4		
prefix5	B1		value = 1 if present
rFL_Number5	B4		
endBit	B1		The value of this bit is always zero to indicate the end of the structure
Detailed Comments : It's a recursive structure. The definition is <pre><RFL number list struct> ::= <RFL_NUMBER : bit(4)> {0 | 1 <RFL number list struct>} the rFL_Number can be repeated infinite times, this TTCN definition shall be modified to include more rFL_Number if more than 5 rFL_Number are required in the constraint.</pre>			

Structured Type Definition			
Type Name : RFN			
Encoding Variation :			
Comments : The reduced frame number corresponding to the absolute frame number (FN) modulo 42432.			
Element Name	Type Definition	Field Encoding	Comments
t1_	B5		(FN div 1326) mod 32
t3	B6		FN mod 51
t2	B5		FN mod 26
Detailed Comments : see 3Gpp TS 44.018 section 10.5.2.38. The reduced frame number, FN modulo 42432 can be calculated in the following formula: $51 * ((t3 - t2) \text{ mod } 26) + t3 + 1326 * t1_$.			

Structured Type Definition			
Type Name : RR_Cause			
Encoding Variation :			
Comments : RR Cause 3GPP TS 44.018 clause 10.5.2.31			
Element Name	Type Definition	Field Encoding	Comments
iei	B8		
cause	B8		
Detailed Comments :			

Structured Type Definition			
Type Name : RTD12_List_List			
Encoding Variation :			
Comments : the CSN.1 definition for RTD12_List_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more bA_RTD12_List if more than 1 bA_RTD12_List is required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
rTD12_List	GPRS_RTD12_List		
prefix1	B1		always = 0
rTD12_List1	GPRS_RTD12_List		
endingRepetition	B1		always = '1'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018, 10.5.2.33b			

Structured Type Definition			
Type Name : RTD6_List_List			
Encoding Variation :			
Comments : the CSN.1 definition for RTD6_List_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more bA_RTD6_List if more than 1 bA_RTD6_List are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
rTD6_List	GPRS_RTD6_List		
prefix1	B1		always = 0
rTD6_List1	GPRS_RTD6_List		
endingBit	B1		always = '1'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018, 10.5.2.33b			

Structured Type Definition			
Type Name : RangeList			
Encoding Variation :			
Comments : Range list 3GPP TS 44.018 clause 10.5.2.1c Only 1 repetition has been included. If more are required, the TTCN will be changed			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
rangeLower1	B10		
rangeUpper1	B10		
endingRepetition	B1		always = 0 indicating the end of the structure
Detailed Comments : the TTCN definition shall be modified if more than 10 ranges are required in the constraint			

Structured Type Definition			
Type Name : ReferenceAddress			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
globalTFImask	B1		not present if globalTFImask=1
gLOBAL_TFI	GlobalTFI		not present if globalTFImask=0
mask2	B1		not present if globalTFImask=0 and mask2=1
tLLI	O4		not present if globalTFImask=0 and mask2=0
mask3	B1		not present if globalTFImask=0 and mask2=0
tQI	B16		not present if globalTFImask=0 and mask2=0 and mask3=1
packetRequestRef	PacketRequestReference		not present if globalTFImask=0 and mask2=0 and mask3=0
Detailed Comments :			

Structured Type Definition			
Type Name : ReferenceFreq			
Encoding Variation :			
Comments : Reference : 3GPP TS 44.060 clause 11.2.19 rFL_Contents is the value part of "Frequency List" information element, the allowed formats are bit map 0, 1024 range, 512 range, 256 range, 128 range and variable bit map			
Element Name	Type Definition	Field Encoding	Comments
rFL_NUMBER	B4		identification of the RFL
lengthOfRFLContents	B4		
rFL_Contents	OCTETSTRING[3..18]		the value part of "Frequency List" information element defined in 3GPP TS 44.018 clause 10.5.2.13
Detailed Comments :			

Structured Type Definition			
Type Name : ReferenceFreqLists Encoding Variation : Comments : The definition in CSN.1 is {1 < Reference Frequency struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more ReferenceFreq if more than 1 ReferenceFreq are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.19			
Element Name	Type Definition	Field Encoding	Comments
prefix1 referenceFreq1 endingRepetition	B1 ReferenceFreq B1		value = 1 if present Value always ZERO, indicates the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : RepeatedUTRAN_FDD_NeighCells Encoding Variation : Comments : 3GPP TS 44.018 clause 9.1.54			
Element Name	Type Definition	Field Encoding	Comments
arfcnIndexMask fDD_ARFCN fDD_Indic0 nR_OF_FDD_CELLS fDD_CELL_INFORMATION	B1 B14 B1 B5 BITSTRING		present if arfcnIndexMask = 0 length of this bitstring = p(nR_OF_FDD_CELLS)
Detailed Comments : function p(x) is: p(0) = 0, p(1) = 10, p(2) = 19, p(3) = 28, p(4) = 36, p(5) = 44, p(6) = 52, p(7) = 60, p(8) = 67, p(9) = 74, p(10) = 81, p(11) = 88, p(12) = 95, p(13) = 102, p(14) = 109, p(15) = 116, p(16) = 122, p(x) = 0 for x = 17-31.			

Structured Type Definition			
Type Name : RepeatedUTRAN_TDD_NeighCells			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 9.1.54			
Element Name	Type Definition	Field Encoding	Comments
arfcnIndexMask	B1		not present if arfcnIndexMask = 0
tDD_ARFCN	B14		
tDD_Indic0	B1		length of this bitstring = p(nR_OF_TDD_CELLS)
nR_OF_TDD_CELLS	B5		
tDD_CELL_INFORMATION	BITSTRING		
Detailed Comments : function p(x) is: p(0) = 0, p(1) = 10, p(2) = 19, p(3) = 28, p(4) = 36, p(5) = 44, p(6) = 52, p(7) = 60, p(8) = 67, p(9) = 74, p(10) = 81, p(11) = 88, p(12) = 95, p(13) = 102, p(14) = 109, p(15) = 116, p(16) = 122, p(x) = 0 for x = 17-31.			

Structured Type Definition			
Type Name : ReqRef			
Encoding Variation :			
Comments : Request reference 3GPP TS 44.018 clause 10.5.2.30			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
radoAccessInfo	B8		
fn	RFN		
Detailed Comments :			

Structured Type Definition			
Type Name : ResAndStartValue			
Encoding Variation :			
Comments : Used to receive the return result from o_CheckUtranClassmark			
Element Name	Type Definition	Field Encoding	Comments
res	BOOLEAN		
start	START_Value		
Detailed Comments :			

Structured Type Definition			
Type Name : RptdInvalidBSICInfo			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9d Only 2 repetitions have only been implemented. If more are required, the definition will be changed			
Element Name	Type Definition	Field Encoding	Comments
mask1	B1		
bCCHFreqNCell1	B5		not present if mask1 = 0
bSIC1	B6		not present if mask1 = 0
rxLevNCell1	B6		not present if mask1 = 0
mask2	B1		
bCCHFreqNCell2	B5		not present if mask2 = 0
bSIC2	B6		not present if mask2 = 0
rxLevNCell2	B6		not present if mask2 = 0
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Definition			
Type Name : SI13PBCCH_Location			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.37b			
Element Name	Type Definition	Field Encoding	Comments
sl13LocationMask	B1		
sl13_LOCATION	B1		not present if sl13LocationMask = 1
PBCCH_LOCATION	B2		not present if sl13LocationMask = 0
pSI1_REPEAT_PERIOD	B4		not present if sl13LocationMask = 0
Detailed Comments :			

Structured Type Definition

Type Name : SI13RO
Encoding Variation :
Comments : SI13 Rest Octets
 3GPP TS 44.018 clause 10.5.2.37b

Element Name	Type Definition	Field Encoding	Comments
mask	B1	LowHigh_Rule3	the remainder of the fields are all not present if mask = L
bCCH_CHANGE_MARK	B3		
sl_CHANGE_FIELD	B4		
sl3ChangeMask	B1		not present if sl3ChangeMask = 0
sl13_CHANGE_MARK	B2		not present if sl3ChangeMask = 0
gPRS_MobileAllocation	GPRSMobileAlloc		not present if sl3ChangeMask = 0
pbccchMask	B1		'0' -> no PBCCH
rAC	O1		present if pbccchMask = 0
sPGC_CCCH_SUP	B1		present if pbccchMask = 0
pRRIORITY_ACCESS_THR	B3		present if pbccchMask = 0
nETWORK_CONTROL_I_OR DER	B2		present if pbccchMask = 0
gPRS_CellOptions	GPRS_CellOptions		present if pbccchMask = 0
gPRS_PowerControlParameters	GPRS_PowerControlParameters		present if pbccchMask = 0
pSI1_REPEAT_PERIOD	B4		present if pbccchMask = 1
pBCCH_Description	PBCCH_Descr		present if pbccchMask = 1
r99Mask	B1	LowHigh_Rule3	addition in R99
sGSNR	B1		present if r99Mask = H
r4Mask	B1	LowHigh_Rule3	addition in R4
sl_STATUS_IND	B1		present if r4Mask = H
r6Mask	B1	LowHigh_Rule3	not present if r4Mask = L
txPwrMaxCCHMask	B1		not present if r6Mask = L
lbMSTxPwrMaxCCH	B5		not present if r6Mask = L or txPwrMaxCCHMask = 0
sl2nSupport	B2		not present if r6Mask = L

Detailed Comments : The info element has a fixed length of 20 octets.

Structured Type Definition			
Type Name : SI15RO Encoding Variation : Comments : SI15 Rest Octets 3GPP TS 44.018 clause 10.5.2.37k The definition is <DYNAMIC ARFCN MAPPING Description :{1 <DYNAMIC ARFCN MAPPING>}**0> <spare bit>** The DYNAMIC ARFCN MAPPING may repeat infinite times, so this TTCN definition shall be modified to include more dYNAMIC_ARFCN_MAPPING if more than 1 dYNAMIC_ARFCN_MAPPING are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
si15Index	B2		
si15Count	B2		
dm_CHANGE_MARK	B4		
prefix1	B1		
dynMappingList	DYNAMIC_ARFCN_MAPPI NG		
endingRepetition	B1		Always set to 0
Detailed Comments : The info element has a fixed length of 20 octets.			

Structured Type Definition			
Type Name : SI1RO Encoding Variation : Comments : SI1 Rest Octets 3GPP TS 04.018 clause 10.5.2.32			
Element Name	Type Definition	Field Encoding	Comments
mask	B1	LowHigh_Rule3	
nCH_Position	B5		not present if mask = L
bandIndicator	B1	LowHigh_Rule3	L= DCS1800; H=PCS1900
Detailed Comments : The info element has a fixed length of 1 octet.			

Structured Type Definition

Type Name : SI2quarterRO
Encoding Variation :
Comments : SI2quarter Rest Octets
 3GPP TS 44.018 clause 10.5.2.33b

Element Name	Type Definition	Field Encoding	Comments
bA_IND	B1		
bA_IND_3G	B1		
mP_CHANGE_MARK	B1		
sl2quarter_INDEX	B4		
sl2quarter_COUNT	B4		
measParamMask	B1		
measParamDescription	MeasParamDescr		not present if measParamMask = 0
gprsRTDMask	B1		
gPRS_RealTimeDiffDescr	GPRS_RealTimeDiffDescr		not present if gprsRTDMask = 0
gprsBSICMask	B1		
gPRS_BSIC_Description	GPRS_BSIC_Descr		not present if gprsBSICMask = 0
gprsRepPrioMask	B1		
gPRS_REP_PRIORITY_Descr	GPRS_REP_PRIORITY_Descr		not present if gprsRepPrioMask = 0
gprsMeasParamMask	B1		
gPRS_MeasParamsDescr	SI2quarterRO_GPRS_MeasParamDescr		not present if gprsMeasParamMask = 0
ncMeasParamMask	B1		
NC_Measurement_Parameters	NC_MeasParams		not present if ncMeasParamMask = 0
extnLengthMask	B1		
extensionLength	ExtLengthDescr		not present if extnLengthMask = 0
extnMask	B1		not present if extnLengthMask = 0
numCells	B7		not present if extnLengthMask = 0 or extnMask = 0
cNSupported	BITSTRING		not present if extnLengthMask = 0 or extnMask = 0
neighCellMask	B1		
neighCellDes3G	NeighCellDescr3G		not present if neighCellMask = 0
measParam3GMask	B1		
measurementParams3G	SI2quarterRO_MeasParamDescr3G		not present if measParam3GMask = 0
gprsMeasParam3GMask	B1		
gPRS_3G_MeasParamDescr	SI2quarterRO_GPRS_3G_MeasParamDescr		not present if gprsMeasParam3GMask = 0
rel5Mask	B1	LowHigh_Rule3	
addMeasMask	B1		not present if rel5Mask = L
addMeasParam3G	AdditionalMeasParam3G		not present if rel5Mask = L or addMeasMask = 0
addMeasMask2	B1		not present if rel5Mask = L

Continued on next page

Continued from previous page

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
fddRepThres2Mask	B1		not present if rel5Mask = L or addMeasMask2 = 0
fddRepThreshold2	B6		not present if rel5Mask = L, addMeasMask2 = 0 or fddRepThres2Mask = 0
rel6Mask	B1	LowHigh_Rule3	not present if rel5Mask = L
cCNActive	B1		not present if rel5Mask = L or rel6Mask = 0
Detailed Comments : The info element has a fixed length of 20 octets.			

Structured Type Definition			
Type Name : SI2quarterRO_GPRS_3G_MeasParamDescr			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
qsearch_P	B4		
sEARCH_PRIO_3G	B1		
fDD_REP_QUANT_Mask	B1		
fDD_REP_QUANT	B1		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTI NG	B2		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRES HOLD	B3		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	B1		
tDD_MULTIRAT_REPORTI NG	B2		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRES HOLD	B3		not present if tDD_ReportingMask = 0
Detailed Comments : Reference : 3GPP TS 44.018 clause 10.5.2.33b			

Structured Type Definition

Type Name : SI2quarterRO_GPRS_MeasParamDescr

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
rREPORT_TYPE	B1		
rREPORTING_RATE	B1		
iINVALID_BSIC_REPORTING	B1		
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
servingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sSCALE_ORD_Mask	B1		
sSCALE_ORD	B2		not present if sSCALE_ORD_Mask = 0
mask900	B1		
rREPORTING_OFFSET_900	B3		not present if mask900 = 0
rREPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rREPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rREPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask450	B1		
rREPORTING_OFFSET_450	B3		not present if mask450 = 0
rREPORTING_THRESHOLD_450	B3		not present if mask450 = 0
mask1900	B1		
rREPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rREPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rREPORTING_OFFSET_850	B3		not present if mask850 = 0
rREPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments : Reference : 3GPP TS 44.018 clause 10.5.2.33b

Structured Type Definition

Type Name : SI2quarterRO_MeasParamDescr3G
Encoding Variation :
Comments : 3G MEASUREMENT PARAMETERSI description in SI2quarter rest octets

Element Name	Type Definition	Field Encoding	Comments
qsearch_I	B4		
qsearch_C_Initial	B1		
fDDMask	B1		
fDD_Qoffset	B4		not present if fDDMask = 0
fDD_REP_QUANT	B1		not present if fDDMask = 0
fDD_MULTIRAT_REPORTI NG	B2		not present if fDDMask = 0
fDD_Qmin	B3		not present if fDDMask = 0
tDDMask	B1		
tDD_Qoffset	B4		not present if tDDMask = 0
tDD_MULTIRAT_REPORTI NG	B2		not present if tDDMask = 0

Detailed Comments :

Structured Type Definition

Type Name : SI3RO
Encoding Variation :
Comments : SI3 Rest Octets
 3GPP TS 44.018 clause 10.5.2.34

Element Name	Type Definition	Field Encoding	Comments
cellSelectMask	B1	LowHigh_Rule3	Cell select parameter mask
cbq	B1		not present if cellSelectMask = L, Cell bar qualify
cellReselectOffset	B6		not present if cellSelectMask = L
temporaryOffset	B3		not present if cellSelectMask = L
penaltyTime	B5		not present if cellSelectMask = L
powerOffsetMask	B1	LowHigh_Rule3	Power offset mask
powerOffset	B2		not present if powerOffsetMask = L
sl2terIndicator	B1	LowHigh_Rule3	SI 2ter indicator L= no SI2ter
earlyClassMarkSendingControl	B1	LowHigh_Rule3	L= forbidden, H= allowed
mask3	B1	LowHigh_Rule3	mask bit for scheduling info
schedulingWhere	B3		not present if mask3 = L
mask4	B1	LowHigh_Rule3	mask bit for GPRS indicator
rA_Colour	B3		not present if mask4 = L
sl13Position	B1		not present if mask4 = L
earlyClassMarksendingRestriction3G	B1	LowHigh_Rule3	L=no early 3G classmark sending
mask5	B1	LowHigh_Rule3	mask bit for SI2quaterPosition
sl2quaterPosition	B1		not present if mask5 = L
SI13altPosition	B1		only present if lu supported in cell

Detailed Comments : The info element has a fixed length of 4 octets.

Structured Type Definition

Type Name : SI4RO
Encoding Variation :
Comments : SI4 Rest Octets
 3GPP TS 44.018 clause 10.5.2.35

Element Name	Type Definition	Field Encoding	Comments
cellSelectMask	B1	LowHigh_Rule3	Cell selection parameter mask
cbq	B1		not present if cellSelectMask = L, Cell bar qualify
cellReselectOffset	B6		not present if cellSelectMask = L
temporaryOffset	B3		not present if cellSelectMask = L
penaltyTime	B5		not present if cellSelectMask = L
powerOffsetMask	B1	LowHigh_Rule3	Power offset mask
powerOffset	B2		not present if powerOffsetMask = L
raColourMask	B1	LowHigh_Rule3	GPRS indicator
rA_Colour	B3		not present if raColourMask = L
si13Position	B1		not present if raColourMask = L
breakMask	B1	LowHigh_Rule3	
breakIndicator	B1	LowHigh_Rule3	present if breakMask = L
IsaParamMask	B1	LowHigh_Rule3	present if breakMask = H
pRIO_THR	B3		not present if IsaParamMask = L or breakMask = L
ISA_OFFSET	B3		not present if IsaParamMask = L or breakMask = L
mccMask	B1		not present if breakMask = L or ISAParamMask = L
mCC	B12		not present if mccMask = 0 or breakMask = L or ISAParamMask = L
nMC	B12		not present if mccMask = 0 or breakMask = L or ISAParamMask = L
cellIDMask	B1	LowHigh_Rule3	not present if breakMask = L
cellIdentity	B16		not present if cellIDMask = L or breakMask = L
IsaMask	B1	LowHigh_Rule3	not present if breakMask = L
si4RO_LSA_ID_Info	SI4RO_LSA_ID_Info		not present if IsaMask = L or breakMask = L
cBQ3Mask	B1	LowHigh_Rule3	not present if breakMask = L
cBQ3	B2		not present if breakMask = L or cBQ3Mask = L
si13altMask	B1		not present if breakMask = L or cBQ3Mask = L
si13altPosition	B1		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments : The info element has a length of 0 to 10 octets.

Structured Type Definition

Type Name : SI4RO_LSA_ID_Info

Encoding Variation :

Comments : The definition is < LSA ID Information > ::=
 < LSA identity> {0 | 1 <LSA ID information>;

<LSA identity> ::=
 {0 <LSA_ID : bit(24)>
 | 1 <ShortLSA_ID : (10)>},

this a recursive definition, can be repeated many times. So the TTCN definition shall be modified to include more ISA_ID if the constaint requires more than 1 ISA_ID.
 Reference : 3GPP TS 44.018 clause 10.5.2.35

Element Name	Type Definition	Field Encoding	Comments
ISA_ID_Mask1	B1		
ISA_ID1	B24		not present if ISA_ID_Mask1 = 1
ShortLSA_ID1	B10		not present if ISA_ID_Mask1 = 0
endingRepetition	B1		value always equal to "0" to indicate the end of the structure

Detailed Comments : 3GPP TS 44.018 clause 10.5.2.35

Structured Type Definition

Type Name : SI6RO
Encoding Variation :
Comments : SI6 Rest Octets
 3GPP TS 44.018 clause 10.5.2.35a

Element Name	Type Definition	Field Encoding	Comments
pchNchMask	B1	LowHigh_Rule3	PCH, NCH info mask
pagingChRestructuring	B1		not present if pchNchMask = L
nLN_SACCH	B2		not present if pchNchMask = L
prioMask	B1		not present if pchNchMask = L
callPriority	B3		not present if pchNchMask = L or prioMask = 0
nLN_Status	B1		not present if pchNchMask = L
inbandMask	B1	LowHigh_Rule3	
inbandNotifications	B1		not present if inbandMask = L
inbandPagings	B1		not present if inbandMask = L
dTM_Supported	B1	LowHigh_Rule3	
rAC	B8		not present if dTM_Supported = L
mAX_LAPDm	B3		not present if dTM_Supported = L
bandIndicator	B1	LowHigh_Rule3	L = 1800 band supported, H = 1900 band supported
txPwrMask	B1	LowHigh_Rule3	
gPRS_MS_TXPWT_MAX_CH	B5		not present if txPwrMask = L
mBMSMask	B1	LowHigh_Rule3	
dedModeMBMSNoteSupport	B1		not present if mBMSMask = L
mNCISupport	B1		not present if mBMSMask = L

Detailed Comments : The info element has a fixed length of 7 octets.

Structured Type Definition

Type Name : SIMessageList

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		always =1 if SI Msg 1 present, otherwise OMIT
siMessgeType1	B8		00 = Msg Type supported but not received 01 = supported and received, single instance 10 = supported and partially received, multiple instances 11 = supported and completely received, multiple instances
messRec1	B2		
sixChangeMark1	B3		
sixChangeCount1	B4		only present if messRec1 = 10
instanceBitmap1	BITSTRING		only present if messRec1 = 10
prefixBit2	B1		always =1 if SI Msg 2 present, otherwise OMIT
siMessgeType2	B8		00 = Msg Type supported but not received 01 = supported and received, single instance 10 = supported and partially received, multiple instances 11 = supported and completely received, multiple instances
messRec2	B2		
sixChangeMark2	B3		
sixChangeCount2	B4		only present if messRec2 = 10
instanceBitmap2	BITSTRING		only present if messRec2 = 10
endingRepetition	B1		always 0
additionalMsgType	B1		

Detailed Comments : ref: 3GPP 44.060, clause 11.2.17b
the TTCN definition shall be modified if more than 2 SI Msgs are required in the constraint

Structured Type Definition			
Type Name : SecondPacketAssign			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.16			
Element Name	Type Definition	Field Encoding	Comments
mask1	B1	LowHigh_Rule3	not present if mask1 = L not present if mask1 = L or mask2 = 0
mask2	B1		
extendedRA	B5		
Detailed Comments :			

Structured Type Definition			
Type Name : ServiceSupport			
Encoding Variation :			
Comments : 44.018 clause 10.5.2.57			
Element Name	Type Definition	Field Encoding	Comments
iei	O1		set to '000000'
spareBits	B6		
multicastMBMS	B1		
broadcastMBMS	B1		
Detailed Comments :			

Structured Type Definition			
Type Name : ServingCellParams			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
cELL_BAR_ACCESS_2	B1		not present if hCS_ServingCellParameters Mask = 0
eXC_ACC	B1		
gPRS_RXLEV_ACCESS_M IN	B6		
gPRS_MS_TXPWR_MAX_C CH	B5		
hCS_ServingCellParameters Mask	B1		
hCS_ServingCellParameters	HCS		
mULTIBAND_REPORTING	B2		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : SingleBlockAllocationPacket			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
timeSlot	B3		
PowerControlMask	B1		
alpha	B4		not present if PowerControlMask=0
gamma	B5		not present if PowerControlMask=0
mask	B1		
P0	B4		not present if mask=0
spareBit	B1		set to 0. not present if mask=0
prMode	B1		not present if mask=0
tBFStartingTime	StartingFrameNumberDscr		
Detailed Comments :			

Structured Type Definition			
Type Name : StartingFrameNumberDscr			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.21			
Element Name	Type Definition	Field Encoding	Comments
encodingMask	B1		
absoluteFrameNumEnc	RFN		not present if encodingMask=1
relativeFrameNumEnc	BITSTRING[0..13]		not present if encodingMask=0
Detailed Comments :			

Structured Type Definition			
Type Name : StartingTime			
Encoding Variation :			
Comments : Starting time 3GPP TS 44.018 clause 10.5.2.38			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01111100'B
fn	RFN		
Detailed Comments :			

Structured Type Definition			
Type Name : TA Encoding Variation : Comments : Timing advance GSM 04.08, 10.5.2.40			
Element Name	Type Definition	Field Encoding	Comments
iei sprb value	IEI_8 BITSTRING [2] BITSTRING [6]		'01111101'B '00'B one unit = 48/13 microseconds (in 1 bit periods)
Detailed Comments :			

Structured Type Definition			
Type Name : TimeSlotAllocation Encoding Variation : Comments : used for down link and up link TBF			
Element Name	Type Definition	Field Encoding	Comments
physicalChld	PhysicalChld		Single PDCH or multi-slot configured PDCHs
tN0	BOOLEAN		TRUE – time slot 0 is allocated; FALSE --- not allocated
tN1	BOOLEAN		TRUE – time slot 1 is allocated; FALSE --- not allocated
tN2	BOOLEAN		TRUE – time slot 2 is allocated; FALSE --- not allocated
tN3	BOOLEAN		TRUE – time slot 3 is allocated; FALSE --- not allocated
tN4	BOOLEAN		TRUE – time slot 4 is allocated; FALSE --- not allocated
tN5	BOOLEAN		TRUE – time slot 5 is allocated; FALSE --- not allocated
tN6	BOOLEAN		TRUE – time slot 6 is allocated; FALSE --- not allocated
tN7	BOOLEAN		TRUE – time slot 7 is allocated; FALSE --- not allocated
Detailed Comments :			

Structured Type Definition

Type Name : TimeSlotAllocationPowerControl

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
tN0mask	B1		
uSF_TN0	B3		not present if tN0mask=0
gAMMA_TN0	B5		not present if tN0mask=0
tN1mask	B1		
uSF_TN1	B3		not present if tN1mask=0
gAMMA_TN1	B5		not present if tN1mask=0
tN2mask	B1		
uSF_TN2	B3		not present if tN2mask=0
gAMMA_TN2	B5		not present if tN2mask=0
tN3mask	B1		
uSF_TN3	B3		not present if tN3mask=0
gAMMA_TN3	B5		not present if tN3mask=0
tN5mask	B1		
uSF_TN5	B3		not present if tN5mask=0
gAMMA_TN5	B5		not present if tN5mask=0
tN6mask	B1		
uSF_TN6	B3		not present if tN6mask=0
gAMMA_TN6	B5		not present if tN6mask=0
tN7mask	B1		
uSF_TN7	B3		not present if tN7mask=0
gAMMA_TN7	B5		not present if tN7mask=0

Detailed Comments :

Structured Type Definition			
Type Name : TimeSlotAllocation_UA			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
tN0mask	B1		
uSF_TN0	B3		not present if tN0mask=0
tN1mask	B1		
uSF_TN1	B3		not present if tN1mask=0
tN2mask	B1		
uSF_TN2	B3		not present if tN2mask=0
tN3mask	B1		
uSF_TN3	B3		not present if tN3mask=0
tN4mask	B1		
uSF_TN4	B3		not present if tN4mask=0
tN5mask	B1		
uSF_TN5	B3		not present if tN5mask=0
tN6mask	B1		
uSF_TN6	B3		not present if tN6mask=0
tN7mask	B1		
uSF_TN7	B3		not present if tN7mask=0
Detailed Comments :			

Structured Type Definition			
Type Name : TMGI			
Encoding Variation :			
Comments : 44.060 clause 12.33			
Element Name	Type Definition	Field Encoding	Comments
mask	B1		
serviceID	B24		always present, regardless of mask value
mCC	B12		not present if mask = 0
mNC	B12		not present if mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : UTRANPreConfigInfo			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.7a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
value	OCTETSTRING		used to be: InterRATHandoverInfo
Detailed Comments :			

Structured Type Definition			
Type Name : UTRAN_ARFCN			
Encoding Variation :			
Comments : The CSN.1 definition is an indeterminate repetition, so the TTCN definition shall be modified to include more uTRAN_ARFCN in more than 1 uTRAN_ARFCN are required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
uTRAN_ARFCN1	B14		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.060 clause 11.2.25b			

Structured Type Definition			
Type Name : UTRAN_FDD_Descr			
Encoding Variation :			
Comments : the CSN.1 definition is <UTRAN FDD description struct> ::= {0 | 1 <Bandwidth_FDD : bit(3) >} {1 <Repeated UTRAN FDD Neighbour Cells : <Repeated UTRAN FDD Neighbour Cells struct>>}**0, the "Repeated UTRAN FDD Neighbour Cells" can be repeated many times as required, the current TTCN definition contains 3 repetitions only, it shall be modified if more repetition is required in the constraint.			
Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		
bandwidthFDD	B3		not present if bandwidthMask = 0
prefix1	B1		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells1	RepeatedUTRAN_FDD_NeighbourCells		
prefix2	B1		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells2	RepeatedUTRAN_FDD_NeighbourCells		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : UTRAN_FDD_Descr_CR			
Encoding Variation :			
Comments : 44.018 clause 10.5.2.1e			
Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		not present if bandwidthMask = 0
bandwidthFDD	B3		
fDD_ARFCN	B14		not present if fDDIndMask = 0
fDDIndMask	B1		
fDD_Indic0	B1		
nR_OF_FDD_CELLS	B5		not present if fDDIndMask = 0
fDD_CELL_INFORMATION	BITSTRING		not present if fDDIndMask = 0 length of this bitstring = p(nR_OF_FDD_CELLS)
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : UTRAN_FreqList			
Encoding Variation :			
Comments : UTRAN frequency list 3GPP TS 44.018 clause 10.5.2.1d			
Element Name	Type Definition	Field Encoding	Comments
iei	B8		'01001100'B
iel	O1		
fDD_ARFCN	UTRAN_ARFCN		FDD frequencies
tDD_ARFCN	UTRAN_ARFCN		TDD frequencies
spareBits	BITSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : UTRAN_TDD_Descr Encoding Variation : Comments : the CSN.1 definition is <UTRAN TDD description struct> ::= {0 | 1 <Bandwidth_TDD : bit(3) >} {1 <Repeated UTRAN TDD Neighbour Cells : <Repeated UTRAN TDD Neighbour Cells struct>>}**0, the "Repeated UTRAN TDD Neighbour Cells" can be repeated many times as required, the current TTCN definition contains 1 repetitions only, it shall be modified if more repetition is required in the constant.			
Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		not present if bandwidthMask = 0
bandwidthTDD	B3		
prefix1	B1		value = 1 if present
repeatedUTRAN_TDD_NeighbourCells1	RepeatedUTRAN_TDD_NeighbourCells		
endingRepetition	B1		always = '0'B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : UTRAN_TDD_Descr_CR Encoding Variation : Comments : 44.018 clause 10.5.2.1e			
Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		not present if bandwidthMask = 0
bandwidthTDD	B3		
tDD_ARFCN	B14		
tDDIndMask	B1		not present if tDDIndMask = 0
tDD_Indic0	B1		
nR_OF_TDD_CELLS	B5		not present if tDDIndMask = 0
tDD_CELL_INFORMATION	BITSTRING		not present if tDDIndMask = 0 length of this bitstring = p(nR_OF_TDD_CELLS)
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : UnknownSIList			
Encoding Variation :			
Comments :			
Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		always =1 if SI Msg 1 present, otherwise OMIT
siMessgeType1	B8		
prefixBit2	B1		always =1 if SI Msg 2 present, otherwise OMIT
siMessgeType2	B8		
endingRepetition	B1		always 0
additionalMsgType	B1		
Detailed Comments : ref: 3GPP 44.060, clause 11.2.17b the TTCN definition shall be modified if more than 2 SI Msgs are required in the constraint			

Structured Type Definition			
Type Name : VGCS_CiphParam			
Encoding Variation :			
Comments : 44.018 clause 10.5.2.42b			
Element Name	Type Definition	Field Encoding	Comments
iei	O1		
length	Length		
spareBits	B2		set to '00'
randInd	B1		
laclnd	B1		
cellInd	B1		
b22Count	B1		
cellGlobalCount	B2		
cellId	O1		Optional
lai	LocAreald_v		Optional
vSTK_RAND	OCTETSTRING[5]		Optional
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : VGCS_TargetMode			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.42a			
Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
targetMode	B2		
groupCipherKey	B4		
spareBits	B2		
Detailed Comments :			

ASN.1 Type Definition

Type Name : RB_Type

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  speech_12_2k (0),
  speech_10_2k (1),
  speech_7_95k (2),
  speech_7_4k (3),
  speech_6_7k (4),
  speech_5_9k (5),
  speech_5_15k (6),
  speech_4_75k (7),
  convUnknown_28_8k (8),
  convUnknown_64k_20 (9),
  convUnknown_32k_20 (10),
  convUnknown_64k_40 (11),
  convUnknown_32k_40 (12),
  streamUnknown_14_4k (13),
  streamUnknown_28_8k (14),
  streamUnknown_57_6k (15),
  streamUnknown_0k_64k (16),
  streamUnknown_64k_0k (17),
  streamUnknown_0k_128k (18),
  streamUnknown_128k_0k (19),
  streamUnknown_0k_384k (20),
  interact_32k_8k_TC_10 (21),
  backgrnd_32k_8k_TC_10 (22),
  interact_32k_8k_TC_20 (23),
  backgrnd_32k_8k_TC_20 (24),
  interact_32k_8k_CC_10 (25),
  backgrnd_32k_8k_CC_10 (26),
  interact_32k_8k_CC_20 (27),
  backgrnd_32k_8k_CC_20 (28),
  interact_64k_8k (29),
  backgrnd_64k_8k (30),
  interact_32k_64k_TC_10 (31),
  backgrnd_32k_64k_TC_10 (32),
  interact_32k_64k_TC_20 (33),
  backgrnd_32k_64k_TC_20 (34),
  interact_32k_64k_CC_10 (35),
  backgrnd_32k_64k_CC_10 (36),
  interact_32k_64k_CC_20 (37),
  backgrnd_32k_64k_CC_20 (38),
  interact_64k (39),
  backgrnd_64k (40),
  interact_64k_128k (41),
  backgrnd_64k_128k (42),
  interact_128k (43),
  backgrnd_128k (44),
  interact_64k_144k (45),
  backgrnd_64k_144k (46),
  interact_144k (47),
  backgrnd_144k (48),
  interact_64k_256k_10 (49),
  backgrnd_64k_256k_10 (50),
  interact_64k_256k_20 (51),
  backgrnd_64k_256k_20 (52),
  interact_64k_384k_10 (53),
  backgrnd_64k_384k_10 (54),
  interact_64k_384k_20 (55),
  backgrnd_64k_384k_20 (56),
  interact_128k_384k_10 (57),
```

Continued on next page

ASN.1 Type Definition

Type Definition

backgrnd_128k_384k_10 (58),
 interact_128k_384k_20 (59),
 backgrnd_128k_384k_20 (60),
 interact_384k_10 (61),
 backgrnd_384k_10 (62),
 interact_384k_20 (63),
 backgrnd_384k_20 (64),
 interact_64k_2048k_10 (65),
 backgrnd_64k_2048k_10 (66),
 interact_64k_2048k_20 (67),
 backgrnd_64k_2048k_20 (68),
 interact_128k_2048k_10 (69),
 backgrnd_128k_2048k_10 (70),
 interact_128k_2048k_20 (71),
 backgrnd_128k_2048k_20 (72),
 interact_384k_2048k_10 (73),
 backgrnd_384k_2048k_10 (74),
 interact_384k_2048k_20 (75),
 backgrnd_384k_2048k_20 (76),
 speech_12_2k_Interact_32k_8k_TC_20 (77) ,
 speech_12_2k_Backgrnd_32k_8k_TC_20 (78),
 speech_12_2k_Interact_32k_8k_TC_10 (79),
 speech_12_2k_Backgrnd_32k_8k_TC_10 (80),
 speech_12_2k_Interact_32k_8k_CC_20 (81),
 speech_12_2k_Backgrnd_32k_8k_CC_20 (82),
 speech_12_2k_Interact_32k_8k_CC_10 (83) ,
 speech_12_2k_Backgrnd_32k_8k_CC_10 (84),
 speech_12_2k_Interact_32k_64k_TC_10 (85) ,
 speech_12_2k_Backgrnd_32k_64k_TC_10 (86),
 speech_12_2k_Interact_32k_64k_TC_20 (87) ,
 speech_12_2k_Backgrnd_32k_64k_TC_20 (88),
 speech_12_2k_Interact_32k_64k_CC_10 (89),
 speech_12_2k_Backgrnd_32k_64k_CC_10 (90),
 speech_12_2k_Interact_32k_64k_CC_20 (91),
 speech_12_2k_Backgrnd_32k_64k_CC_20 (92),
 speech_12_2k_Interact_64k(93),
 speech_12_2k_Backgrnd_64k(94),
 speech_12_2k_Interact_64k_128k(95),
 speech_12_2k_Backgrnd_64k_128k (96),
 speech_12_2k_Interact_64k_256k_10 (97),
 speech_12_2k_Backgrnd_64k_256k_10(98),
 speech_12_2k_Interact_64k_256k_20(99),
 speech_12_2k_Backgrnd_64k_256k_20(100),
 speech_12_2k_Interact_64k_384k_10 (101),
 speech_12_2k_Backgrnd_64k_384k_10 (102) ,
 speech_12_2k_Interact_64k_384k_20 (103),
 speech_12_2k_Backgrnd_64k_384k_20 (104),
 speech_12_2k_Interact_128k_2048k_10 (105),
 speech_12_2k_Backgrnd_128k_2048k_10 (106),
 speech_12_2k_Interact_128k_2048k_20 (107),
 speech_12_2k_Backgrnd_128k_2048k_20 (108),
 speech_12_2k_StreamUnknown_57_6k (109) ,
 speech_12_2k_StreamUnknown_0_64k (110) ,
 speech_12_2k_StreamUnknown_0_128k (111) ,
 speech_12_2k_StreamUnknown_0_384k (112) ,
 speech_12_2k_ConvUnknown_64k_20(113),
 speech_12_2k_ConvUnknown_64k_40(114),
 convUnknown_64k_ConvUnknown_64k_20(115),
 convUnknown_64k_ConvUnknown_64k_40(116) ,
 convUnknown_64k_Interact_64k_20 (117),
 convUnknown_64k_Interact_64k_40 (118),
 convUnknown_64k_Backgrnd_64k_20 (119),

ASN.1 Type Definition

Type Definition

convUnknown_64k_Backgrnd_64k_40 (120),
 convUnknown_64k_Interact_64k_128k_20 (121),
 convUnknown_64k_Interact_64k_128k_40 (122),
 convUnknown_64k_Backgrnd_64k_128k_20 (123),
 convUnknown_64k_Backgrnd_64k_128k_40 (124),
 convUnknown_64k_Interact_128k_128k_20 (125),
 convUnknown_64k_Interact_128k_128k_40 (126),
 convUnknown_64k_Backgrnd_128k_128k_20 (127),
 convUnknown_64k_Backgrnd_128k_128k_40 (128),
 interact_64k_128k_StreamingUnknown_0k_64k(129),
 backgrnd_64k_128k_StreamingUnknown_0k_64k (130),
 interact_64k_128k_StreamingUnknown_0k_128k (131),
 backgrnd_64k_128k_StreamingUnknown_0k_128k (132),
 interact_64k_8k_CC (133),
 backgrnd_64k_8k_CC (134) ,
 interact_32k_TC_40 (135),
 backgrnd_32k_TC_40 (136)
 ,
 speech_12_2k_7_95k_5_9k_4_75k (137),
 interact_16k_TC_40(138),
 backgrnd_16k_TC_40(139),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_8k_8k_40 (140) ,
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_8k_8k_40 (141),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_16k_16k_40 (142) ,
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_16k_16k_40 (143),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_32k_32k_40(144),
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_32k_32k_40(145),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_64k_64k_20(146),
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_64k_64k_20(147),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_64k_128k_20(148),
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_64k_128k_20(149),

 speech_10_2k_6_7k_5_9k_4_75k (150),
 speech_7_4k_6_7k_5_9k_4_75k (151),
 interact_8k_TC_40(152),
 backgrnd_8k_TC_40(153),
 speech_12_2k_Interact_0k_0k_CC_20 (154) ,
 speech_12_2k_Backgrnd_0k_0k_CC_20 (155),
 speech_12_2k_Interact_8k_8k_TC_40 (156) ,
 speech_12_2k_Backgrnd_8k_8k_TC_40 (157),
 speech_12_2k_7_95k_5_9k_4_75k_Interact_0k_0k_CC_20(158),
 speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_0k_0k_CC_20(159),
 convUnknown_64k_Interact_8k_20(160),
 convUnknown_64k_Backgrnd_8k_20(161),
 convUnknown_64k_Interact_8k_40(162),
 convUnknown_64k_Backgrnd_8k_40(163),
 convUnknown_64k_Interact_16k_64k_20(164),
 convUnknown_64k_Backgrnd_16k_64k_20(165),
 convUnknown_64k_Interact_16k_64k_40(166),
 convUnknown_64k_Backgrnd_16k_64k_40(167) ,
 interact_32k_TC_20 (168),
 backgrnd_32k_TC_20 (169),
 speech_12_2k_7_95k_5_9k_4_75k_ConvUnknown_64k_20(170),
 speech_12_2k_Interact_32k_32k_40(171),
 speech_12_2k_Backgrnd_32k_32k_40(172),
 interact_64k_TC_20(173),
 backgrnd_64k_TC_20(174),
 interact_8k_Interact_8k_TC_40(175),
 backgrnd_8k_Backgrnd_8k_TC_40(176),
 streamUnknown_16k_64k_Interact_8k(177),
 streamUnknown_16k_64k_Backgrnd_8k(178),
 speech_12_2k_Interact_64k_64k_TC_20(179),

Continued from previous page

ASN.1 Type Definition
Type Definition
<pre> speech_12_2k_Backgrnd_64k_64k_TC_20(180), speech_12_2k_7_95k_5_9k_4_75k_ConvUnknown_64k_40(181) , -- interact_64k_384k_DSCH_10 (182), -- backgrnd_64k_384k_DSCH_10(183), -- interact_64k_384k_DSCH_20(184), -- backgrnd_64k_384k_DSCH_20(185), -- interact_64k_2048k_DSCH_10(186), -- backgrnd_64k_2048k_DSCH_10(187), -- interact_64k_2048k_DSCH_20(188), -- backgrnd_64k_2048k_DSCH_20(189), speech_12_2k_Interact_64k_384k_DSCH_10 (190), speech_12_2k_Backgrnd_64k_384k_DSCH_10 (191), speech_12_2k_Interact_64k_384k_DSCH_20 (192), speech_12_2k_Backgrnd_64k_384k_DSCH_20 (193), speech_12_2k_Interact_64k_2048k_DSCH_10 (194), speech_12_2k_Backgrnd_64k_2048k_DSCH_10 (195), speech_12_2k_Interact_64k_2048k_DSCH_20 (196), speech_12_2k_Backgrnd_64k_2048k_DSCH_20 (197), interact_8k_CC_40(198), backgrnd_8k_CC_40(199), interact_64k_768k_10(200), interact_64k_768k_20(201), backgrnd_64k_768k_10(202), backgrnd_64k_768k_20(203), streamUnknown_16k_128k_Interact_8k(204), streamUnknown_16k_128k_Backgrnd_8k(205) } </pre>
Detailed Comments :

ASN.1 Type Definition
Type Name : AICHInfo Encoding Variation : Comments :
Type Definition
<pre> SEQUENCE { aichinfo AICH_Info, dl_TxPower AICH_PowerOffset } </pre>
Detailed Comments :

ASN.1 Type Definition	
Type Name	: AmConfirmationRequest
Encoding Variation	:
Comments	: If the noConfirmationRequested option is used, then an RLC_AM_DATA_CNF is not expected from the RLC AM entity. If the confirmationRequested option is used, then the RLC AM entity is being requested to provide an RLC_DATA_CNF primitive containing the same mui value.
Type Definition	
CHOICE { noConfirmationRequest NULL, confirmationRequested Mui }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: COUNT_I_MSB
Encoding Variation	:
Comments	: 28 bits long
Type Definition	
INTEGER (0..268435455)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CellToBeCreated
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { cell_DCH (0), cell_FACH (10) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CellTxPowerLevel
Encoding Variation	:
Comments	: The defaultCellTxPowerLvl is a default setting and is used for the most signalling tests. The real total cell DL Tx power level equals to the sum of the DL Tx power of the individual physical channels configured. The totalCellTxPowerLvl applies to e.g. the idle mode tests in a non-default multi-cell radio environment.
Type Definition	
CHOICE { defaultCellTxPowerLvl NULL, totalCellTxPowerLvl DL_TxPower }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CiphActivationInfo
Encoding Variation	:
Comments	: DL or UL ciphering activation info RB is omitted in rB_UL_CiphActivationTimeInfo the SS takes no action on this RB and the ciphering configuration keeps unchanged on this RB. CipheringModeCommand = dummy NULL means no ciphering.
Type Definition	
CHOICE { cipheringModeInfo CipheringModeInfo, rb_UL_CipheringActivationTimeInfo RB_ActivationTimeInfoList }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CmacConfigReq
Encoding Variation	:
Comments	: To request to configure MAC
Type Definition	
SEQUENCE { activationTime SS_ActivationTime, uE_Info UE_Info, trCHInfo TrCHInfo, trCH_LogCHMapping TrCH_LogCHMappingList1 -- RACHTransmissionCtrlElements -- CPCHTransmissionControlElements }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CmacSysinfoConfigReq
Encoding Variation	:
Comments	: if bcch_ModificationTime = OMIT SS shall modify the Sysinfo immediately
Type Definition	
SEQUENCE { sg_REP INTEGER (2..12), -- Repetition period is the sg_REP-th power of 2. sg_POS INTEGER (0..2047), -- The position of each segment is 2 * sg_POS. bcch_ModificationTime BCCH_ModificationTime OPTIONAL }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTFS
Encoding Variation	:
Comments	: Transport Format Set
Type Definition	
<pre>SEQUENCE { tti CHOICE { tti10 CommonOrDedicatedTF_InfoList, tti20 CommonOrDedicatedTF_InfoList, tti40 CommonOrDedicatedTF_InfoList, tti80 CommonOrDedicatedTF_InfoList, dynamic CommonOrDedicatedTF_InfoList_DynamicTTI }, semistaticTF_Information SemistaticTF_Information }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_Info
Encoding Variation	:
Comments	: Transport Format Set
Type Definition	
<pre>SEQUENCE { tb_Size INTEGER (0..5035), numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks, logicalChannelList LogicalChannelList }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_InfoList
Encoding Variation	:
Comments	: Transport Format Set
Type Definition	
<pre>SEQUENCE (SIZE (1..maxTF)) OF CommonOrDedicatedTF_Info</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_InfoList_DynamicTTI
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { tb_Size INTEGER (0..5035), numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks, logicalChannelList LogicalChannelList }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CrlcConfigReq
Encoding Variation	:
Comments	: To request to setup, re_configure or release RLC entityThe Stop parameter indicates that the RLC entity shall not transmit or receive RLC PDUs. The Continue parameter indicates that the RLC entity shall continue transmission and reception of RLC PDUs. When the RLC entity is stopped, the RLC timers are not affected. Triggered polls and status transmissions are delayed until the RLC entity is continued.
Type Definition	
<pre>CHOICE { setup RbInfo, reconfigure RbInfo, release NULL, sS_stop NULL, sS_continue NULL }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: DL_DPCHInfo
Encoding Variation	:
Comments	: The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0–6 dB, 0.25 dB per step.
Type Definition	
<pre>SEQUENCE { dl_CommonInformation DL_CommonInformation, dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL, powerOffsetOfTFCI_PO1 INTEGER (0..24), powerOffsetOfTPC_PO2 INTEGER (0..24), powerOffsetOfPILOT_PO3 INTEGER (0..24), dl_TxPower DL_TxPower, dl_TxPowerMax DL_TxPower, dl_TxPowerMin DL_TxPower }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: DL_TxPower
Encoding Variation	:
Comments	: Downlink Tx Power relative to PCPICH
Type Definition	
INTEGER (-35..15)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: DL_TxPower_PCPICH
Encoding Variation	:
Comments	: Absolute Tx Power of PCPICH
Type Definition	
INTEGER (-60..-30)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: DPCHInfo
Encoding Variation	:
Comments	: The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0 dB to 6 dB, 0,25 dB per step.
Type Definition	
<pre>SEQUENCE { ul_DPCHInfo UL_DPCH_Info OPTIONAL, dl_DPCHInfo DL_DPCHInfo OPTIONAL }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: HS_DPCCHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { cqi_RepetitionFactor CQI_RepetitionFactor, ackNackRepetitionFactor ACK_NACK_repetitionFactor }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: HS_DSCHMACdFlows
Encoding Variation	:
Comments	: Applicable Rel-5 or later. Within the ACK/NACK repetition period indicated by ackNackRepetitionFactor the SS shall not transmit MAC-hs PDU's on HS-PDSCH.
Type Definition	
SEQUENCE { harqInfo HARQ_Info OPTIONAL, addOrReconfMACdFlow SS_AddOrReconfMAC_dFlow OPTIONAL, ackNackRepetitionFactor ACK_NACK_repetitionFactor OPTIONAL }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: HyperFrameNumber
Encoding Variation	:
Comments	:
Type Definition	
BIT STRING (SIZE (20))	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IP_VersionType
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { IPv4(0), IPv6(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Increment_Mode
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED {incPerCFN_Cycle(0), notInc(1), incByOne_IncPerCFN_Cycle(2)}	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityActivationInfo
Encoding Variation	:
Comments	: Comment DL or UL integrity activation info. At the RRC message sequence numbers specified in the ul_IntegProtActivationInfo the SS shall initialise COUNT-I for the SRB's indicated in the ul_IntegProtActivationInfo and start using the new configuration on uplink for the indicated SRB's. If the START value is omitted in the CRLC_SecurityMode_Config_REQ above COUNT-I initialisation shall not be performed. Type Definition
Type Definition	
CHOICE { integrityProtectionModelInfo IntegrityProtectionModelInfo, ul_IntegProtActivationInfo IntegrityProtActivationInfoList }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityProtActivationInfoList
Encoding Variation	:
Comments	: List of SS IntegrityProtActivationInfo
Type Definition	
SEQUENCE (SIZE (1..maxRB)) OF SS_IntegrityProtActivationTimeInfo	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityResult
Encoding Variation	:
Comments	:
Type Definition	
CHOICE { integrityNotUsed NULL, integrityUsed IntegrityStatus }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityStatus
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { i_pass(0), i_fail(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_ActiveSetUpdate
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { activeSetUpdate_r3 ActiveSetUpdate_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_CCCH_MsgShort
Encoding Variation	:
Comments	:
Type Definition	
NULL	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_CellUpdateConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { cellUpdateConfirm_r3 CellUpdateConfirm_r3_IEs, v3a0NonCriticalExtensions SEQUENCE { cellUpdateConfirm_v3a0ext CellUpdateConfirm_v3a0ext, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_DCCH_MsgShort
Encoding Variation	:
Comments	:
Type Definition	
NULL	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_DL_CCCH_MsgType
Encoding Variation	:
Comments	:
Type Definition	
<pre> CHOICE { invalid_cellUpdateConfirm [0] Invalid_CCCH_MsgShort, invalid_rrcConnectionReject [1] Invalid_CCCH_MsgShort, invalid_rrcConnectionRelease [2] Invalid_CCCH_MsgShort, invalid_rrcConnectionSetup [3] Invalid_RRCCConnectionSetup, -- Specific invalid message invalid_uraUpdateConfirm [4] Invalid_UraUpdateConfirm, invalid_extension [5] NULL, unkown_Type_CCCH_message [6] Invalid_CCCH_MsgShort } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_DL_DCCH_MsgType
Encoding Variation	:
Comments	:
Type Definition	
<pre> CHOICE { invalid_activeSetUpdate [0] Invalid_ActiveSetUpdate, invalid_assistanceDataDelivery [1] Invalid_DCCH_MsgShort, invalid_cellChangeOrderFromUTRAN [2] Invalid_DCCH_MsgShort, invalid_cellUpdateConfirm [3] Invalid_CellUpdateConfirm , invalid_counterCheck [4] Invalid_DCCH_MsgShort, invalid_downlinkDirectTransfer [5] Invalid_DownlinkDirectTransfer, invalid_handoverFromUTRANCommand_GSM [6] Invalid_HandoverFromUTRANCommand_GSM, invalid_handoverFromUTRANCommand_CDMA2000 [7] Invalid_DCCH_MsgShort, invalid_measurementControl [8] Invalid_MeasurementControl, invalid_pagingType2 [9] Invalid_DCCH_MsgShort, invalid_physicalChannelReconfiguration [10] Invalid_PhysicalChannelReconfiguration, invalid_physicalSharedChannelAllocation [11] Invalid_DCCH_MsgShort, invalid_radioBearerReconfiguration [12] Invalid_RadioBearerReconfiguration, invalid_radioBearerRelease [13] Invalid_RadioBearerRelease, invalid_radioBearerSetup [14] Invalid_RadioBearerSetup, invalid_rrcConnectionRelease [15] Invalid_RRC_ConnectionRelease, invalid_securityModeCommand [16] Invalid_SecurityModeCommand, invalid_signallingConnectionRelease [17] Invalid_DCCH_MsgShort, invalid_transportChannelReconfiguration [18] Invalid_TransportChannelReconfiguration, invalid_transportFormatCombinationControl [19] Invalid_DCCH_MsgShort, invalid_ueCapabilityEnquiry [20] Invalid_UECapabilityEnquiry, -- Specific invalid message invalid_ueCapabilityInformationConfirm [21] Invalid_UECapabilityInformationConfirm, -- Specific invalid message invalid_uplinkPhysicalChannelControl [22] Invalid_DCCH_MsgShort, invalid_uraUpdateConfirm [23] Invalid_UraUpdateConfirm, invalid_utranMobilityInformation [24] Invalid_UtranMobilityInformation, invalid_extension [25] NULL, unkown_Type_DCCH_message [26] Invalid_DCCH_MsgShort } </pre>	
Detailed Comments :	

ASN.1 Type Definition	
Type Name	: Invalid_DL_SHCCH_MsgType
Encoding Variation	:
Comments	:
Type Definition	
<pre> CHOICE { invalid_physicalSharedChannelAllocation [0] Invalid_SHCCH_Message_short, extension [1] NULL, unkown_Type_SHCCH_message [2] Invalid_SHCCH_Message_short } </pre>	
Detailed Comments :	

ASN.1 Type Definition	
Type Name	: Invalid_DownlinkDirectTransfer
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { downlinkDirectTransfer_r3 DownlinkDirectTransfer_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_HandoverFromUTRANCommand_GSM
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { handoverFromUTRANCommand_GSM_r3 HandoverFromUTRANCommand_GSM_r3_IEs, laterNonCriticalExtensions SEQUENCE { handoverFromUTRANCommand_GSM_r3_add_ext BIT STRING OPTIONAL, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_MeasurementControl
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { measurementControl_r3 MeasurementControl_r3_IEs, v390nonCriticalExtensions SEQUENCE { measurementControl_v390ext MeasurementControl_v390ext, v3a0NonCriticalExtensions SEQUENCE { measurementControl_v3a0ext MeasurementControl_v3a0ext, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_PhysicalChannelReconfiguration
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { physicalChannelReconfiguration_r3 PhysicalChannelReconfiguration_r3_IEs, v3a0NonCriticalExtensions SEQUENCE { physicalChannelReconfiguration_v3a0ext PhysicalChannelReconfiguration_v3a0ext, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_RRConnectionSetup
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { rrcConnectionSetup_r3 RRConnectionSetup_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_RRC_ConnectionRelease
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { rrcConnectionRelease_r3 RRConnectionRelease_r3_IEs, laterNonCriticalExtensions SEQUENCE { rrcConnectionRelease_r3_add_ext BIT STRING OPTIONAL, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- instead of SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition

Type Name : Invalid_RadioBearerReconfiguration
Encoding Variation :
Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    radioBearerReconfiguration_r3 RadioBearerReconfiguration_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      radioBearerReconfiguration_v3a0ext RadioBearerReconfiguration_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : Invalid_RadioBearerRelease
Encoding Variation :
Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    radioBearerRelease_r3 RadioBearerRelease_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      radioBearerRelease_v3a0ext RadioBearerRelease_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RadioBearerSetup
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { radioBearerSetup_r3 RadioBearerSetup_r3_IEs, v3a0NonCriticalExtensions SEQUENCE { radioBearerSetup_v3a0ext RadioBearerSetup_v3a0ext, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_SHCCH_Message_short
Encoding Variation	:
Comments	:
Type Definition	
CounterCheckResponse	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_SecurityModeCommand
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { securityModeCommand_r3 SecurityModeCommand_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_TransportChannelReconfiguration
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { transportChannelReconfiguration_r3 TransportChannelReconfiguration_r3_IEs, v3a0NonCriticalExtensions SEQUENCE { transportChannelReconfiguration_v3a0ext TransportChannelReconfiguration_v3a0ext, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_UECapabilityEnquiry
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { ueCapabilityEnquiry_r3 UECapabilityEnquiry_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_UECapabilityInformationConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { ueCapabilityInformationConfirm_r3 UECapabilityInformationConfirm_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_UraUpdateConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { uraUpdateConfirm_r3 URAUpdateConfirm_r3_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_UtranMobilityInformation
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error
Type Definition	
<pre> CHOICE { r3 SEQUENCE { utranMobilityInformation_r3 UTRANMobilityInformation_r3_IEs, v3a0NonCriticalExtensions SEQUENCE { utranMobilityInformation_v3a0ext UTRANMobilityInformation_v3a0ext_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL }, later_than_r3 SEQUENCE { rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {} } } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: KeyCiphering
Encoding Variation	:
Comments	:
Type Definition	
BIT STRING (SIZE (128))	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: LogicalChannelType
Encoding Variation	:
Comments	:
Type Definition	
<pre> ENUMERATED { bCCH (0), pCCH (1), cCCH (2), cTCH (3), dCCH (4), dTCH (5), sHCCH (6) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: MAC_HeaderManipulation
Encoding Variation	:
Comments	:
Type Definition	
<pre> ENUMERATED { normalMacHeader (0), omitMacHeader (1) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Mui
Encoding Variation	:
Comments	:
Type Definition	
<pre> INTEGER (0..4095) </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PDSCHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre> SEQUENCE { fdd_tdd CHOICE { fdd SEQUENCE { pdsch_CodeMapping PDSCH_CodeMapping }, tdd SEQUENCE { -- pdsch-Identity PDSCH-Identity, -- pdsch-Info PDSCH-Info, -- pdsch-PowerControlInfo PDSCH-PowerControlInfo OPTIONAL } }, dl_TxPower DL_TxPower } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PICHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { pichinfo PICH_Info, dl_TxPower PICH_PowerOffset, sccpchId_associated INTEGER (0..31) }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PRACHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { fdd_tdd CHOICE { fdd SEQUENCE { preambleSignature AvailableSignatures, spreadingFactorForDataPart SF_PRACH, preambleScramblingCode PreambleScramblingCodeWordNumber, puncturingLimit PuncturingLimit, accessSlot AvailableSubChannelNumbers }, tdd SEQUENCE { -- timeSlot TimeSlot, -- spreadingCode SpreadingCode, -- midambleCode MidambleCode, } } }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PayloadSize
Encoding Variation	:
Comments	:
Type Definition	
<pre>INTEGER (0..4992)</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PhysicalChannelIdentity
Encoding Variation	:
Comments	:
Type Definition	
INTEGER (0..31)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PrimaryCCPCHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { sttd_Indicator BOOLEAN, dl_TxPower DL_TxPower -- timeSlot TimeSlot OPTIONAL, -- burstType BurstType OPTIONAL, -- offset Offset OPTIONAL, -- repetitionPeriod RepetitionPeriod OPTIONAL, -- repetitionLength RepetitionLength OPTIONAL, }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PrimaryCPICHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { dl_TxPower_PCPICH DL_TxPower_PCPICH, txdiversityIndicator BOOLEAN }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PrimarySCHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { tstIndicator BOOLEAN, dl_TxPower DL_TxPower }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RBInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { sS_rlc_Info SS_RLC_Info OPTIONAL, rB_LogCH_Mapping RB_LogCH_Mapping }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RB_LogCH_Mapping
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { uLogicalChannelIdentity LogicalChannelIdentity OPTIONAL, dLogicalChannelIdentity LogicalChannelIdentity OPTIONAL, logicalChannelType LogicalChannelType OPTIONAL, cn_DomainIdentity CN_DomainIdentity OPTIONAL }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RLC_IncMode
Encoding Variation	:
Comments	:
Type Definition	
<pre>ENUMERATED {notInc(0), inc(1)}</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_Rel_Status
Encoding Variation	:
Comments	:
Type Definition	
<pre>ENUMERATED { cell_Dch(0), cell_Fach_Dcch(1), cell_Fach_Ccch(2) }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_SequenceNumber
Encoding Variation	:
Comments	: 4 bits long
Type Definition	
INTEGER (0..15)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_ServTested
Encoding Variation	:
Comments	:
Type Definition	
<pre> ENUMERATED { speech (0), conversational_64k (1), streaming_57_6k (2), ps_Interactive (3), ps_Background (4) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RatType
Encoding Variation	:
Comments	: To select route between each channels
Type Definition	
<pre> ENUMERATED { fdd(0), tdd(1) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RegOr_MO
Encoding Variation	:
Comments	:
Type Definition	
<pre> ENUMERATED { est_Reg(0), est_MO(1), est_MT(2) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RoutingInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>CHOICE { physicalChannelIdentity INTEGER (0..31), transportChannelIdentity TransportChannelIdentity, logicalChannelIdentity LogicalChannelIdentity, rB_Identity INTEGER (-31..32), cn_DomainIdentity CN_DomainIdentity }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SCCPCHSlotFormat
Encoding Variation	:
Comments	: Reference to TS25.211
Type Definition	
INTEGER (0..17)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SIB
Encoding Variation	:
Comments	: Union of all system information blocks
Type Definition	
<pre> CHOICE { sIB1 SysInfoType1, sIB2 SysInfoType2, sIB3 SysInfoType3, sIB4 SysInfoType4, sIB5 SysInfoType5, sIB6 SysInfoType6, sIB7 SysInfoType7, sIB8 SysInfoType8, sIB9 SysInfoType9, sIB10 SysInfoType10, sIB11 SysInfoType11, sIB12 SysInfoType12, sIB13 SysInfoType13, sIB13_1 SysInfoType13_1, sIB13_2 SysInfoType13_2, sIB13_3 SysInfoType13_3, sIB13_4 SysInfoType13_4, sIB14 SysInfoType14, sIB15 SysInfoType15, sIB15_1 SysInfoType15_1, sIB15_2 SysInfoType15_2, sIB15_3 SysInfoType15_3, sIB16 SysInfoType16, sIB17 SysInfoType17, sIB18 SysInfoType18, mIB MasterInformationBlock, sB1 SysInfoTypeSB1, sB2 SysInfoTypeSB2 } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_ActivationTime
Encoding Variation	:
Comments	:
Type Definition	
<pre> CHOICE { activationCFN ActivationTime, activateNow NULL } </pre>	
Detailed Comments	:

ASN.1 Type Definition

Type Name : SS_AddOrReconfMAC_dFlow

Encoding Variation :

Comments : Applicable Rel-5 or later.

Type Definition

```
SEQUENCE {
  mac_hs_AddReconfQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hs_AddReconfQueue SS_MAC_hs_AddReconfQueue } OPTIONAL,
  mac_hs_DelQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hsQueueId INTEGER(0..7)
  } OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_DL_LogicalChannelMapping

Encoding Variation :

Comments : If the macHeaderManipulation field is 'normalMacHeader', then data transmitted on this logical channel shall have an appropriate MAC header added before it is sent to lower layers for transmission.
If the macHeaderManipulation field is 'OmitMacHeader', then data transmitted on this logical channel shall not have any MAC header information added, even if the logical channel type and mapping indicates that there should be a MAC header present. This allows the entire MAC PDU to be specified in the TTCN, so individual fields in the MAC header can be modified.
When used for logical channel to MAC_d flow mapping rlc_SizeList should choose RLC_SizeExplicitList.

Type Definition

```
SEQUENCE {
  macHeaderManipulation MAC_HeaderManipulation,
  dl_TransportChannelType SS_DL_TransportChannelType,
  logicalChannelIdentity LogicalChannelIdentity,
  logicalChannelType LogicalChannelType ,
  rlc_SizeList CHOICE {
    allSizes NULL,
    configured NULL,
    explicitList RLC_SizeExplicitList
  },
  mac_LogicalChannelPriority MAC_LogicalChannelPriority OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_DL_RLC_Mode
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { dl_PayloadSize PayloadSize OPTIONAL, dl_RLCModeInfo UL_RLC_Mode }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_DL_TransportChannelType
Encoding Variation	:
Comments	:
Type Definition	
<pre>ENUMERATED { dch(0), fach(1), bch(2), pch(3), dsch(4), hsdSCH(5) -- Rel-5 or later }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_IntegrityProtActivationTimeInfo
Encoding Variation	:
Comments	: Omitting rrc_MessageSequenceNumber means activation time set to "now".
Type Definition	
<pre>SEQUENCE { rb_Identity INTEGER (-31..32), rrc_MessageSequenceNumber RRC_MessageSequenceNumber OPTIONAL }</pre>	
Detailed Comments	:

ASN.1 Type Definition

Type Name : SS_MAC_hs_AddReconfQueue

Encoding Variation :

Comments : Applicable Rel-5 or later.

When writing TTCN constraints the TTCN writer shall set the priority of PriorityQueue in this object correctly according to the priority of logical channels which is mapped on to this priority queue. And please note that : the range of priority of PriorityQueue is from 0 to 7 and 0 is the lowest priority.

Type Definition

```
SEQUENCE {
  mACHsAddReconfQueue MAC_hs_AddReconfQueue,
  logicalChannelList SEQUENCE OF LogicalChannelIdentity,
  -- logical channels mapping onto the priority queue
  -- which is specified in maChsAddReconfQueue
  priority INTEGER(0..7),
  discardTimer ENUMERATED { v20(0),v40(1),v60(2),v80(3),v100(4),
  v120(5),v140(6),v160(7),v180(8),v200(9),
  v250(10),v300(11),v400(12),v500(13),
  v750(14),v1000(15),v1250(16),v1500(17),
  v1750(18),v2000(19),v2500(20),v3000(21),
  v3500(22),v4000(23),v4500(24),v5000(25),
  v7500(26)
} OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_RLC_Info

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  sS_ul_RLC_Mode DL_RLC_Mode OPTIONAL,
  sS_dl_RLC_Mode SS_DL_RLC_Mode OPTIONAL,
  sS_ul_RLC_Mode_r5 DL_RLC_Mode_r5 OPTIONAL -- Rel-5 or later
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_UL_LogicalChannelMapping

Encoding Variation :

Comments : If the macHeaderManipulation field is 'normalMacHeader', then data received on the transport channel supporting this logical channel shall have its MAC header inspected to determine the appropriate routing, and removed as normal. The MAC SDU shall be passed to the appropriate logical channel.
If the macHeaderManipulation field is 'OmitMacHeader', then data received on the transport channel supporting this logical channel shall have its MAC header inspected to determine the appropriate routing, but the MAC layer shall not remove the MAC header. Thus the entire MAC PDU shall be passed to the appropriate logical channel, and the MAC header can be checked by the TTCN.

Type Definition

```
SEQUENCE {  
  macHeaderManipulation MAC_HeaderManipulation,  
  ul_TransportChannelType SS_UL_TransportChannelType,  
  logicalChannelIdentity LogicalChannelIdentity,  
  logicalChannelType LogicalChannelType  
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SecondaryCCPCHInfo

Encoding Variation :

Comments : The range for powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0–6 dB, 0.25 dB per step.

Type Definition

```
SEQUENCE {  
  scramblingCode INTEGER(0..15),  
  dl_ChannelizationCode SF256_AndCodeNumber,  
  sCCPCHSlotFormat SCCPCHSlotFormat,  
  timingOffset INTEGER (0..149),  
  positionFixedOrFlexible PositionFixedOrFlexible,  
  sttd_Indicator BOOLEAN,  
  dl_TxPower DL_TxPower,  
  powerOffsetOfTFCI_PO1 INTEGER (0..24),  
  powerOffsetOfPILOT_PO3 INTEGER (0..24)  
  -- timeSlot TimeSlot OPTIONAL,  
  -- burstType BurstType OPTIONAL,  
  -- midambleShift MidambleShift OPTIONAL,  
  -- offset Offset OPTIONAL,  
  -- repetitionPeriod RepetitionPeriod OPTIONAL,  
  -- repetitionLength RepetitionLength OPTIONAL,  
  -- tFCIPresence TFCIPresence OPTIONAL,  
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SecondaryCPICHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { scramblingCode INTEGER(0..63), dl_ChannelizationCode SF512_AndCodeNumber, dl_TxPower DL_TxPower }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SecondarySCHInfo
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { tstIndicator BOOLEAN, dl_TxPower DL_TxPower }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SecurityInfo
Encoding Variation	:
Comments	: The integrityKey is not applicable to MAC
Type Definition	
<pre>SEQUENCE { cn_DomainIdentity CN_DomainIdentity, startValue START_Value OPTIONAL, cipherringKey BIT STRING (SIZE (128)) OPTIONAL, integrityKey BIT STRING (SIZE (128)) OPTIONAL, gsmCipherringKey BIT STRING (SIZE (64)) OPTIONAL }</pre>	
Detailed Comments	: When the SS receives SecurityInfo, the SS first stores the contents. The SecurityInfo contents is not activated until the contents follows until receiving the subsequent ASP, CRRC_Cipherring_Activate_REQ, CMAC_Cipherring_Activate_REQ or CRRC_Integrity_Activate_REQ. Omitted fields of SecurityInfo shall not be affected by the subsequent ASP at the activation time. EXAMPLE: Omitting of startValue indicates not to re-initialize the relevant COUNT=C or COUNT-I, omitting of cipherringKey indicates that the current cipherring key is valid..

ASN.1 Type Definition	
Type Name	: SegmentsOfSysInfoBlock
Encoding Variation	:
Comments	: The structure holding the segments of a MIB/SIB/SB, maximum number of segments is 16.
Type Definition	
<pre> SEQUENCE { segCount INTEGER (1..16), seg1 BIT STRING (SIZE (1..226)), seg2 BIT STRING (SIZE (1..222)) OPTIONAL, seg3 BIT STRING (SIZE (1..222)) OPTIONAL, seg4 BIT STRING (SIZE (1..222)) OPTIONAL, seg5 BIT STRING (SIZE (1..222)) OPTIONAL, seg6 BIT STRING (SIZE (1..222)) OPTIONAL, seg7 BIT STRING (SIZE (1..222)) OPTIONAL, seg8 BIT STRING (SIZE (1..222)) OPTIONAL, seg9 BIT STRING (SIZE (1..222)) OPTIONAL, seg10 BIT STRING (SIZE (1..222)) OPTIONAL, seg11 BIT STRING (SIZE (1..222)) OPTIONAL, seg12 BIT STRING (SIZE (1..222)) OPTIONAL, seg13 BIT STRING (SIZE (1..222)) OPTIONAL, seg14 BIT STRING (SIZE (1..222)) OPTIONAL, seg15 BIT STRING (SIZE (1..222)) OPTIONAL, seg16 BIT STRING (SIZE (1..222)) OPTIONAL } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Tcell
Encoding Variation	:
Comments	: Timing offset between reference channel and this channel (unit : 256 chips)
Type Definition	
INTEGER (0..38399)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrCHInfo
Encoding Variation	:
Comments	: The same TFCS information should be provided to the PHY and MAC layers at all times. When a CMAC_Config_REQ is used to configure the MAC layer, a corresponding CPHY_TrCH_Config_REQ should be sent to the PHY layer to ensure that the configuration is consistent. For MAC-hs configuration: When ulconnectedTrCHList, ulTFCS, dlconnectedTrCHList and dlTFCS are omitted this ASP configures an MAC-hs entity.
Type Definition	
<pre>SEQUENCE { ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE { trchid TransportChannelIdentity, transportChannelInfo CommonOrDedicatedTFS } OPTIONAL, ulTFCS TFCS OPTIONAL, dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE { trchid TransportChannelIdentity, transportChannelInfo CommonOrDedicatedTFS } OPTIONAL, dlTFCS TFCS OPTIONAL, hsDSCHMacdFlows HS_DSCHMACdFlows OPTIONAL -- Rel-5 or later } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrCH_LogCHMappingList
Encoding Variation	:
Comments	: maxLogCHperTrCH = 8
Type Definition	
SEQUENCE (SIZE (1..maxLogCHperTrCH)) OF TrCH_LogicalChannelMapping	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrCH_LogicalChannelMapping
Encoding Variation	:
Comments	: When used for logical channel to MAC_d flow mapping dl_LogicalChannelMapping shall be chosen,
Type Definition	
<pre>SEQUENCE { logicalChannel_Mapping CHOICE { ul_LogicalChannelMapping SS_UL_LogicalChannelMapping, dl_LogicalChannelMapping SS_DL_LogicalChannelMapping }, rB_Identity INTEGER (-31..32) OPTIONAL, cn_DomainIdentity CN_DomainIdentity OPTIONAL } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrChConfigType
Encoding Variation	:
Comments	:
Type Definition	
CHOICE { nonDch NULL, dch ENUMERATED {normal(0), softHO(1)}	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: UE_OperationMode
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { opModeA (0), opModeC (1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CphyRIModifyReq
Encoding Variation	:
Comments	:
Type Definition	
SEQUENCE { activationTime SS_ActivationTime, physicalChannellInfo CHOICE { dpch_CompressedModeStatusInfo DPCH_CompressedModeStatusInfo, secondaryCCPCHInfo SecondaryCCPCHInfo, pRACHInfo PRACHInfo, dPCHInfo DPCHInfo, dPCHInfo_r5 DPCHInfo_r5OrLater, -- Rel-5 or later hS_PDSCHInfo HS_PDSCHInfo_r5OrLater, -- Rel-5 or later e_DPCHInfo SS_E_DPCH_Info, -- Rel-6 or later e_AGCHInfo SS_E_AGCH_Info, -- Rel-6 or later e_HICHInfo SS_E_HICH_Info, -- Rel-6 or later e_RGCHInfo SS_E_RGCH_Info -- Rel-6 or later }, trchConfigToFollow BOOLEAN DEFAULT TRUE }	
Detailed Comments	:

ASN.1 Type Definition

Type Name : CphyRISetupReq
Encoding Variation :
Comments : To request to setup the Radio Link

Type Definition

```
SEQUENCE {  
  physicalChannelInfo CHOICE {  
    primaryCPICHInfo PrimaryCPICHInfo,  
    secondaryCPICHInfo SecondaryCPICHInfo,  
    primarySCHInfo PrimarySCHInfo,  
    secondarySCHInfo SecondarySCHInfo,  
    primaryCCPCHInfo PrimaryCCPCHInfo,  
    secondaryCCPCHInfo SecondaryCCPCHInfo,  
    pRACHInfo PRACHInfo,  
    pICHInfo PICHInfo,  
    aICHInfo AICHInfo,  
    dPCHInfo DPCHInfo,  
    pDSCHInfo PDSCHInfo,  
    dPCHInfo_r5 DPCHInfo_r5OrLater, -- Rel-5 or later  
    hS_PDSCHInfo HS_PDSCHInfo_r5OrLater, -- Rel-5 or later  
    e_DPCHInfo SS_E_DPCH_Info, -- Rel-6 or later  
    e_AGCHInfo SS_E_AGCH_Info, -- Rel-6 or later  
    e_HICHInfo SS_E_HICH_Info, -- Rel-6 or later  
    e_RGCHInfo SS_E_RGCH_Info -- Rel-6 or later  
  }  
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CphyTrchConfigReq

Encoding Variation :

Comments : To request to configure the transport channel.
The same TFCS information should be provided to the PHY and MAC layers at all times. When a CPHY_TrCH_Config_REQ is used to configure the PHY layer, a corresponding CMAC_Config_REQ should be sent to the MAC layer to ensure that the configuration is consistent.
HS-DSCH MAC-d flows or E-DCH MAC-d flows shall be separately configured whilst the ulconnectedTrCHList, ulTFCS, dlconnectedTrCHList and dlTFCS are omitted.

Type Definition

```
SEQUENCE {
  activationTime SS_ActivationTime,
  ulconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    ul_TransportChannelType SS_UL_TransportChannelType,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL,
  ulTFCS TFCS OPTIONAL,
  dlconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    dl_TransportChannelType SS_DL_TransportChannelType,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL,
  dlTFCS TFCS OPTIONAL,
  hsDSCHMacdFlows HS_DSCHMACdFlows OPTIONAL, -- Rel-5 or later
  e_DCHMacdFlows E_DCHMACdFlows OPTIONAL -- Rel-6 or later
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DL_DPCHInfo_r5

Encoding Variation :

Comments : Applicable Rel-5 or later

Type Definition

```
SEQUENCE {
  dl_CommonInformation DL_CommonInformation_r5,
  dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL_r5,
  powerOffsetOfTFCI_PO1 INTEGER (0..24),
  powerOffsetOfTPC_PO2 INTEGER (0..24),
  powerOffsetOfPILOT_PO3 INTEGER (0..24),
  dl_TxPower DL_TxPower,
  dl_TxPowerMax DL_TxPower,
  dl_TxPowerMin DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: DL_DPCHInfo_r6
Encoding Variation	:
Comments	: Applicable Rel-5 or later
Type Definition	
<pre> SEQUENCE { dl_CommonInformation DL_CommonInformation_r6, dl_Dpch_InfoPerRL CHOICE { dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL_r6, dl_FDPCH_InfoPerRL DL_FDPCH_InfoPerRL_r6 }, powerOffsetOfTFCI_PO1 INTEGER (0..24), powerOffsetOfTPC_PO2 INTEGER (0..24), powerOffsetOfPILOT_PO3 INTEGER (0..24), dl_TxPower DL_TxPower, dl_TxPowerMax DL_TxPower, dl_TxPowerMin DL_TxPower } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: DPCHInfo_r5OrLater
Encoding Variation	:
Comments	: Applicable Rel-5 or later At least one of the first two fields shall be present. Presence of hs_DPCCHInd (value = truevalue) means that the HS-DPCCH shall be configured in the uplink DPCH. If hs_DPCCHInd is absent no HS-DPCCH shall be configured in the uplink DPCH, or the configured HS-DPCCH shall be removed in the modify ASP. In the active set which has radio links from more than one cell the HS-DPCCH is configured only in the HS-DSCH serving cell. Three combinations are valid: ul_DPCH_Info only, dl_DPCHInfo only and ul_DPCH_Info + hs_DPCCHInd.
Type Definition	
<pre> CHOICE { r5 SEQUENCE { ul_DPCHInfo UL_DPCH_Info_r5 OPTIONAL, dl_DPCHInfo DL_DPCHInfo_r5 OPTIONAL, hs_DPCCHInd HS_DPCCHInfo OPTIONAL }, r6 SEQUENCE { ul_DPCHInfo6 UL_DPCH_Info_r6 OPTIONAL, dl_DPCHInfo6 DL_DPCHInfo_r6 OPTIONAL, hs_DPCCHInd HS_DPCCHInfo OPTIONAL }, spare1 SEQUENCE {}, spare2 SEQUENCE {} } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: E_DCHMACdFlows
Encoding Variation	:
Comments	: Rel-6 or later
Type Definition	
<pre>SEQUENCE { tti E_DCH_TTI, harq_Info ENUMERATED {rv0 (0), rvtable (1)}, addReconf_MAC_d_FlowList E_DCH_AddReconf_MAC_d_FlowList OPTIONAL }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: FrequencyBandFDD
Encoding Variation	:
Comments	: The frequency band indicator indicates how to interpret the radio frequency broadcast.
Type Definition	
<pre>CHOICE { frequencyBandIndicator RadioFrequencyBandFDD, frequencyBandIndicator2 RadioFrequencyBandFDD2 }</pre>	
Detailed Comments	:

ASN.1 Type Definition

Type Name : HS_PDSCHInfo_r5OrLater

Encoding Variation :

Comments : Applicable Rel-5 or later
When CHY_RL_Setup_REQ is called with CHOICE of HS_PDSCHInfo HS_PDSCH and HS-SCCH shall be configured in SS.
The following HS-DSCH related parameters are passed to the SS implicitly by HSDSCH_physical_layer_category:
– Maximum number of HS-DSCH codes can be received by UE,
– Minimum inter-TTI interval,
– Maximum number of bits of an HS-DSCH transport block within an HS-DSCH TTI
– Total number of soft channel bits".
HSDSCH_physical_Layer_category is also used for interpretation of the meaning of CQI value.

Type Definition

```
CHOICE {
  r5 SEQUENCE {
    hSDSCHPhysicalLayerCategory HSDSCH_physical_layer_category,
    h_RNTI H_RNTI,
    dlHSPDSCHInformation DL_HSPDSCH_Information,
    sttd_Indicator BOOLEAN,
    hs_SCCH_TxPower DL_TxPower -- offset related to CPICH
  },
  r6 SEQUENCE {
    hSDSCHPhysicalLayerCategory HSDSCH_physical_layer_category,
    h_RNTI H_RNTI,
    dlHSPDSCHInformation DL_HSPDSCH_Information_r6,
    sttd_Indicator BOOLEAN,
    hs_SCCH_TxPower DL_TxPower -- offset related to CPICH
  },
  spare1 SEQUENCE {},
  spare2 SEQUENCE {}
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : RB_ConfigType

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  cell_NotConfigured (0),
  -- Configurations on DPCH
  cell_DCH_StandAloneSRB_NoConn (1),
  cell_NoDPCH (2),
  cell_DCH_StandAloneSRB (3),
  cell_DCH_Speech (4),
  cell_DCH_64kCS_RAB_SRB (5),
  cell_DCH_57_6kCS_RAB_SRB (6),
  cell_DCH_64kPS_RAB_SRB (7),
  cell_RLC_DCH_AM_RAB_15Lis (8),
  cell_RLC_DCH_AM_RAB_7Lis (9),
  cell_RLC_DCH_UM_RAB_15Lis (10),
  cell_RLC_DCH_UM_RAB_7Lis (11),
  cell_PDCP_AM_RAB (12),
  cell_PDCP_UM_RAB (13),
  cell_PDCP_AM_UM_RAB (14),
  cell_DCH_MAC_SRB_NoConn (15),
  cell_DCH_MAC_SRB (16),
  cell_DCH_2AM_PS (17),
  -- Configurations on FACH
  cell_FACH_NoConn (18),
  cell_FACH (19),
  cell_FACH_NoDedicated (20),
  cell_FACH_PS (21),
  cell_FACH_BMC (22),
  cell_FACH_BMC_NoConn (23),
  cell_FACH_2_PRACH_NoConn (24), --no RAB
  cell_FACH_2_PRACH (25), -- no RAB
  cell_FACH_2_SCCPCH_NoConn (26), --used in BMC
  cell_FACH_2_SCCPCH (27), --Used in BMC
  cell_FACH_MAC_SRB_NoConn (28),
  cell_FACH_MAC_SRB (29),
  cell_FACH_MAC_SRB0_NoConn (30),
  cell_FACH_MAC_SRB0 (31),
  -- Configurations for RAB test cases
  -- for these configurations Security step does not handle RAB established situation, as in RAB test procedure
  -- Security procedure is called before RAB establishment
  cell_FACH_2SCCPCH_StandAlonePCH_NoConn (32),
  cell_FACH_2SCCPCH_StandAlonePCH (33),
  cell_FACH_2SCCPCH_StandAlonePCH_PS (34),
  cell_Two_DTCH (35),
  cell_Four_DTCH_CS (36),
  cell_Two_DTCH_CS_PS (37),
  cell_Four_DTCH_CS_PS ( 38 ),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn (39),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg1 (40),
  cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn (41),
  cell_FACH_3_SCCPCH_3_FACH_CTCH (42),
  cell_Two_DTCH_PS_CS (43),
  cell_Four_DTCH_PS_CS (44) ,
  cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn (45),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg2 (46),
  cell_DCH_2_PS_Call(47),
  cell_FACH_2SCCPCH_StandAlonePCH_PS_2a(50),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn (51),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1 (52),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn (53),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2 (54),
```

Continued on next page

ASN.1 Type Definition

Type Definition

```

cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn (55),
cell_FACH_3_SCCPCH_3_FACH_2a_CTCH (56),
cell_Two_DTCH_CS_PS_Init (57),
cell_Four_DTCH_CS_PS_Init ( 58 ),
cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn (59),
cell_FACH_2SCCPCH_StandAlonePCH_2a (60),
cell_Two_DTCH_PS_CS_Init (61),
cell_Four_DTCH_PS_CS_Init (62),
cell_DCH_HS_DSCH(63),
cell_FACH_HS(64),
cell_DCH_64kPS_RAB_SRB_HS(65),
cell_One_DTCH_HS_DSCH_MAC(66),
cell_2UM_3AM_DCH_HS_DSCH (67),
cell_DCH_Speech_WAMR (68),
cell_Four_DTCH_HS_CS_Init (69),
cell_Four_DTCH_HS_CS (70),
cell_Two_DTCH_HS_CS_Init (71),
cell_Two_DTCH_HS_CS (72),
cell_Four_DTCH_CS_HS_Init (73),
cell_DCH_2AM_HS_DSCH (74),
cell_Three_DTCH_5SRB (75 ),
cell_Five_DTCH_CS_HS (76),
cell_Four_DTCH_5SRB_HS_CS (77),
cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS (78),
cell_FACH_3_SCCPCH_3_FACH_CTCH_PS (79),
cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS (80),
cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS (81),
cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS (82),
cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_PS (83),
-- E-DCH configurations
cell_DCH_E_HS (84),
cell_DCH_dISRB_E_HS (85),
cell_E_HS (86),
cell_Four_DTCH_E_HS_CS (87),
cell_Four_DTCH_E_HS_CS_Init (88),
cell_Four_DTCH_CS_E_HS (89),
cell_Four_DTCH_CS_E_HS_Init (90),
cell_2DCH_2AM_dISRB_E_HS (91),
cell_E_HS_MAC_TM_RAB (92),
cell_2DCH_MAC_2TM_dISRB_E_HS (93)
}

```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_E_AGCH_Info
Encoding Variation	:
Comments	: Rel-6 or later.
Type Definition	
<pre> SEQUENCE { e_AGCHInfo E_AGCH_Information, tti E_DCH_TTI, e_AGCH_PowerOffset INTEGER (0..255), -- Range and Step are FFS (25.433, 9.2.2.131f) -- Offset relative to P-CPICH e_RNTI_Primary E_RNTI OPTIONAL, e_RNTI_Secondary E_RNTI OPTIONAL } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_E_DPCH_Info
Encoding Variation	:
Comments	: Rel-6 or later. If there is an UL-DPCH configured in the cell the E-DPCH shall use the same scramblingCodeType and scramblingCode as the UL-DPCH
Type Definition	
<pre> SEQUENCE { e_DPCCH_Info E_DPCCH_Info, e_DPDCH_Info E_DPDCH_Info, scramblingCodeType ScramblingCodeType OPTIONAL, scramblingCode UL_ScramblingCode OPTIONAL, tti E_DCH_TTI OPTIONAL, edch_PhysicalLayerCategory INTEGER (1..16) } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_E_HICH_Info
Encoding Variation	:
Comments	: Rel-6 or later.
Type Definition	
<pre> SEQUENCE { e_HICHInfo E_HICH_Information OPTIONAL, tti E_DCH_TTI, e_HICH_PowerOffset INTEGER (0..255) OPTIONAL -- PowerOffset = -32 + offset * 0.25 -- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB -- (25.433, 9.2.2.131d), offset relative to P-CPICH } </pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_E_RGCH_Info
Encoding Variation	:
Comments	: Rel-6 or later.
Type Definition	
<pre>SEQUENCE { e_RGCHInfo E_RGCH_Information OPTIONAL, tti E_DCH_TTI, e_RGCH_PowerOffset INTEGER (0..255) OPTIONAL -- Range and Step are FFS (25.433, 9.2.2.13le) -- Offset relative to P-CPICH }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SS_UL_TransportChannelType
Encoding Variation	:
Comments	:
Type Definition	
<pre>ENUMERATED { dch(0), rach(1), cpch(2), usch(3), edch(4) -- Rel-6 or later }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrCH_LogCHMappingList1
Encoding Variation	:
Comments	: maxulTrCH = maxdlTrCH = 16
Type Definition	
<pre>SEQUENCE { ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE { trchid TransportChannelIdentity, trCH_LogCHMappingList TrCH_LogCHMappingList} OPTIONAL, dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE { trchid TransportChannelIdentity, trCH_LogCHMappingList TrCH_LogCHMappingList} OPTIONAL, dlconnectedMACdFlows SEQUENCE (SIZE (1..8)) OF SEQUENCE { mac_dFlowId MAC_d_FlowIdentity, trCH_LogCHMappingList TrCH_LogCHMappingList } OPTIONAL -- Rel-5 or later }</pre>	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: UE_Info
Encoding Variation	:
Comments	: The value of c_RNTI_DSCH_RNTI is 16 bits, used either for C-RNTI or DSCH-RNTI. DSCH is configured if the physical channel in CMAC_config_REQ is a PDSCH. Otherwise, C-RNTI is applied. For MAC-hs configuration both u_RNTI and c_RNTI_DSCH_RNTI are omitted.
Type Definition	
SEQUENCE { u_RNTI U_RNTI OPTIONAL, c_RNTI C_RNTI OPTIONAL }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CellConfiguration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { cell_EFR(0), cell_AMR(1) -- TBD }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: GSM_GPRSConfiguration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { gsmonly(0), gprs(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: GPRSCellConfiguration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { bcch(0), pbcch(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SI2quarterConfiguration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { nosi2quarter(0), si2quarter(1), si2ter(2), si2terand2quarter(3) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PSI5Configuration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { nopsi5(0), psi5(1) }	
Detailed Comments	:

ASN.1 Type Definitions By Reference

Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DL_DCCH_MessageType	DL-DCCH-MessageType	Class-definitions		
UL_DCCH_MessageType	UL-DCCH-MessageType	Class-definitions		
DL_CCCH_MessageType	DL-CCCH-MessageType	Class-definitions		
UL_CCCH_MessageType	UL-CCCH-MessageType	Class-definitions		
PCCH_MessageType	PCCH-MessageType	Class-definitions		
DL_SHCCH_MessageType	DL-SHCCH-MessageType	Class-definitions		
UL_SHCCH_MessageType	UL-SHCCH-MessageType	Class-definitions		
BCCH_FACH_MessageType	BCCH-FACH-MessageType	Class-definitions		
ActiveSetUpdate	ActiveSetUpdate	Class-definitions		
ActiveSetUpdate_r3_IEs	ActiveSetUpdate-r3-IEs	Class-definitions		
ActiveSetUpdate_v4b0ext_IEs	ActiveSetUpdate-v4b0ext-IEs	Class-definitions		
ActiveSetUpdate_v590ext_IEs	ActiveSetUpdate-v590ext-IEs	Class-definitions		
ActiveSetUpdate_v690ext_IEs	ActiveSetUpdate-v690ext-IEs	Class-definitions		
ActiveSetUpdate_r6_IEs	ActiveSetUpdate-r6-IEs	Class-definitions		
ActiveSetUpdateComplete	ActiveSetUpdateComplete	Class-definitions		
ActiveSetUpdateFailure	ActiveSetUpdateFailure	Class-definitions		
AssistanceDataDelivery	AssistanceDataDelivery	Class-definitions		
AssistanceDataDelivery_r3_IEs	AssistanceDataDelivery-r3-IEs	Class-definitions		
AssistanceDataDelivery_v3a0ext	AssistanceDataDelivery-v3a0ext	Class-definitions		
AssistanceDataDelivery_v4b0ext_IEs	AssistanceDataDelivery-v4b0ext-IEs	Class-definitions		
CellChangeOrderFromUTRAN	CellChangeOrderFromUTRAN	Class-definitions		
CellChangeOrderFromUTRAN_r3_IEs	CellChangeOrderFromUTRAN-r3-IEs	Class-definitions		
CellChangeOrderFromUTRAN_v590ext_IEs	CellChangeOrderFromUTRAN-v590ext-IEs	Class-definitions		
CellChangeOrderFromUTRANFailure	CellChangeOrderFromUTRANFailure	Class-definitions		
CellChangeOrderFromUTRANFailure_r3_IEs	CellChangeOrderFromUTRANFailure-r3-IEs	Class-definitions		
CellUpdate	CellUpdate	Class-definitions		
CellUpdate_v590ext	CellUpdate-v590ext	Class-definitions		
CellUpdate_v690ext_IEs	CellUpdate-v690ext-IEs	Class-definitions		
CellUpdateConfirm	CellUpdateConfirm	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CellUpdateConfirm_r3_IEs	CellUpdateConfirm-r3-IEs	Class-definitions		
CellUpdateConfirm_v3a0ext	CellUpdateConfirm-v3a0ext	Class-definitions		
CellUpdateConfirm_v4b0ext_IEs	CellUpdateConfirm-v4b0ext-IEs	Class-definitions		
CellUpdateConfirm_v590ext_IEs	CellUpdateConfirm-v590ext-IEs	Class-definitions		
CellUpdateConfirm_v5d0ext_IEs	CellUpdateConfirm-v5d0ext-IEs	Class-definitions		
CellUpdateConfirm_r4_IEs	CellUpdateConfirm-r4-IEs	Class-definitions		
CellUpdateConfirm_r5_IEs	CellUpdateConfirm-r5-IEs	Class-definitions		
CellUpdateConfirm_r6_IEs	CellUpdateConfirm-r6-IEs	Class-definitions		
CellUpdateConfirm_v690ext_IEs	CellUpdateConfirm-v690ext-IEs	Class-definitions		
CellUpdateConfirm_CCH	CellUpdateConfirm-CCH	Class-definitions		
CounterCheck	CounterCheck	Class-definitions		
CounterCheck_r3_IEs	CounterCheck-r3-IEs	Class-definitions		
CounterCheckResponse	CounterCheckResponse	Class-definitions		
DownlinkDirectTransfer	DownlinkDirectTransfer	Class-definitions		
DownlinkDirectTransfer_r3_IEs	DownlinkDirectTransfer-r3-IEs	Class-definitions		
HandoverToUTRANCommand	HandoverToUTRANCommand	Class-definitions		
HandoverToUTRANCommand_r3_IEs	HandoverToUTRANCommand-r3-IEs	Class-definitions		
HandoverToUTRANCommand_r4_IEs	HandoverToUTRANCommand-r4-IEs	Class-definitions		
HandoverToUTRANCommand_r5_IEs	HandoverToUTRANCommand-r5-IEs	Class-definitions		
HandoverToUTRANCommand_r6_IEs	HandoverToUTRANCommand-r6-IEs	Class-definitions		
HandoverToUTRANComplete	HandoverToUTRANComplete	Class-definitions		
InitialDirectTransfer	InitialDirectTransfer	Class-definitions		
InitialDirectTransfer_v3a0ext	InitialDirectTransfer-v3a0ext	Class-definitions		
InitialDirectTransfer_v590ext	InitialDirectTransfer-v590ext	Class-definitions		
InitialDirectTransfer_v690ext_IEs	InitialDirectTransfer-v690ext-IEs	Class-definitions		
HandoverFromUTRANCommand_GSM	HandoverFromUTRANCommand-GSM	Class-definitions		
HandoverFromUTRANCommand_GSM_r3_IEs	HandoverFromUTRANCommand-GSM-r3-IEs	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
HandoverFromUTRAN Command_GSM_r6_I Es	HandoverFromUTRAN Command-GSM-r6-I Es	Class-definitions		
HandoverFromUTRAN Command_GSM_v69 0ext_IEs	HandoverFromUTRAN Command-GSM-v69 0ext-IEs	Class-definitions		
HandoverFromUTRAN Command_GERANlu	HandoverFromUTRAN Command-GERANlu	Class-definitions		
HandoverFromUTRAN Command_GERANlu_ r5_IEs	HandoverFromUTRAN Command-GERANlu -r5-IEs	Class-definitions		
HandoverFromUTRAN Command_CDMA200 0	HandoverFromUTRAN Command-CDMA200 0	Class-definitions		
HandoverFromUTRAN Command_CDMA200 0_r3_IEs	HandoverFromUTRAN Command-CDMA200 0-r3-IEs	Class-definitions		
HandoverFromUTRAN Failure	HandoverFromUTRAN Failure	Class-definitions		
HandoverFromUtranF ailure_v590ext_IEs	HandoverFromUtranF ailure-v590ext-IEs	Class-definitions		
MeasurementControl	MeasurementControl	Class-definitions		
MeasurementControl_ r3_IEs	MeasurementControl- r3-IEs	Class-definitions		
MeasurementControl_ v390ext	MeasurementControl- v390ext	Class-definitions		
MeasurementControl_ v3a0ext	MeasurementControl- v3a0ext	Class-definitions		
MeasurementControl_ r4_IEs	MeasurementControl- r4-IEs	Class-definitions		
MeasurementControl_ v590ext_IEs	MeasurementControl- v590ext-IEs	Class-definitions		
MeasurementControl_ v5b0ext_IEs	MeasurementControl- v5b0ext-IEs	Class-definitions		
MeasurementControl_ r6_IEs	MeasurementControl- r6-IEs	Class-definitions		
MeasurementControl_ v6a0ext_IEs	MeasurementControl- v6a0ext-IEs	Class-definitions		
MeasurementControlF ailure	MeasurementControlF ailure	Class-definitions		
MeasurementControlF ailure_v590ext_IEs	MeasurementControlF ailure-v590ext-IEs	Class-definitions		
MeasurementReport	MeasurementReport	Class-definitions		
MeasurementReport_v 390ext	MeasurementReport- v390ext	Class-definitions		
MeasurementReport_v 4b0ext_IEs	MeasurementReport- v4b0ext-IEs	Class-definitions		
MeasurementReport_v 590ext_IEs	MeasurementReport- v590ext-IEs	Class-definitions		
MeasurementReport_v 5b0ext_IEs	MeasurementReport- v5b0ext-IEs	Class-definitions		
MeasurementReport_v 690ext_IEs	MeasurementReport- v690ext-IEs	Class-definitions		
PagingType1	PagingType1	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
PagingType1_v590ext_IEs	PagingType1-v590ext-IEs	Class-definitions		
PagingType2	PagingType2	Class-definitions		
PhysicalChannelReconfiguration	PhysicalChannelReconfiguration	Class-definitions		
PhysicalChannelReconfiguration_r3_IEs	PhysicalChannelReconfiguration-r3-IEs	Class-definitions		
PhysicalChannelReconfiguration_v3a0ext	PhysicalChannelReconfiguration-v3a0ext	Class-definitions		
PhysicalChannelReconfiguration_v4b0ext_IEs	PhysicalChannelReconfiguration-v4b0ext-IEs	Class-definitions		
PhysicalChannelReconfiguration_v590ext_IEs	PhysicalChannelReconfiguration-v590ext-IEs	Class-definitions		
PhysicalChannelReconfiguration_r4_IEs	PhysicalChannelReconfiguration-r4-IEs	Class-definitions		
PhysicalChannelReconfiguration_r5_IEs	PhysicalChannelReconfiguration-r5-IEs	Class-definitions		
PhysicalChannelReconfiguration_r6_IEs	PhysicalChannelReconfiguration-r6-IEs	Class-definitions		
PhysicalChannelReconfiguration_v690ext_IEs	PhysicalChannelReconfiguration-v690ext-IEs	Class-definitions		
PhysicalChannelReconfigurationComplete	PhysicalChannelReconfigurationComplete	Class-definitions		
PhysicalChannelReconfigurationFailure	PhysicalChannelReconfigurationFailure	Class-definitions		
PhysicalSharedChannelAllocation	PhysicalSharedChannelAllocation	Class-definitions		
PhysicalSharedChannelAllocation_r3_IEs	PhysicalSharedChannelAllocation-r3-IEs	Class-definitions		
PhysicalSharedChannelAllocation_r4_IEs	PhysicalSharedChannelAllocation-r4-IEs	Class-definitions		
PhysicalSharedChannelAllocation_v690ext_IEs	PhysicalSharedChannelAllocation-v690ext-IEs	Class-definitions		
PUSCHCapacityRequest	PUSCHCapacityRequest	Class-definitions		
PUSCHCapacityRequest_v590ext	PUSCHCapacityRequest-v590ext	Class-definitions		
RadioBearerReconfiguration	RadioBearerReconfiguration	Class-definitions		
RadioBearerReconfiguration_r3_IEs	RadioBearerReconfiguration-r3-IEs	Class-definitions		
RadioBearerReconfiguration_v3a0ext	RadioBearerReconfiguration-v3a0ext	Class-definitions		
RadioBearerReconfiguration_v4b0ext_IEs	RadioBearerReconfiguration-v4b0ext-IEs	Class-definitions		
RadioBearerReconfiguration_v590ext_IEs	RadioBearerReconfiguration-v590ext-IEs	Class-definitions		
RadioBearerReconfiguration_v5d0ext_IEs	RadioBearerReconfiguration-v5d0ext-IEs	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RadioBearerReconfiguration_r4_IEs	RadioBearerReconfiguration-r4-IEs	Class-definitions		
RadioBearerReconfiguration_r5_IEs	RadioBearerReconfiguration-r5-IEs	Class-definitions		
RadioBearerReconfiguration_r6_IEs	RadioBearerReconfiguration-r6-IEs	Class-definitions		
RadioBearerReconfiguration_v690ext_IEs	RadioBearerReconfiguration-v690ext-IEs	Class-definitions		
RadioBearerReconfigurationComplete	RadioBearerReconfigurationComplete	Class-definitions		
RadioBearerReconfigurationFailure	RadioBearerReconfigurationFailure	Class-definitions		
RadioBearerRelease	RadioBearerRelease	Class-definitions		
RadioBearerRelease_r3_IEs	RadioBearerRelease-r3-IEs	Class-definitions		
RadioBearerRelease_v3a0ext	RadioBearerRelease-v3a0ext	Class-definitions		
RadioBearerRelease_v4b0ext_IEs	RadioBearerRelease-v4b0ext-IEs	Class-definitions		
RadioBearerRelease_v590ext_IEs	RadioBearerRelease-v590ext-IEs	Class-definitions		
RadioBearerRelease_r4_IEs	RadioBearerRelease-r4-IEs	Class-definitions		
RadioBearerRelease_r5_IEs	RadioBearerRelease-r5-IEs	Class-definitions		
RadioBearerRelease_v690ext_IEs	RadioBearerRelease-v690ext-IEs	Class-definitions		
RadioBearerRelease_r6_IEs	RadioBearerRelease-r6-IEs	Class-definitions		
RadioBearerReleaseComplete	RadioBearerReleaseComplete	Class-definitions		
RadioBearerReleaseFailure	RadioBearerReleaseFailure	Class-definitions		
RadioBearerSetup	RadioBearerSetup	Class-definitions		
RadioBearerSetup_r3_IEs	RadioBearerSetup-r3-IEs	Class-definitions		
RadioBearerSetup_v3a0ext	RadioBearerSetup-v3a0ext	Class-definitions		
RadioBearerSetup_v4b0ext_IEs	RadioBearerSetup-v4b0ext-IEs	Class-definitions		
RadioBearerSetup_v590ext_IEs	RadioBearerSetup-v590ext-IEs	Class-definitions		
RadioBearerSetup_v5d0ext_IEs	RadioBearerSetup-v5d0ext-IEs	Class-definitions		
RadioBearerSetup_r4_IEs	RadioBearerSetup-r4-IEs	Class-definitions		
RadioBearerSetup_r5_IEs	RadioBearerSetup-r5-IEs	Class-definitions		
RadioBearerSetup_v690ext_IEs	RadioBearerSetup-v690ext-IEs	Class-definitions		
RadioBearerSetup_r6_IEs	RadioBearerSetup-r6-IEs	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RadioBearerSetupComplete	RadioBearerSetupComplete	Class-definitions		
RadioBearerSetupFailure	RadioBearerSetupFailure	Class-definitions		
RRCCConnectionReject	RRCCConnectionReject	Class-definitions		
RRCCConnectionReject_r3_IEs	RRCCConnectionReject-r3-IEs	Class-definitions		
RRCCConnectionReject_v690ext_IEs	RRCCConnectionReject-v690ext-IEs	Class-definitions		
RRCCConnectionRelease	RRCCConnectionRelease	Class-definitions		
RRCCConnectionRelease_r3_IEs	RRCCConnectionRelease-r3-IEs	Class-definitions		
RRCCConnectionRelease_r4_IEs	RRCCConnectionRelease-r4-IEs	Class-definitions		
RRCCConnectionRelease_v690ext_IEs	RRCCConnectionRelease-v690ext-IEs	Class-definitions		
RRCCConnectionRelease_CCCH	RRCCConnectionRelease-CCCH	Class-definitions		
RRCCConnectionRelease_CCCH_r3_IEs	RRCCConnectionRelease-CCCH-r3-IEs	Class-definitions		
RRCCConnectionRelease_CCCH_r4_IEs	RRCCConnectionRelease-CCCH-r4-IEs	Class-definitions		
RRCCConnectionRelease_CCCH_r5_IEs	RRCCConnectionRelease-CCCH-r5-IEs	Class-definitions		
RRCCConnectionRelease_CCCH_v690ext_IEs	RRCCConnectionRelease-CCCH-v690ext-IEs	Class-definitions		
RRCCConnectionReleaseComplete	RRCCConnectionReleaseComplete	Class-definitions		
RRCCConnectionRequest	RRCCConnectionRequest	Class-definitions		
RRCCConnectionRequest_v3d0ext_IEs	RRCCConnectionRequest-v3d0ext-IEs	Class-definitions		
RRCCConnectionRequest_v4b0ext_IEs	RRCCConnectionRequest-v4b0ext-IEs	Class-definitions		
RRCCConnectionRequest_v590ext_IEs	RRCCConnectionRequest-v590ext-IEs	Class-definitions		
RRCCConnectionRequest_v690ext_IEs	RRCCConnectionRequest-v690ext-IEs	Class-definitions		
RRCCConnectionSetup	RRCCConnectionSetup	Class-definitions		
RRCCConnectionSetup_r3_IEs	RRCCConnectionSetup-r3-IEs	Class-definitions		
RRCCConnectionSetup_v4b0ext_IEs	RRCCConnectionSetup-v4b0ext-IEs	Class-definitions		
RRCCConnectionSetup_v590ext_IEs	RRCCConnectionSetup-v590ext-IEs	Class-definitions		
RRCCConnectionSetup_r4_IEs	RRCCConnectionSetup-r4-IEs	Class-definitions		
RRCCConnectionSetup_r5_IEs	RRCCConnectionSetup-r5-IEs	Class-definitions		
RRCCConnectionSetup_v690ext_IEs	RRCCConnectionSetup-v690ext-IEs	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RRCCONNECTIONSetup_r6_IEs	RRCCONNECTIONSetup_r6_IEs	Class-definitions		
RRCCONNECTIONSetupComplete	RRCCONNECTIONSetupComplete	Class-definitions		
RRCCONNECTIONSetupComplete_v370ext	RRCCONNECTIONSetupComplete_v370ext	Class-definitions		
RRCCONNECTIONSetupComplete_v380ext_IEs	RRCCONNECTIONSetupComplete_v380ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v3a0ext_IEs	RRCCONNECTIONSetupComplete_v3a0ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v3g0ext_IEs	RRCCONNECTIONSetupComplete_v3g0ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v4b0ext_IEs	RRCCONNECTIONSetupComplete_v4b0ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v590ext_IEs	RRCCONNECTIONSetupComplete_v590ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v5c0ext_IEs	RRCCONNECTIONSetupComplete_v5c0ext_IEs	Class-definitions		
RRCCONNECTIONSetupComplete_v690ext_IEs	RRCCONNECTIONSetupComplete_v690ext_IEs	Class-definitions		
RRCSTATUS	RRCSTATUS	Class-definitions		
SECURITYMODECommand	SECURITYMODECommand	Class-definitions		
SECURITYMODECommand_r3_IEs	SECURITYMODECommand_r3_IEs	Class-definitions		
SECURITYMODEComplete	SECURITYMODEComplete	Class-definitions		
SECURITYMODEFailure	SECURITYMODEFailure	Class-definitions		
SIGNALLINGCONNECTIONRelease	SIGNALLINGCONNECTIONRelease	Class-definitions		
SIGNALLINGCONNECTIONRelease_r3_IEs	SIGNALLINGCONNECTIONRelease_r3_IEs	Class-definitions		
SIGNALLINGCONNECTIONReleaseIndication	SIGNALLINGCONNECTIONReleaseIndication	Class-definitions		
SYSTEMINFORMATION_BCH	SYSTEMINFORMATION_BCH	Class-definitions		
SYSTEMINFORMATION_FACH	SYSTEMINFORMATION_FACH	Class-definitions		
FIRSTSEGMENT	FIRSTSEGMENT	Class-definitions		
FIRSTSEGMENTSHORT	FIRSTSEGMENTSHORT	Class-definitions		
SUBSEQUENTSEGMENT	SUBSEQUENTSEGMENT	Class-definitions		
LASTSEGMENT	LASTSEGMENT	Class-definitions		
LASTSEGMENTSHORT	LASTSEGMENTSHORT	Class-definitions		
COMPLETE_SIB_List	COMPLETE_SIB_List	Class-definitions		
COMPLETE_SIB	COMPLETE_SIB	Class-definitions		
COMPLETE_SIBshort	COMPLETE_SIBshort	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SystemInformationChangeIndication	SystemInformationChangeIndication	Class-definitions		
TransportChannelReconfiguration	TransportChannelReconfiguration	Class-definitions		
TransportChannelReconfiguration_r3_IEs	TransportChannelReconfiguration-r3-IEs	Class-definitions		
TransportChannelReconfiguration_v3a0ext	TransportChannelReconfiguration-v3a0ext	Class-definitions		
TransportChannelReconfiguration_v4b0ext_IEs	TransportChannelReconfiguration-v4b0ext-IEs	Class-definitions		
TransportChannelReconfiguration_v590ext_IEs	TransportChannelReconfiguration-v590ext-IEs	Class-definitions		
TransportChannelReconfiguration_r4_IEs	TransportChannelReconfiguration-r4-IEs	Class-definitions		
TransportChannelReconfiguration_r5_IEs	TransportChannelReconfiguration-r5-IEs	Class-definitions		
TransportChannelReconfiguration_v690ext_IEs	TransportChannelReconfiguration-v690ext-IEs	Class-definitions		
TransportChannelReconfiguration_r6_IEs	TransportChannelReconfiguration-r6-IEs	Class-definitions		
TransportChannelReconfigurationComplete	TransportChannelReconfigurationComplete	Class-definitions		
TransportChannelReconfigurationFailure	TransportChannelReconfigurationFailure	Class-definitions		
TransportFormatCombinationControl	TransportFormatCombinationControl	Class-definitions		
TransportFormatCombinationControlFailure	TransportFormatCombinationControlFailure	Class-definitions		
UECapabilityEnquiry	UECapabilityEnquiry	Class-definitions		
UECapabilityEnquiry_r3_IEs	UECapabilityEnquiry-r3-IEs	Class-definitions		
UECapabilityEnquiry_v4b0ext_IEs	UECapabilityEnquiry-v4b0ext-IEs	Class-definitions		
UECapabilityEnquiry_v590ext_IEs	UECapabilityEnquiry-v590ext-IEs	Class-definitions		
UECapabilityInformation	UECapabilityInformation	Class-definitions		
UECapabilityInformation_v370ext	UECapabilityInformation-v370ext	Class-definitions		
UECapabilityInformation_v380ext_IEs	UECapabilityInformation-v380ext-IEs	Class-definitions		
UECapabilityInformation_v3a0ext_IEs	UECapabilityInformation-v3a0ext-IEs	Class-definitions		
UECapabilityInformation_v4b0ext	UECapabilityInformation-v4b0ext	Class-definitions		
UECapabilityInformation_v590ext	UECapabilityInformation-v590ext	Class-definitions		
UECapabilityInformation_v5c0ext	UECapabilityInformation-v5c0ext	Class-definitions		
UECapabilityInformation_v690ext_IEs	UECapabilityInformation-v690ext-IEs	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UECapabilityInformationConfirm	UECapabilityInformationConfirm	Class-definitions		
UECapabilityInformationConfirm_r3_IEs	UECapabilityInformationConfirm-r3-IEs	Class-definitions		
UplinkDirectTransfer	UplinkDirectTransfer	Class-definitions		
UplinkDirectTransfer_v690ext_IEs	UplinkDirectTransfer-v690ext-IEs	Class-definitions		
UplinkPhysicalChannelControl	UplinkPhysicalChannelControl	Class-definitions		
UplinkPhysicalChannelControl_r3_IEs	UplinkPhysicalChannelControl-r3-IEs	Class-definitions		
UplinkPhysicalChannelControl_v4b0ext_IEs	UplinkPhysicalChannelControl-v4b0ext-IEs	Class-definitions		
UplinkPhysicalChannelControl_r4_IEs	UplinkPhysicalChannelControl-r4-IEs	Class-definitions		
UplinkPhysicalChannelControl_r5_IEs	UplinkPhysicalChannelControl-r5-IEs	Class-definitions		
UplinkPhysicalChannelControl_v690ext_IEs	UplinkPhysicalChannelControl-v690ext-IEs	Class-definitions		
UplinkPhysicalChannelControl_v6a0ext_IEs	UplinkPhysicalChannelControl-v6a0ext-IEs	Class-definitions		
URAUpdate	URAUpdate	Class-definitions		
URAUpdateConfirm	URAUpdateConfirm	Class-definitions		
URAUpdateConfirm_r3_IEs	URAUpdateConfirm-r3-IEs	Class-definitions		
URAUpdateConfirm_r5_IEs	URAUpdateConfirm-r5-IEs	Class-definitions		
URAUpdateConfirm_v690ext_IEs	URAUpdateConfirm-v690ext-IEs	Class-definitions		
URAUpdateConfirm_CCCH	URAUpdateConfirm-CCCH	Class-definitions		
URAUpdateConfirm_CCCH_r3_IEs	URAUpdateConfirm-CCCH-r3-IEs	Class-definitions		
UTRANMobilityInformation	UTRANMobilityInformation	Class-definitions		
UTRANMobilityInformation_r3_IEs	UTRANMobilityInformation-r3-IEs	Class-definitions		
UTRANMobilityInformation_v3a0ext_IEs	UTRANMobilityInformation-v3a0ext-IEs	Class-definitions		
UTRANMobilityInformation_r5_IEs	UTRANMobilityInformation-r5-IEs	Class-definitions		
UtranMobilityInformation_v690ext_IEs	UtranMobilityInformation-v690ext-IEs	Class-definitions		
UTRANMobilityInformationConfirm	UTRANMobilityInformationConfirm	Class-definitions		
UTRANMobilityInformationFailure	UTRANMobilityInformationFailure	Class-definitions		
MBMSModificationRequest	MBMSModificationRequest	Class-definitions		
MBMSModifiedServicesInformation	MBMSModifiedServicesInformation	Class-definitions		
Ansi_41_IDNNS	Ansi-41-IDNNS	Class-definitions		
CN_DomainIdentity	CN-DomainIdentity	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CN_DomainInformation	CN-DomainInformation	Class-definitions		
CN_DomainInformationFull	CN-DomainInformationFull	Class-definitions		
CN_DomainInformationList	CN-DomainInformationList	Class-definitions		
CN_DomainInformationListFull	CN-DomainInformationListFull	Class-definitions		
CN_DomainSysInfo	CN-DomainSysInfo	Class-definitions		
CN_DomainSysInfoList	CN-DomainSysInfoList	Class-definitions		
CN_InformationInfo	CN-InformationInfo	Class-definitions		
CN_InformationInfo_r6	CN-InformationInfo-r6	Class-definitions		
CN_InformationInfoFull	CN-InformationInfoFull	Class-definitions		
Digit	Digit	Class-definitions		
Gsm_map_IDNNS	Gsm-map-IDNNS	Class-definitions		
IMEI	IMEI	Class-definitions		
IMEI_Digit	IMEI-Digit	Class-definitions		
IMSI_GSM_MAP	IMSI-GSM-MAP	Class-definitions		
IntraDomainNasNodeSelector	IntraDomainNasNodeSelector	Class-definitions		
LAI	LAI	Class-definitions		
MCC	MCC	Class-definitions		
MNC	MNC	Class-definitions		
MultiplePLMN_List_r6	MultiplePLMN-List-r6	Class-definitions		
NAS_Message	NAS-Message	Class-definitions		
NAS_Synchronisation_Indicator	NAS-Synchronisation-Indicator	Class-definitions		
NAS_SystemInformationGSM_MAP	NAS-SystemInformationGSM-MAP	Class-definitions		
P_TMSI_GSM_MAP	P-TMSI-GSM-MAP	Class-definitions		
PagingRecordTypeID	PagingRecordTypeID	Class-definitions		
PLMN_Identity	PLMN-Identity	Class-definitions		
PLMN_IdentityWithOptionalMCC_r6	PLMN-IdentityWithOptionalMCC-r6	Class-definitions		
PLMN_Type	PLMN-Type	Class-definitions		
RAB_Identity	RAB-Identity	Class-definitions		
RAI	RAI	Class-definitions		
RoutingAreaCode	RoutingAreaCode	Class-definitions		
RoutingParameter	RoutingParameter	Class-definitions		
TMSI_GSM_MAP	TMSI-GSM-MAP	Class-definitions		
AccessClassBarred	AccessClassBarred	Class-definitions		
AccessClassBarredList	AccessClassBarredList	Class-definitions		
AllowedIndicator	AllowedIndicator	Class-definitions		
CellAccessRestriction	CellAccessRestriction	Class-definitions		
CellBarred	CellBarred	Class-definitions		
CellIdentity	CellIdentity	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CellIdentity_PerRL_List	CellIdentity-PerRL-List	Class-definitions		
CellSelectReselectInfoSIB_3_4	CellSelectReselectInfoSIB-3-4	Class-definitions		
DomainSpecificAccessRestrictionForSharedNetwork_v670ext	DomainSpecificAccessRestrictionForSharedNetwork-v670ext	Class-definitions		
DomainSpecificAccessRestrictionList_v670ext	DomainSpecificAccessRestrictionList-v670ext	Class-definitions		
DomainSpecificAccessRestrictionParam_v670ext	DomainSpecificAccessRestrictionParam-v670ext	Class-definitions		
DomainSpecificAccessRestriction_v670ext	DomainSpecificAccessRestriction-v670ext	Class-definitions		
MapParameter	MapParameter	Class-definitions		
Mapping	Mapping	Class-definitions		
Mapping_LCR_r4	Mapping-LCR-r4	Class-definitions		
MappingFunctionParameter	MappingFunctionParameter	Class-definitions		
MappingFunctionParameterList	MappingFunctionParameterList	Class-definitions		
MappingFunctionType	MappingFunctionType	Class-definitions		
MappingInfo	MappingInfo	Class-definitions		
Q_Hyst_S	Q-Hyst-S	Class-definitions		
Q_Hyst_S_Fine	Q-Hyst-S-Fine	Class-definitions		
RAT	RAT	Class-definitions		
RAT_FDD_Info	RAT-FDD-Info	Class-definitions		
RAT_FDD_InfoList	RAT-FDD-InfoList	Class-definitions		
RAT_Identifier	RAT-Identifier	Class-definitions		
RAT_TDD_Info	RAT-TDD-Info	Class-definitions		
RAT_TDD_InfoList	RAT-TDD-InfoList	Class-definitions		
ReservedIndicator	ReservedIndicator	Class-definitions		
S_SearchQual	S-SearchQual	Class-definitions		
S_SearchRXLEV	S-SearchRXLEV	Class-definitions		
SpeedDependentScalingFactor	SpeedDependentScalingFactor	Class-definitions		
T_Barred	T-Barred	Class-definitions		
T_Reselection_S	T-Reselection-S	Class-definitions		
T_Reselection_S_Fine	T-Reselection-S-Fine	Class-definitions		
TreselectionScalingFactor	TreselectionScalingFactor	Class-definitions		
UpperLimit	UpperLimit	Class-definitions		
URA_Identity	URA-Identity	Class-definitions		
URA_IdentityList	URA-IdentityList	Class-definitions		
AccessStratumReleaseIndicator	AccessStratumReleaseIndicator	Class-definitions		
ActivationTime	ActivationTime	Class-definitions		
BackoffControlParameters	BackoffControlParameters	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
C_RNTI	C-RNTI	Class-definitions		
CapabilityUpdateRequirement	CapabilityUpdateRequirement	Class-definitions		
CapabilityUpdateRequirement_r4_ext	CapabilityUpdateRequirement-r4-ext	Class-definitions		
CapabilityUpdateRequirement_r4	CapabilityUpdateRequirement-r4	Class-definitions		
CellUpdateCause	CellUpdateCause	Class-definitions		
CellUpdateCause_ext	CellUpdateCause-ext	Class-definitions		
ChipRateCapability	ChipRateCapability	Class-definitions		
CipheringAlgorithm	CipheringAlgorithm	Class-definitions		
CipheringModeCommand	CipheringModeCommand	Class-definitions		
CipheringModeInfo	CipheringModeInfo	Class-definitions		
CN_DRX_CycleLengthCoefficient	CN-DRX-CycleLengthCoefficient	Class-definitions		
CN_PagedUE_Identity	CN-PagedUE-Identity	Class-definitions		
CompressedModeMeasureCapability	CompressedModeMeasureCapability	Class-definitions		
CompressedModeMeasureCapability_LCR_r4	CompressedModeMeasureCapability-LCR-r4	Class-definitions		
CompressedModeMeasureCapabFDDList	CompressedModeMeasureCapabFDDList	Class-definitions		
CompressedModeMeasureCapabFDD	CompressedModeMeasureCapabFDD	Class-definitions		
CompressedModeMeasureCapabTDDList	CompressedModeMeasureCapabTDDList	Class-definitions		
CompressedModeMeasureCapabTDD	CompressedModeMeasureCapabTDD	Class-definitions		
CompressedModeMeasureCapabGSMList	CompressedModeMeasureCapabGSMList	Class-definitions		
CompressedModeMeasureCapabGSM	CompressedModeMeasureCapabGSM	Class-definitions		
CompressedModeMeasureCapabMC	CompressedModeMeasureCapabMC	Class-definitions		
CPCH_Parameters	CPCH-Parameters	Class-definitions		
DL_CapabilityWithSimultaneousHS_DSCHConfig	DL-CapabilityWithSimultaneousHS-DSCHConfig	Class-definitions		
DL_DPCCH_BER	DL-DPCCH-BER	Class-definitions		
DL_PhysChCapabilityFDD	DL-PhysChCapabilityFDD	Class-definitions		
DL_PhysChCapabilityFDD_v380ext	DL-PhysChCapabilityFDD-v380ext	Class-definitions		
SupportOfDedicatedPilotForChEstimation	SupportOfDedicatedPilotForChEstimation	Class-definitions		
DL_PhysChCapabilityTDD	DL-PhysChCapabilityTDD	Class-definitions		
DL_PhysChCapabilityTDD_LCR_r4	DL-PhysChCapabilityTDD-LCR-r4	Class-definitions		
DL_TransChCapability	DL-TransChCapability	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DRAC_SysInfo	DRAC-SysInfo	Class-definitions		
DRAC_SysInfoList	DRAC-SysInfoList	Class-definitions		
DSCH_RNTI	DSCH-RNTI	Class-definitions		
DelayRestrictionFlag	DelayRestrictionFlag	Class-definitions		
E_RNTI	E-RNTI	Class-definitions		
ESN_DS_41	ESN-DS-41	Class-definitions		
EstablishmentCause	EstablishmentCause	Class-definitions		
FailureCauseWithProtErr	FailureCauseWithProtErr	Class-definitions		
FailureCauseWithProtErrTrId	FailureCauseWithProtErrTrId	Class-definitions		
GroupIdentityWithReleaseInformation	GroupIdentityWithReleaseInformation	Class-definitions		
GroupReleaseInformation	GroupReleaseInformation	Class-definitions		
GSM_Measurements	GSM-Measurements	Class-definitions		
H_RNTI	H-RNTI	Class-definitions		
HSDSCH_physical_layer_category	HSDSCH-physical-layer-category	Class-definitions		
UESpecificBehaviourInformation1idle	UESpecificBehaviourInformation1idle	Class-definitions		
IMSI_and_ESN_DS_41	IMSI-and-ESN-DS-41	Class-definitions		
IMSI_DS_41	IMSI-DS-41	Class-definitions		
InitialPriorityDelayList	InitialPriorityDelayList	Class-definitions		
InitialUE_Identity	InitialUE-Identity	Class-definitions		
IntegrityCheckInfo	IntegrityCheckInfo	Class-definitions		
IntegrityProtActivationInfo	IntegrityProtActivationInfo	Class-definitions		
IntegrityProtectionAlgorithm	IntegrityProtectionAlgorithm	Class-definitions		
IntegrityProtectionModeCommand	IntegrityProtectionModeCommand	Class-definitions		
IntegrityProtectionModeInfo	IntegrityProtectionModeInfo	Class-definitions		
IntegrityProtInitNumber	IntegrityProtInitNumber	Class-definitions		
MaxHcContextSpace	MaxHcContextSpace	Class-definitions		
MaxHcContextSpace_r5_ext	MaxHcContextSpace-r5-ext	Class-definitions		
MaxROHC_ContextSessions_r4	MaxROHC-ContextSessions-r4	Class-definitions		
MaximumAM_EntityNumberRLC_Cap	MaximumAM-EntityNumberRLC-Cap	Class-definitions		
MaximumBitRate	MaximumBitRate	Class-definitions		
MaximumRLC_WindowSize	MaximumRLC-WindowSize	Class-definitions		
MaxNoDPDCH_BitsTransmitted	MaxNoDPDCH-BitsTransmitted	Class-definitions		
MaxNoBits	MaxNoBits	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MaxNoPhysChBitsReceived	MaxNoPhysChBitsReceived	Class-definitions		
MaxNoSCCPCH_RL	MaxNoSCCPCH-RL	Class-definitions		
MaxNumberOfTF	MaxNumberOfTF	Class-definitions		
MaxNumberOfTFC_DL	MaxNumberOfTFC-DL	Class-definitions		
MaxNumberOfTFC_UL	MaxNumberOfTFC-UL	Class-definitions		
MaxPhysChPerFrame	MaxPhysChPerFrame	Class-definitions		
MaxPhysChPerSubFrame_r4	MaxPhysChPerSubFrame-r4	Class-definitions		
MaxPhysChPerTimeslot	MaxPhysChPerTimeslot	Class-definitions		
MaxPhysChPerTS	MaxPhysChPerTS	Class-definitions		
MaxSimultaneousCCTrCH_Count	MaxSimultaneousCCTrCH-Count	Class-definitions		
MaxSimultaneousTransChsDL	MaxSimultaneousTransChsDL	Class-definitions		
MaxSimultaneousTransChsUL	MaxSimultaneousTransChsUL	Class-definitions		
MaxTransportBlocksDL	MaxTransportBlocksDL	Class-definitions		
MaxTransportBlocksUL	MaxTransportBlocksUL	Class-definitions		
MaxTS_PerFrame	MaxTS-PerFrame	Class-definitions		
MaxTS_PerSubFrame_r4	MaxTS-PerSubFrame-r4	Class-definitions		
MeasurementCapability	MeasurementCapability	Class-definitions		
MeasurementCapabilityExt	MeasurementCapabilityExt	Class-definitions		
MeasurementCapability_r4_ext	MeasurementCapability-r4-ext	Class-definitions		
MessageAuthenticationCode	MessageAuthenticationCode	Class-definitions		
MinimumSF_DL	MinimumSF-DL	Class-definitions		
MinimumSF_UL	MinimumSF-UL	Class-definitions		
MultiModeCapability	MultiModeCapability	Class-definitions		
MultiRAT_Capability	MultiRAT-Capability	Class-definitions		
MultiModeRAT_Capability_v590ext	MultiModeRAT-Capability-v590ext	Class-definitions		
N_300	N-300	Class-definitions		
N_301	N-301	Class-definitions		
N_302	N-302	Class-definitions		
N_304	N-304	Class-definitions		
N_308	N-308	Class-definitions		
N_310	N-310	Class-definitions		
N_312	N-312	Class-definitions		
N_312ext	N-312ext	Class-definitions		
N_312_r5	N-312-r5	Class-definitions		
N_313	N-313	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
N_315	N-315	Class-definitions		
N_315ext	N-315ext	Class-definitions		
N_315_r5	N-315-r5	Class-definitions		
N_AccessFails	N-AccessFails	Class-definitions		
N_AP_RetransMax	N-AP-RetransMax	Class-definitions		
NetworkAssistedGPS_Supported	NetworkAssistedGPS-Supported	Class-definitions		
NF_BO_AllBusy	NF-BO-AllBusy	Class-definitions		
NF_BO_NoAICH	NF-BO-NoAICH	Class-definitions		
NF_BO_Mismatch	NF-BO-Mismatch	Class-definitions		
NS_BO_Busy	NS-BO-Busy	Class-definitions		
NS_IP	NS-IP	Class-definitions		
P_TMSI_and_RAI_GSM_MAP	P-TMSI-and-RAI-GSM-MAP	Class-definitions		
PagingCause	PagingCause	Class-definitions		
PagingRecord	PagingRecord	Class-definitions		
PagingRecord2_r5	PagingRecord2-r5	Class-definitions		
PagingRecordList	PagingRecordList	Class-definitions		
PagingRecord2List_r5	PagingRecord2List-r5	Class-definitions		
PDCP_Capability	PDCP-Capability	Class-definitions		
PDCP_Capability_r4_ext	PDCP-Capability-r4-ext	Class-definitions		
PDCP_Capability_r5_ext	PDCP-Capability-r5-ext	Class-definitions		
PDCP_Capability_r5_ext2	PDCP-Capability-r5-ext2	Class-definitions		
PhysicalChannelCapability	PhysicalChannelCapability	Class-definitions		
PhysicalChannelCapability_LCR_r4	PhysicalChannelCapability-LCR-r4	Class-definitions		
PhysicalChannelCapability_hspdsch_r5	PhysicalChannelCapability-hspdsch-r5	Class-definitions		
PNBSCH_Allocation_r4	PNBSCH-Allocation-r4	Class-definitions		
ProtocolErrorCause	ProtocolErrorCause	Class-definitions		
ProtocolErrorIndicator	ProtocolErrorIndicator	Class-definitions		
ProtocolErrorIndicatorWithMoreInfo	ProtocolErrorIndicatorWithMoreInfo	Class-definitions		
ProtocolErrorMoreInformation	ProtocolErrorMoreInformation	Class-definitions		
RadioFrequencyBandFDD	RadioFrequencyBandFDD	Class-definitions		
RadioFrequencyBandFDD2	RadioFrequencyBandFDD2	Class-definitions		
RadioFrequencyBandTDDLList	RadioFrequencyBandTDDLList	Class-definitions		
RadioFrequencyBandTDD	RadioFrequencyBandTDD	Class-definitions		
RadioFrequencyBandGSM	RadioFrequencyBandGSM	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
Rb_timer_indicator	Rb-timer-indicator	Class-definitions		
Re_EstablishmentTime r	Re-EstablishmentTime r	Class-definitions		
RedirectionInfo	RedirectionInfo	Class-definitions		
RedirectionInfo_r6	RedirectionInfo-r6	Class-definitions		
RejectionCause	RejectionCause	Class-definitions		
ReleaseCause	ReleaseCause	Class-definitions		
RF_Capability	RF-Capability	Class-definitions		
RF_Capability_r4_ext	RF-Capability-r4-ext	Class-definitions		
RLC_Capability	RLC-Capability	Class-definitions		
RLC_Capability_r5_ext	RLC-Capability-r5-ext	Class-definitions		
RRC_ConnectionReleaseInformation	RRC-ConnectionReleaseInformation	Class-definitions		
RRC_MessageSequenceNumber	RRC-MessageSequenceNumber	Class-definitions		
RRC_MessageSequenceNumberList	RRC-MessageSequenceNumberList	Class-definitions		
RRC_StateIndicator	RRC-StateIndicator	Class-definitions		
RRC_TransactionIdentifier	RRC-TransactionIdentifier	Class-definitions		
S_RNTI	S-RNTI	Class-definitions		
S_RNTI_2	S-RNTI-2	Class-definitions		
SecurityCapability	SecurityCapability	Class-definitions		
Serving_HSDSCH_CellInformation	Serving-HSDSCH-CellInformation	Class-definitions		
SimultaneousSCCPCH_DPCH_Reception	SimultaneousSCCPCH-DPCH-Reception	Class-definitions		
SRNC_Identity	SRNC-Identity	Class-definitions		
START_Value	START-Value	Class-definitions		
STARTList	STARTList	Class-definitions		
STARTSingle	STARTSingle	Class-definitions		
CapabilityUpdateRequirement_r5	CapabilityUpdateRequirement-r5	Class-definitions		
SystemSpecificCapUpdateReq	SystemSpecificCapUpdateReq	Class-definitions		
SystemSpecificCapUpdateReq_v590ext	SystemSpecificCapUpdateReq-v590ext	Class-definitions		
SystemSpecificCapUpdateReq_r5	SystemSpecificCapUpdateReq-r5	Class-definitions		
SystemSpecificCapUpdateReqList	SystemSpecificCapUpdateReqList	Class-definitions		
SystemSpecificCapUpdateReqList_r5	SystemSpecificCapUpdateReqList-r5	Class-definitions		
T_300	T-300	Class-definitions		
T_301	T-301	Class-definitions		
T_302	T-302	Class-definitions		
T_304	T-304	Class-definitions		
T_305	T-305	Class-definitions		
T_307	T-307	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
T_308	T-308	Class-definitions		
T_309	T-309	Class-definitions		
T_310	T-310	Class-definitions		
T_311	T-311	Class-definitions		
T_312	T-312	Class-definitions		
T_313	T-313	Class-definitions		
T_314	T-314	Class-definitions		
T_315	T-315	Class-definitions		
T_316	T-316	Class-definitions		
T_317	T-317	Class-definitions		
T_CPCH	T-CPCH	Class-definitions		
TMSI_and_LAI_GSM_MAP	TMSI-and-LAI-GSM-MAP	Class-definitions		
TMSI_DS_41	TMSI-DS-41	Class-definitions		
TotalRLC_AM_Buffer Size	TotalRLC-AM-Buffer Size	Class-definitions		
TotalRLC_AM_Buffer Size_r5_ext	TotalRLC-AM-Buffer Size-r5-ext	Class-definitions		
TransmissionProbability	TransmissionProbability	Class-definitions		
TransportChannelCapability	TransportChannelCapability	Class-definitions		
TurboSupport	TurboSupport	Class-definitions		
TxRxFrequencySeparation	TxRxFrequencySeparation	Class-definitions		
U_RNTI	U-RNTI	Class-definitions		
U_RNTI_Group	U-RNTI-Group	Class-definitions		
U_RNTI_Short	U-RNTI-Short	Class-definitions		
UE_ConnTimersAndConstants	UE-ConnTimersAndConstants	Class-definitions		
UE_ConnTimersAndConstants_v3a0ext	UE-ConnTimersAndConstants-v3a0ext	Class-definitions		
UE_ConnTimersAndConstants_r5	UE-ConnTimersAndConstants-r5	Class-definitions		
UE_IdleTimersAndConstants	UE-IdleTimersAndConstants	Class-definitions		
UE_IdleTimersAndConstants_v3a0ext	UE-IdleTimersAndConstants-v3a0ext	Class-definitions		
UE_MultiModeRAT_Capability	UE-MultiModeRAT-Capability	Class-definitions		
UE_PowerClass	UE-PowerClass	Class-definitions		
UE_PowerClassExt	UE-PowerClassExt	Class-definitions		
UE_RadioAccessCapability	UE-RadioAccessCapability	Class-definitions		
UE_RadioAccessCapability_v370ext	UE-RadioAccessCapability-v370ext	Class-definitions		
UE_RadioAccessCapability_v380ext	UE-RadioAccessCapability-v380ext	Class-definitions		
UE_RadioAccessCapability_v3a0ext	UE-RadioAccessCapability-v3a0ext	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_RadioAccessCapability_v3g0ext	UE-RadioAccessCapability-v3g0ext	Class-definitions		
UE_PositioningCapabilityExt_v380	UE-PositioningCapabilityExt-v380	Class-definitions		
UE_PositioningCapabilityExt_v3a0	UE-PositioningCapabilityExt-v3a0	Class-definitions		
UE_PositioningCapabilityExt_v3g0	UE-PositioningCapabilityExt-v3g0	Class-definitions		
UE_RadioAccessCapabilityBandFDDList	UE-RadioAccessCapabilityBandFDDList	Class-definitions		
UE_RadioAccessCapabilityBandFDD	UE-RadioAccessCapabilityBandFDD	Class-definitions		
UE_RadioAccessCapability_v4b0ext	UE-RadioAccessCapability-v4b0ext	Class-definitions		
UE_RadioAccessCapability_v590ext	UE-RadioAccessCapability-v590ext	Class-definitions		
UE_RadioAccessCapability_v5c0ext	UE-RadioAccessCapability-v5c0ext	Class-definitions		
UL_PhysChCapabilityFDD	UL-PhysChCapabilityFDD	Class-definitions		
UL_PhysChCapabilityTDD	UL-PhysChCapabilityTDD	Class-definitions		
UL_PhysChCapabilityTDD_LCR_r4	UL-PhysChCapabilityTDD-LCR-r4	Class-definitions		
UL_TransChCapability	UL-TransChCapability	Class-definitions		
UE_Positioning_Capability	UE-Positioning-Capability	Class-definitions		
URA_UpdateCause	URA-UpdateCause	Class-definitions		
UTRAN_DRX_CycleLengthCoefficient	UTRAN-DRX-CycleLengthCoefficient	Class-definitions		
WaitTime	WaitTime	Class-definitions		
AlgorithmSpecificInfo	AlgorithmSpecificInfo	Class-definitions		
AlgorithmSpecificInfo_r4	AlgorithmSpecificInfo-r4	Class-definitions		
CID_InclusionInfo_r4	CID-InclusionInfo-r4	Class-definitions		
COUNT_C	COUNT-C	Class-definitions		
COUNT_C_MSB	COUNT-C-MSB	Class-definitions		
DefaultConfigIdentity	DefaultConfigIdentity	Class-definitions		
DefaultConfigIdentity_r4	DefaultConfigIdentity-r4	Class-definitions		
DefaultConfigIdentity_r5	DefaultConfigIdentity-r5	Class-definitions		
DefaultConfigIdentity_r6	DefaultConfigIdentity-r6	Class-definitions		
DefaultConfigMode	DefaultConfigMode	Class-definitions		
DDI	DDI	Class-definitions		
DL_AM_RLC_Mode	DL-AM-RLC-Mode	Class-definitions		
DL_AM_RLC_Mode_r5	DL-AM-RLC-Mode-r5	Class-definitions		
DL_CounterSynchronisationInfo	DL-CounterSynchronisationInfo	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DL_CounterSynchronisationInfo_r5	DL-CounterSynchronisationInfo-r5	Class-definitions		
DL_LogicalChannelMapping	DL-LogicalChannelMapping	Class-definitions		
DL_LogicalChannelMapping_r5	DL-LogicalChannelMapping-r5	Class-definitions		
DL_LogicalChannelMappingList	DL-LogicalChannelMappingList	Class-definitions		
DL_LogicalChannelMappingList_r5	DL-LogicalChannelMappingList-r5	Class-definitions		
DL_Reception_Window_Size_r6	DL-Reception-Window-Size-r6	Class-definitions		
DL_RFC3095_r4	DL-RFC3095-r4	Class-definitions		
DL_RLC_Mode	DL-RLC-Mode	Class-definitions		
DL_RLC_Mode_r5	DL-RLC-Mode-r5	Class-definitions		
DL_RLC_Mode_r6	DL-RLC-Mode-r6	Class-definitions		
DL_RLC_StatusInfo	DL-RLC-StatusInfo	Class-definitions		
DL_TM_RLC_Mode	DL-TM-RLC-Mode	Class-definitions		
DL_TransportChannelType	DL-TransportChannelType	Class-definitions		
DL_TransportChannelType_r5	DL-TransportChannelType-r5	Class-definitions		
DL_UM_RLC_LI_size	DL-UM-RLC-LI-size	Class-definitions		
DL_UM_RLC_Mode_r5	DL-UM-RLC-Mode-r5	Class-definitions		
DL_UM_RLC_Mode_r6	DL-UM-RLC-Mode-r6	Class-definitions		
ExpectReordering	ExpectReordering	Class-definitions		
ExplicitDiscard	ExplicitDiscard	Class-definitions		
HeaderCompressionInfo	HeaderCompressionInfo	Class-definitions		
HeaderCompressionInfoList	HeaderCompressionInfoList	Class-definitions		
HeaderCompressionInfo_r4	HeaderCompressionInfo-r4	Class-definitions		
HeaderCompressionInfoList_r4	HeaderCompressionInfoList-r4	Class-definitions		
LogicalChannelIdentity	LogicalChannelIdentity	Class-definitions		
LosslessSRNS_RelocSupport	LosslessSRNS-RelocSupport	Class-definitions		
MAC_d_HFN_initial_value	MAC-d-HFN-initial-value	Class-definitions		
MAC_LogicalChannelPriority	MAC-LogicalChannelPriority	Class-definitions		
MaxDAT	MaxDAT	Class-definitions		
MaxDAT_Retransmissions	MaxDAT-Retransmissions	Class-definitions		
MaxMRW	MaxMRW	Class-definitions		
MaxPDCP_SN_WindowSize	MaxPDCP-SN-WindowSize	Class-definitions		
MaxRST	MaxRST	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
NoExplicitDiscard	NoExplicitDiscard	Class-definitions		
PDCP_Info	PDCP-Info	Class-definitions		
PDCP_Info_r4	PDCP-Info-r4	Class-definitions		
PDCP_InfoReconfig	PDCP-InfoReconfig	Class-definitions		
PDCP_InfoReconfig_r4	PDCP-InfoReconfig-r4	Class-definitions		
PDCP_PDU_Header	PDCP-PDU-Header	Class-definitions		
PDCP_ROHC_Target Mode	PDCP-ROHC-Target Mode	Class-definitions		
PDCP_SN_Info	PDCP-SN-Info	Class-definitions		
Poll_PDU	Poll-PDU	Class-definitions		
Poll_SDU	Poll-SDU	Class-definitions		
PollingInfo	PollingInfo	Class-definitions		
PollWindow	PollWindow	Class-definitions		
PredefinedConfigIdentity	PredefinedConfigIdentity	Class-definitions		
PredefinedConfigValueTag	PredefinedConfigValueTag	Class-definitions		
PredefinedRB_Configuration	PredefinedRB-Configuration	Class-definitions		
PreDefRadioConfiguration	PreDefRadioConfiguration	Class-definitions		
RAB_Info	RAB-Info	Class-definitions		
RAB_Info_r6_ext	RAB-Info-r6-ext	Class-definitions		
RAB_Info_r6	RAB-Info-r6	Class-definitions		
RAB_InformationList	RAB-InformationList	Class-definitions		
RAB_InformationList_r6	RAB-InformationList-r6	Class-definitions		
RAB_InformationReconfigList	RAB-InformationReconfigList	Class-definitions		
RAB_InformationReconfig	RAB-InformationReconfig	Class-definitions		
RAB_Info_Post	RAB-Info-Post	Class-definitions		
RAB_InformationSetup	RAB-InformationSetup	Class-definitions		
RAB_InformationSetup_r4	RAB-InformationSetup-r4	Class-definitions		
RAB_InformationSetup_r5	RAB-InformationSetup-r5	Class-definitions		
RAB_InformationSetup_r6_ext	RAB-InformationSetup-r6-ext	Class-definitions		
RAB_InformationSetup_r6	RAB-InformationSetup-r6	Class-definitions		
RAB_InformationSetupList	RAB-InformationSetupList	Class-definitions		
RAB_InformationSetupList_r4	RAB-InformationSetupList-r4	Class-definitions		
RAB_InformationSetupList_r5	RAB-InformationSetupList-r5	Class-definitions		
RAB_InformationSetupList_r6	RAB-InformationSetupList-r6	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RAB_InformationSetupList_r6_ext	RAB-InformationSetupList-r6-ext	Class-definitions		
RB_ActivationTimeInfo	RB-ActivationTimeInfo	Class-definitions		
RB_ActivationTimeInfoList	RB-ActivationTimeInfoList	Class-definitions		
RB_COUNT_C_Information	RB-COUNT-C-Information	Class-definitions		
RB_COUNT_C_InformationList	RB-COUNT-C-InformationList	Class-definitions		
RB_COUNT_C_MSB_Information	RB-COUNT-C-MSB-Information	Class-definitions		
RB_COUNT_C_MSB_InformationList	RB-COUNT-C-MSB-InformationList	Class-definitions		
RB_Identity	RB-Identity	Class-definitions		
RB_IdentityList	RB-IdentityList	Class-definitions		
RB_InformationAffected	RB-InformationAffected	Class-definitions		
RB_InformationAffected_r5	RB-InformationAffected-r5	Class-definitions		
RB_InformationAffected_r6	RB-InformationAffected-r6	Class-definitions		
RB_InformationAffectedList	RB-InformationAffectedList	Class-definitions		
RB_InformationAffectedList_r5	RB-InformationAffectedList-r5	Class-definitions		
RB_InformationAffectedList_r6	RB-InformationAffectedList-r6	Class-definitions		
RB_InformationChanged_r6	RB-InformationChanged-r6	Class-definitions		
RB_InformationChangedList_r6	RB-InformationChangedList-r6	Class-definitions		
RB_InformationReconfig	RB-InformationReconfig	Class-definitions		
RB_InformationReconfig_r4	RB-InformationReconfig-r4	Class-definitions		
RB_InformationReconfig_r5	RB-InformationReconfig-r5	Class-definitions		
RB_InformationReconfig_r6	RB-InformationReconfig-r6	Class-definitions		
RB_InformationReconfigList	RB-InformationReconfigList	Class-definitions		
RB_InformationReconfigList_r4	RB-InformationReconfigList-r4	Class-definitions		
RB_InformationReconfigList_r5	RB-InformationReconfigList-r5	Class-definitions		
RB_InformationReconfigList_r6	RB-InformationReconfigList-r6	Class-definitions		
RB_InformationReleaseList	RB-InformationReleaseList	Class-definitions		
RB_InformationSetup	RB-InformationSetup	Class-definitions		
RB_InformationSetup_r4	RB-InformationSetup-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RB_InformationSetup_r5	RB-InformationSetup-r5	Class-definitions		
RB_InformationSetup_r6	RB-InformationSetup-r6	Class-definitions		
RB_InformationSetupList	RB-InformationSetupList	Class-definitions		
RB_InformationSetupList_r4	RB-InformationSetupList-r4	Class-definitions		
RB_InformationSetupList_r5	RB-InformationSetupList-r5	Class-definitions		
RB_InformationSetupList_r6	RB-InformationSetupList-r6	Class-definitions		
RB_MappingInfo	RB-MappingInfo	Class-definitions		
RB_MappingInfo_r5	RB-MappingInfo-r5	Class-definitions		
RB_MappingInfo_r6	RB-MappingInfo-r6	Class-definitions		
RB_MappingOption	RB-MappingOption	Class-definitions		
RB_MappingOption_r5	RB-MappingOption-r5	Class-definitions		
RB_MappingOption_r6	RB-MappingOption-r6	Class-definitions		
RB_PDCPContextRelocation	RB-PDCPContextRelocation	Class-definitions		
RB_PDCPContextRelocationList	RB-PDCPContextRelocationList	Class-definitions		
RB_StopContinue	RB-StopContinue	Class-definitions		
RB_WithPDCP_Info	RB-WithPDCP-Info	Class-definitions		
RB_WithPDCP_InfoList	RB-WithPDCP-InfoList	Class-definitions		
ReceivingWindowSize	ReceivingWindowSize	Class-definitions		
RFC2507_Info	RFC2507-Info	Class-definitions		
RFC3095_Info_r4	RFC3095-Info-r4	Class-definitions		
RLC_Info	RLC-Info	Class-definitions		
RLC_Info_r5	RLC-Info-r5	Class-definitions		
RLC_Info_r6	RLC-Info-r6	Class-definitions		
RLC_Info_MCCH_r6	RLC-Info-MCCH-r6	Class-definitions		
RLC_Info_MSCH_r6	RLC-Info-MSCH-r6	Class-definitions		
RLC_InfoChoice	RLC-InfoChoice	Class-definitions		
RLC_InfoChoice_r5	RLC-InfoChoice-r5	Class-definitions		
RLC_InfoChoice_r6	RLC-InfoChoice-r6	Class-definitions		
RLC_PDU_Size	RLC-PDU-Size	Class-definitions		
RLC_PDU_SizeList	RLC-PDU-SizeList	Class-definitions		
RLC_SequenceNumber	RLC-SequenceNumber	Class-definitions		
RLC_SizeInfo	RLC-SizeInfo	Class-definitions		
RLC_SizeExplicitList	RLC-SizeExplicitList	Class-definitions		
ROHC_Profile_r4	ROHC-Profile-r4	Class-definitions		
ROHC_ProfileList_r4	ROHC-ProfileList-r4	Class-definitions		
ROHC_PacketSize_r4	ROHC-PacketSize-r4	Class-definitions		
ROHC_PacketSizeList_r4	ROHC-PacketSizeList-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SRB_InformationSetup	SRB-InformationSetup	Class-definitions		
SRB_InformationSetup_r5	SRB-InformationSetup-r5	Class-definitions		
SRB_InformationSetup_r6	SRB-InformationSetup-r6	Class-definitions		
SRB_InformationSetupList	SRB-InformationSetupList	Class-definitions		
SRB_InformationSetupList_r5	SRB-InformationSetupList-r5	Class-definitions		
SRB_InformationSetupList_r6	SRB-InformationSetupList-r6	Class-definitions		
SRB_InformationSetupList2	SRB-InformationSetupList2	Class-definitions		
SRB_InformationSetupList2_r6	SRB-InformationSetupList2-r6	Class-definitions		
TimerDiscard	TimerDiscard	Class-definitions		
TimerEPC	TimerEPC	Class-definitions		
TimerMRW	TimerMRW	Class-definitions		
TimerOSD_r6	TimerOSD-r6	Class-definitions		
TimerPoll	TimerPoll	Class-definitions		
TimerPollPeriodic	TimerPollPeriodic	Class-definitions		
TimerPollProhibit	TimerPollProhibit	Class-definitions		
TimerRST	TimerRST	Class-definitions		
TimerStatusPeriodic	TimerStatusPeriodic	Class-definitions		
TimerStatusProhibit	TimerStatusProhibit	Class-definitions		
TransmissionRLC_Discard	TransmissionRLC-Discard	Class-definitions		
TransmissionWindowSize	TransmissionWindowSize	Class-definitions		
UL_AM_RLC_Mode	UL-AM-RLC-Mode	Class-definitions		
UL_CounterSynchronisationInfo	UL-CounterSynchronisationInfo	Class-definitions		
UL_LogicalChannelMapping	UL-LogicalChannelMapping	Class-definitions		
UL_LogicalChannelMapping_r6	UL-LogicalChannelMapping-r6	Class-definitions		
UL_LogicalChannelMappingList	UL-LogicalChannelMappingList	Class-definitions		
UL_LogicalChannelMappingList_r6	UL-LogicalChannelMappingList-r6	Class-definitions		
UL_LogicalChannelMappings	UL-LogicalChannelMappings	Class-definitions		
UL_LogicalChannelMappings_r6	UL-LogicalChannelMappings-r6	Class-definitions		
UL_RFC3095_r4	UL-RFC3095-r4	Class-definitions		
UL_RLC_Mode	UL-RLC-Mode	Class-definitions		
UL_TM_RLC_Mode	UL-TM-RLC-Mode	Class-definitions		
UL_UM_RLC_Mode	UL-UM-RLC-Mode	Class-definitions		
UL_TransportChannelType	UL-TransportChannelType	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UM_RLC_OutOSeqDelivery_Info_r6	UM-RLC-OutOSeqDelivery-Info-r6	Class-definitions		
WindowSizeOSD_r6	WindowSizeOSD-r6	Class-definitions		
AddOrReconfMAC_dFlow	AddOrReconfMAC-dFlow	Class-definitions		
AllowedTFC_List	AllowedTFC-List	Class-definitions		
AllowedTFI_List	AllowedTFI-List	Class-definitions		
BitModeRLC_SizeInfo	BitModeRLC-SizeInfo	Class-definitions		
BLER_QualityValue	BLER-QualityValue	Class-definitions		
ChannelCodingType	ChannelCodingType	Class-definitions		
CodingRate	CodingRate	Class-definitions		
CommonDynamicTF_Info	CommonDynamicTF-Info	Class-definitions		
CommonDynamicTF_Info_DynamicTTI	CommonDynamicTF-Info-DynamicTTI	Class-definitions		
CommonDynamicTF_InfoList	CommonDynamicTF-InfoList	Class-definitions		
CommonDynamicTF_InfoList_DynamicTTI	CommonDynamicTF-InfoList-DynamicTTI	Class-definitions		
CommonTransChTFS	CommonTransChTFS	Class-definitions		
CommonTransChTFS_LCR	CommonTransChTFS-LCR	Class-definitions		
CPCH_SetID	CPCH-SetID	Class-definitions		
CRC_Size	CRC-Size	Class-definitions		
DedicatedDynamicTF_Info	DedicatedDynamicTF-Info	Class-definitions		
DedicatedDynamicTF_Info_DynamicTTI	DedicatedDynamicTF-Info-DynamicTTI	Class-definitions		
DedicatedDynamicTF_InfoList	DedicatedDynamicTF-InfoList	Class-definitions		
DedicatedDynamicTF_InfoList_DynamicTTI	DedicatedDynamicTF-InfoList-DynamicTTI	Class-definitions		
DedicatedTransChTFS	DedicatedTransChTFS	Class-definitions		
DL_AddReconfTransChInfo2List	DL-AddReconfTransChInfo2List	Class-definitions		
DL_AddReconfTransChInfoList	DL-AddReconfTransChInfoList	Class-definitions		
DL_AddReconfTransChInfoList_r4	DL-AddReconfTransChInfoList-r4	Class-definitions		
DL_AddReconfTransChInfoList_r5	DL-AddReconfTransChInfoList-r5	Class-definitions		
DL_AddReconfTransChInformation	DL-AddReconfTransChInformation	Class-definitions		
DL_AddReconfTransChInformation_r4	DL-AddReconfTransChInformation-r4	Class-definitions		
DL_AddReconfTransChInformation_r5	DL-AddReconfTransChInformation-r5	Class-definitions		
DL_AddReconfTransChInformation2	DL-AddReconfTransChInformation2	Class-definitions		
DL_CommonTransChInfo	DL-CommonTransChInfo	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DL_CommonTransChInfo_r4	DL-CommonTransChInfo-r4	Class-definitions		
DL_DeletedTransChInfoList	DL-DeletedTransChInfoList	Class-definitions		
DL_DeletedTransChInfoList_r5	DL-DeletedTransChInfoList-r5	Class-definitions		
DL_TransportChannelIdentity	DL-TransportChannelIdentity	Class-definitions		
DL_TransportChannelIdentity_r5	DL-TransportChannelIdentity-r5	Class-definitions		
DL_TrCH_Type	DL-TrCH-Type	Class-definitions		
DL_TrCH_TypeId1_r5	DL-TrCH-TypeId1-r5	Class-definitions		
DL_TrCH_TypeId2_r5	DL-TrCH-TypeId2-r5	Class-definitions		
DRAC_ClassIdentity	DRAC-ClassIdentity	Class-definitions		
DRAC_StaticInformation	DRAC-StaticInformation	Class-definitions		
DRAC_StaticInformationList	DRAC-StaticInformationList	Class-definitions		
E_DCH_AddReconf_MAC_d_Flow	E-DCH-AddReconf-MAC-d-Flow	Class-definitions		
E_DCH_AddReconf_MAC_d_FlowList	E-DCH-AddReconf-MAC-d-FlowList	Class-definitions		
E_DCH_MAC_d_FlowIdentity	E-DCH-MAC-d-FlowIdentity	Class-definitions		
E_DCH_MAC_d_FlowMaxRetrans	E-DCH-MAC-d-FlowMaxRetrans	Class-definitions		
E_DCH_MAC_d_FlowMultiplexingList	E-DCH-MAC-d-FlowMultiplexingList	Class-definitions		
E_DCH_MAC_d_FlowPowerOffset	E-DCH-MAC-d-FlowPowerOffset	Class-definitions		
E_DCH_TTI	E-DCH-TTI	Class-definitions		
ExplicitTFCS_Configuration	ExplicitTFCS-Configuration	Class-definitions		
GainFactor	GainFactor	Class-definitions		
GainFactorInformation	GainFactorInformation	Class-definitions		
HSDSCH_Info	HSDSCH-Info	Class-definitions		
HARQ_Info	HARQ-Info	Class-definitions		
HARQMemorySize	HARQMemorySize	Class-definitions		
IndividualDL_CCTrCH_Info	IndividualDL-CCTrCH-Info	Class-definitions		
IndividualDL_CCTrCH_InfoList	IndividualDL-CCTrCH-InfoList	Class-definitions		
IndividualUL_CCTrCH_Info	IndividualUL-CCTrCH-Info	Class-definitions		
IndividualUL_CCTrCH_InfoList	IndividualUL-CCTrCH-InfoList	Class-definitions		
LogicalChannelByRB	LogicalChannelByRB	Class-definitions		
LogicalChannelList	LogicalChannelList	Class-definitions		
MAC_d_FlowIdentity	MAC-d-FlowIdentity	Class-definitions		
DCHandHSDSCH	DCHandHSDSCH	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MAC_d_FlowIdentity	MAC-d-FlowIdentity	Class-definitions		
MAC_d_PDU_SizeInfo_List	MAC-d-PDU-SizeInfo-List	Class-definitions		
MAC_d_PDUsizeInfo	MAC-d-PDUsizeInfo	Class-definitions		
MAC_hs_AddReconfQueue_List	MAC-hs-AddReconfQueue-List	Class-definitions		
MAC_hs_AddReconfQueue	MAC-hs-AddReconfQueue	Class-definitions		
MAC_hs_DelQueue_List	MAC-hs-DelQueue-List	Class-definitions		
MAC_hs_DelQueue	MAC-hs-DelQueue	Class-definitions		
MAC_hs_WindowSize	MAC-hs-WindowSize	Class-definitions		
NumberOfTbSizeAndTTList	NumberOfTbSizeAndTTList	Class-definitions		
MessType	MessType	Class-definitions		
Non_allowedTFC_List	Non-allowedTFC-List	Class-definitions		
NumberOfTransportBlocks	NumberOfTransportBlocks	Class-definitions		
OctetModeRLC_SizeInfoType1	OctetModeRLC-SizeInfoType1	Class-definitions		
OctetModeRLC_SizeInfoType2	OctetModeRLC-SizeInfoType2	Class-definitions		
PowerOffsetInfoShort	PowerOffsetInfoShort	Class-definitions		
PowerOffsetInformation	PowerOffsetInformation	Class-definitions		
PowerOffsetPp_m	PowerOffsetPp-m	Class-definitions		
PreDefTransChConfiguration	PreDefTransChConfiguration	Class-definitions		
QualityTarget	QualityTarget	Class-definitions		
RateMatchingAttribute	RateMatchingAttribute	Class-definitions		
ReferenceTFC_ID	ReferenceTFC-ID	Class-definitions		
RestrictedTrChInfo	RestrictedTrChInfo	Class-definitions		
RestrictedTrChInfoList	RestrictedTrChInfoList	Class-definitions		
SemistaticTF_Information	SemistaticTF-Information	Class-definitions		
SignalledGainFactors	SignalledGainFactors	Class-definitions		
SplitTFCI_Signalling	SplitTFCI-Signalling	Class-definitions		
SplitType	SplitType	Class-definitions		
T1_ReleaseTimer	T1-ReleaseTimer	Class-definitions		
TFC_Subset	TFC-Subset	Class-definitions		
TFC_SubsetList	TFC-SubsetList	Class-definitions		
TFC_Value	TFC-Value	Class-definitions		
TFCI_Field2_Information	TFCI-Field2-Information	Class-definitions		
TFCI_Range	TFCI-Range	Class-definitions		
TFCI_RangeList	TFCI-RangeList	Class-definitions		
TFCS	TFCS	Class-definitions		
TFCS_Identity	TFCS-Identity	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
TFCS_IdentityPlain	TFCS-IdentityPlain	Class-definitions		
TFCS_InfoForDSCH	TFCS-InfoForDSCH	Class-definitions		
TFCS_ReconfAdd	TFCS-ReconfAdd	Class-definitions		
TFCS_Removal	TFCS-Removal	Class-definitions		
TFCS_RemovalList	TFCS-RemovalList	Class-definitions		
TimeDurationBeforeRetry	TimeDurationBeforeRetry	Class-definitions		
TM_SignallingInfo	TM-SignallingInfo	Class-definitions		
TransmissionTimeInterval	TransmissionTimeInterval	Class-definitions		
TransmissionTimeValidity	TransmissionTimeValidity	Class-definitions		
TransportChannelIdentity	TransportChannelIdentity	Class-definitions		
TransportChannelIdentityDCHandDSCH	TransportChannelIdentityDCHandDSCH	Class-definitions		
TransportFormatSet	TransportFormatSet	Class-definitions		
TransportFormatSet_LCR	TransportFormatSet_LCR	Class-definitions		
UL_AddReconfTransChInfoList	UL-AddReconfTransChInfoList	Class-definitions		
UL_AddReconfTransChInfoList_r6	UL-AddReconfTransChInfoList-r6	Class-definitions		
UL_AddReconfTransChInformation	UL-AddReconfTransChInformation	Class-definitions		
UL_AddReconfTransChInformation_r6	UL-AddReconfTransChInformation-r6	Class-definitions		
UL_CommonTransChInfo	UL-CommonTransChInfo	Class-definitions		
UL_CommonTransChInfo_r4	UL-CommonTransChInfo-r4	Class-definitions		
UL_ControlledTrChList	UL-ControlledTrChList	Class-definitions		
UL_DeletedTransChInfoList	UL-DeletedTransChInfoList	Class-definitions		
UL_DeletedTransChInfoList_r6	UL-DeletedTransChInfoList-r6	Class-definitions		
UL_TransportChannelIdentity	UL-TransportChannelIdentity	Class-definitions		
UL_TransportChannelIdentity_r6	UL-TransportChannelIdentity-r6	Class-definitions		
UL_TrCH_Type	UL-TrCH-Type	Class-definitions		
USCH_TransportChannelsInfo	USCH-TransportChannelsInfo	Class-definitions		
ACK_NACK_repetitionFactor	ACK-NACK-repetitionFactor	Class-definitions		
AC_To_ASC_Mapping	AC-To-ASC-Mapping	Class-definitions		
AC_To_ASC_MappingTable	AC-To-ASC-MappingTable	Class-definitions		
AccessServiceClass_FDD	AccessServiceClass-FDD	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
AccessServiceClass_TDD	AccessServiceClass-TDD	Class-definitions		
AccessServiceClass_TDD_LCR_r4	AccessServiceClass-TDD-LCR-r4	Class-definitions		
AdditionalPRACH_TF_and_TFCS_CCCH_IEs	AdditionalPRACH-TF-and-TFCS-CCCH-IEs	Class-definitions		
AdditionalPRACH_TF_and_TFCS_CCCH	AdditionalPRACH-TF-and-TFCS-CCCH	Class-definitions		
AdditionalPRACH_TF_and_TFCS_CCCH_List	AdditionalPRACH-TF-and-TFCS-CCCH-List	Class-definitions		
AICH_Info	AICH-Info	Class-definitions		
AICH_PowerOffset	AICH-PowerOffset	Class-definitions		
AICH_TransmissionTiming	AICH-TransmissionTiming	Class-definitions		
AllocationPeriodInfo	AllocationPeriodInfo	Class-definitions		
Alpha	Alpha	Class-definitions		
AP_AICH_ChannelisationCode	AP-AICH-ChannelisationCode	Class-definitions		
AP_PreambleScramblingCode	AP-PreambleScramblingCode	Class-definitions		
AP_Signature	AP-Signature	Class-definitions		
AP_Signature_VCAM	AP-Signature-VCAM	Class-definitions		
AP_Subchannel	AP-Subchannel	Class-definitions		
ASCSetting_FDD	ASCSetting-FDD	Class-definitions		
ASCSetting_TDD	ASCSetting-TDD	Class-definitions		
ASCSetting_TDD_LCR_r4	ASCSetting-TDD-LCR-r4	Class-definitions		
AvailableAP_Signature_VCAMList	AvailableAP-Signature-VCAMList	Class-definitions		
AvailableAP_SignatureList	AvailableAP-SignatureList	Class-definitions		
AvailableAP_SubchannelList	AvailableAP-SubchannelList	Class-definitions		
AvailableMinimumSF_ListVCAM	AvailableMinimumSF-ListVCAM	Class-definitions		
AvailableMinimumSF_VCAM	AvailableMinimumSF-VCAM	Class-definitions		
AvailableSignatures	AvailableSignatures	Class-definitions		
AvailableSubChannelNumbers	AvailableSubChannelNumbers	Class-definitions		
BEACON_PL_Est	BEACON-PL-Est	Class-definitions		
BurstType	BurstType	Class-definitions		
Bler_Target	Bler-Target	Class-definitions		
CCTrCH_PowerControlInfo	CCTrCH-PowerControlInfo	Class-definitions		
CCTrCH_PowerControlInfo_r4	CCTrCH-PowerControlInfo-r4	Class-definitions		
CCTrCH_PowerControlInfo_r5	CCTrCH-PowerControlInfo-r5	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CD_AccessSlotSubchannel	CD-AccessSlotSubchannel	Class-definitions		
CD_AccessSlotSubchannelList	CD-AccessSlotSubchannelList	Class-definitions		
CD_CA_ICH_ChannelisationCode	CD-CA-ICH-ChannelisationCode	Class-definitions		
CD_PreambleScramblingCode	CD-PreambleScramblingCode	Class-definitions		
CD_SignatureCode	CD-SignatureCode	Class-definitions		
CD_SignatureCodeList	CD-SignatureCodeList	Class-definitions		
CellAndChannelIdentity	CellAndChannelIdentity	Class-definitions		
CellParametersID	CellParametersID	Class-definitions		
Cfntargetsfncframeoffset	Cfntargetsfncframeoffset	Class-definitions		
ChannelAssignmentActive	ChannelAssignmentActive	Class-definitions		
ChannelisationCode256	ChannelisationCode256	Class-definitions		
ChannelReqParamsForUCSM	ChannelReqParamsForUCSM	Class-definitions		
ClosedLoopTimingAdjustMode	ClosedLoopTimingAdjustMode	Class-definitions		
CodeNumberDSCH	CodeNumberDSCH	Class-definitions		
CodeRange	CodeRange	Class-definitions		
CodeWordSet	CodeWordSet	Class-definitions		
CommonTimeslotInfo	CommonTimeslotInfo	Class-definitions		
CommonTimeslotInfoSCCPCH	CommonTimeslotInfoSCCPCH	Class-definitions		
ConstantValue	ConstantValue	Class-definitions		
ConstantValueTdd	ConstantValueTdd	Class-definitions		
CPCH_PersistenceLevels	CPCH-PersistenceLevels	Class-definitions		
CPCH_PersistenceLevelsList	CPCH-PersistenceLevelsList	Class-definitions		
CPCH_SetInfo	CPCH-SetInfo	Class-definitions		
CPCH_SetInfoList	CPCH-SetInfoList	Class-definitions		
CPCH_StatusIndicationMode	CPCH-StatusIndicationMode	Class-definitions		
CQI_RepetitionFactor	CQI-RepetitionFactor	Class-definitions		
CSICH_PowerOffset	CSICH-PowerOffset	Class-definitions		
DefaultDPCH_OffsetValueFDD	DefaultDPCH-OffsetValueFDD	Class-definitions		
DefaultDPCH_OffsetValueTDD	DefaultDPCH-OffsetValueTDD	Class-definitions		
DeltaPp_m	DeltaPp-m	Class-definitions		
DeltaCQI	DeltaCQI	Class-definitions		
DeltaNACK	DeltaNACK	Class-definitions		
DeltaACK	DeltaACK	Class-definitions		
DeltaSIR	DeltaSIR	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DHS_Sync	DHS-Sync	Class-definitions		
DL_CCTrCh	DL-CCTrCh	Class-definitions		
DL_CCTrCh_r4	DL-CCTrCh-r4	Class-definitions		
DL_CCTrChList	DL-CCTrChList	Class-definitions		
DL_CCTrChList_r4	DL-CCTrChList-r4	Class-definitions		
DL_CCTrChListToRe move	DL-CCTrChListToRe move	Class-definitions		
DL_ChannelisationCo de	DL-ChannelisationCo de	Class-definitions		
DL_ChannelisationCo deList	DL-ChannelisationCo deList	Class-definitions		
DL_CommonInformati on	DL-CommonInformati on	Class-definitions		
DL_CommonInformati on_r4	DL-CommonInformati on-r4	Class-definitions		
DL_CommonInformati on_r5	DL-CommonInformati on-r5	Class-definitions		
DL_CommonInformati on_r6	DL-CommonInformati on-r6	Class-definitions		
DL_CommonInformati onPost	DL-CommonInformati onPost	Class-definitions		
DL_CommonInformati onPredef	DL-CommonInformati onPredef	Class-definitions		
DL_CompressedMode Method	DL-CompressedMode Method	Class-definitions		
DL_DPCH_InfoCom mon	DL-DPCH-InfoCom mon	Class-definitions		
DL_DPCH_InfoCom mon_r4	DL-DPCH-InfoCom mon-r4	Class-definitions		
DL_DPCH_InfoCom mon_r6	DL-DPCH-InfoCom mon-r6	Class-definitions		
DL_DPCH_InfoCom monPost	DL-DPCH-InfoCom monPost	Class-definitions		
DL_DPCH_InfoCom monPredef	DL-DPCH-InfoCom monPredef	Class-definitions		
DL_DPCH_InfoPerRL	DL-DPCH-InfoPerR L	Class-definitions		
DL_DPCH_InfoPerRL _r4	DL-DPCH-InfoPerR L-r4	Class-definitions		
DL_DPCH_InfoPerRL _r5	DL-DPCH-InfoPerR L-r5	Class-definitions		
DL_DPCH_InfoPerRL _r6	DL-DPCH-InfoPerR L-r6	Class-definitions		
DL_FDPCH_InfoPerR L_r6	DL-FDPCH-InfoPer RL-r6	Class-definitions		
DL_DPCH_InfoPerRL _PostFDD	DL-DPCH-InfoPerR L-PostFDD	Class-definitions		
DL_DPCH_InfoPerRL _PostTDD	DL-DPCH-InfoPerR L-PostTDD	Class-definitions		
DL_DPCH_InfoPerRL _PostTDD_LCR_r4	DL-DPCH-InfoPerR L-PostTDD-LCR-r4	Class-definitions		
DL_DPCH_PowerCo ntrollInfo	DL-DPCH-PowerCo ntrollInfo	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DL_FDPCH_InfoCommon_r6	DL-FDPCH-InfoCommon-r6	Class-definitions		
DL_FrameType	DL-FrameType	Class-definitions		
DL_HSPDSCH_Information	DL-HSPDSCH-Information	Class-definitions		
DL_HSPDSCH_Information_r6	DL-HSPDSCH-Information-r6	Class-definitions		
DL_HSPDSCH_TS_Configuration	DL-HSPDSCH-TS-Configuration	Class-definitions		
DL_InformationPerRL	DL-InformationPerRL	Class-definitions		
DL_InformationPerRL_r4	DL-InformationPerRL-r4	Class-definitions		
DL_InformationPerRL_r5	DL-InformationPerRL-r5	Class-definitions		
DL_InformationPerRL_r5bis	DL-InformationPerRL-r5bis	Class-definitions		
DL_InformationPerRL_r6	DL-InformationPerRL-r6	Class-definitions		
DL_InformationPerRL_List	DL-InformationPerRL-List	Class-definitions		
DL_InformationPerRL_List_r4	DL-InformationPerRL-List-r4	Class-definitions		
DL_InformationPerRL_List_r5	DL-InformationPerRL-List-r5	Class-definitions		
DL_InformationPerRL_List_r6	DL-InformationPerRL-List-r6	Class-definitions		
DL_InformationPerRL_List_r5bis	DL-InformationPerRL-List-r5bis	Class-definitions		
DL_InformationPerRL_ListPostFDD	DL-InformationPerRL-ListPostFDD	Class-definitions		
DL_InformationPerRL_PostFDD	DL-InformationPerRL-PostFDD	Class-definitions		
DL_InformationPerRL_PostTDD	DL-InformationPerRL-PostTDD	Class-definitions		
DL_InformationPerRL_PostTDD_LCR_r4	DL-InformationPerRL-PostTDD-LCR-r4	Class-definitions		
DL_PDSCH_Information	DL-PDSCH-Information	Class-definitions		
DL_rate_matching_restriction	DL-rate-matching-restriction	Class-definitions		
DL_TPC_PowerOffsetPerRL	DL-TPC-PowerOffsetPerRL	Class-definitions		
DL_TPC_PowerOffsetPerRL_List	DL-TPC-PowerOffsetPerRL-List	Class-definitions		
DL_TS_ChannelisationCode	DL-TS-ChannelisationCode	Class-definitions		
DL_TS_ChannelisationCodesShort	DL-TS-ChannelisationCodesShort	Class-definitions		
DownlinkAdditionalTimeslots	DownlinkAdditionalTimeslots	Class-definitions		
DownlinkAdditionalTimeslots_LCR_r4	DownlinkAdditionalTimeslots-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DownlinkTimeslotsCodes	DownlinkTimeslotsCodes	Class-definitions		
DownlinkTimeslotsCodes_LCR_r4	DownlinkTimeslotsCodes-LCR-r4	Class-definitions		
DPC_Mode	DPC-Mode	Class-definitions		
DPCCH_PowerOffset	DPCCH-PowerOffset	Class-definitions		
DPCCH_PowerOffset2	DPCCH-PowerOffset2	Class-definitions		
DPCH_CompactedModeInfo	DPCH-CompactedModeInfo	Class-definitions		
DPCH_CompactedModeStatusInfo	DPCH-CompactedModeStatusInfo	Class-definitions		
DPCH_FrameOffset	DPCH-FrameOffset	Class-definitions		
DSCH_Mapping	DSCH-Mapping	Class-definitions		
DSCH_MappingList	DSCH-MappingList	Class-definitions		
DSCH_RadioLinkIdentifier	DSCH-RadioLinkIdentifier	Class-definitions		
DSCH_TransportChannelsInfo	DSCH-TransportChannelsInfo	Class-definitions		
DurationTimeInfo	DurationTimeInfo	Class-definitions		
DynamicPersistenceLevel	DynamicPersistenceLevel	Class-definitions		
DynamicPersistenceLevelList	DynamicPersistenceLevelList	Class-definitions		
DynamicPersistenceLevelTF_List	DynamicPersistenceLevelTF-List	Class-definitions		
DynamicTFInformationCCCH	DynamicTFInformationCCCH	Class-definitions		
E_AGCH_ChannelisationCode	E-AGCH-ChannelisationCode	Class-definitions		
E_AGCH_Information	E-AGCH-Information	Class-definitions		
E_DCH_MinimumSet_E_TFCI	E-DCH-MinimumSet-E-TFCI	Class-definitions		
E_DCH_ReconfigurationInfo	E-DCH-ReconfigurationInfo	Class-definitions		
E_DCH_RL_InfoNewServingCell	E-DCH-RL-InfoNewServingCell	Class-definitions		
E_DCH_RL_InfoOtherCell	E-DCH-RL-InfoOtherCell	Class-definitions		
E_DPCCH_Info	E-DPCCH-Info	Class-definitions		
E_DPCCH_DPCCH_PowerOffset	E-DPCCH-DPCCH-PowerOffset	Class-definitions		
E_DPDCH_Info	E-DPDCH-Info	Class-definitions		
E_DPDCH_PeriodicityOfSchedInfo	E-DPDCH-PeriodicityOfSchedInfo	Class-definitions		
E_DPDCH_PL_NonMax	E-DPDCH-PL-NonMax	Class-definitions		
E_DPDCH_Reference_E_TFCI	E-DPDCH-Reference-E-TFCI	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
E_DPDCH_Reference_E_TFCIList	E-DPDCH-Reference-E-TFCIList	Class-definitions		
E_DPDCH_SchedulingInfoConfiguration	E-DPDCH-SchedulingInfoConfiguration	Class-definitions		
E_DPDCH_SchedulingTransmConfiguration	E-DPDCH-SchedulingTransmConfiguration	Class-definitions		
E_DPDCH_MaxChannelisationCodes	E-DPDCH-MaxChannelisationCodes	Class-definitions		
E_HICH_ChannelisationCode	E-HICH-ChannelisationCode	Class-definitions		
E_HICH_Information	E-HICH-Information	Class-definitions		
E_HICH_RGCH_SignatureSequence	E-HICH-RGCH-SignatureSequence	Class-definitions		
E_RGCH_CombinationIndex	E-RGCH-CombinationIndex	Class-definitions		
E_RGCH_Information	E-RGCH-Information	Class-definitions		
E_TFCI_TableIndex	E-TFCI-TableIndex	Class-definitions		
FACH_PCH_Information	FACH-PCH-Information	Class-definitions		
FACH_PCH_InformationList	FACH-PCH-InformationList	Class-definitions		
Feedback_cycle	Feedback-cycle	Class-definitions		
FPACH_Info_r4	FPACH-Info-r4	Class-definitions		
FrequencyInfo	FrequencyInfo	Class-definitions		
FrequencyInfoFDD	FrequencyInfoFDD	Class-definitions		
FrequencyInfoTDD	FrequencyInfoTDD	Class-definitions		
HappyBit_DelayCondition	HappyBit-DelayCondition	Class-definitions		
HARQ_Preamble_Mode	HARQ-Preamble-Mode	Class-definitions		
HS_ChannelisationCode_LCR	HS-ChannelisationCode-LCR	Class-definitions		
HS_PDSCH_Midamble_Configuration_TDD128	HS-PDSCH-Midamble-Configuration-TDD128	Class-definitions		
HS_SCCH_Info	HS-SCCH-Info	Class-definitions		
HS_SCCH_Info_r6	HS-SCCH-Info-r6	Class-definitions		
HS_SCCH_Codes	HS-SCCH-Codes	Class-definitions		
HS_SCCH_TDD128	HS-SCCH-TDD128	Class-definitions		
HS_SICH_Configuration_TDD128	HS-SICH-Configuration-TDD128	Class-definitions		
HS_SCCH_TDD384	HS-SCCH-TDD384	Class-definitions		
HS_SCCH_TDD384_r6	HS-SCCH-TDD384-r6	Class-definitions		
HS_SICH_Configuration_TDD384	HS-SICH-Configuration-TDD384	Class-definitions		
HS_SICH_Power_Control_Info_TDD384	HS-SICH-Power-Control-Info-TDD384	Class-definitions		
IndividualTimeslotInfo	IndividualTimeslotInfo	Class-definitions		
IndividualTimeslotInfo_LCR_r4	IndividualTimeslotInfo-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
IndividualTimeslotInfo_LCR_r4_ext	IndividualTimeslotInfo-LCR-r4-ext	Class-definitions		
IndividualTS_Interference	IndividualTS-Interference	Class-definitions		
IndividualTS_InterferenceList	IndividualTS-InterferenceList	Class-definitions		
ITP	ITP	Class-definitions		
NidentifyAbort	NidentifyAbort	Class-definitions		
MaxAllowedUL_TX_Power	MaxAllowedUL-TX-Power	Class-definitions		
MaxAvailablePCPCH_Number	MaxAvailablePCPCH-Number	Class-definitions		
MaxPowerIncrease_r4	MaxPowerIncrease-r4	Class-definitions		
MaxTFCI_Field2Value	MaxTFCI-Field2Value	Class-definitions		
Measurement_Feedback_Info	Measurement-Feedback-Info	Class-definitions		
MidambleConfigurationBurstType1and3	MidambleConfigurationBurstType1and3	Class-definitions		
MidambleConfigurationBurstType2	MidambleConfigurationBurstType2	Class-definitions		
MidambleShiftAndBurstType	MidambleShiftAndBurstType	Class-definitions		
MidambleShiftAndBurstType_DL	MidambleShiftAndBurstType-DL	Class-definitions		
MidambleShiftAndBurstType_LCR_r4	MidambleShiftAndBurstType-LCR-r4	Class-definitions		
MidambleShiftLong	MidambleShiftLong	Class-definitions		
MidambleShiftShort	MidambleShiftShort	Class-definitions		
MinimumSpreadingFactor	MinimumSpreadingFactor	Class-definitions		
MultiCodeInfo	MultiCodeInfo	Class-definitions		
N_EOT	N-EOT	Class-definitions		
N_GAP	N-GAP	Class-definitions		
N_PCH	N-PCH	Class-definitions		
N_StartMessage	N-StartMessage	Class-definitions		
NB01	NB01	Class-definitions		
NF_Max	NF-Max	Class-definitions		
NumberOfDPDCH	NumberOfDPDCH	Class-definitions		
NumberOfFBI_Bits	NumberOfFBI-Bits	Class-definitions		
OpenLoopPowerControl_TDD	OpenLoopPowerControl-TDD	Class-definitions		
OpenLoopPowerControl_IPDL_TDD_r4	OpenLoopPowerControl-IPDL-TDD-r4	Class-definitions		
PagingIndicatorLength	PagingIndicatorLength	Class-definitions		
PC_Preamble	PC-Preamble	Class-definitions		
PCP_Length	PCP-Length	Class-definitions		
PCPCH_ChannelInfo	PCPCH-ChannelInfo	Class-definitions		
PCPCH_ChannelInfoList	PCPCH-ChannelInfoList	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
PCPICH_UsageForChannelEst	PCPICH-UsageForChannelEst	Class-definitions		
PDSCH_CapacityAllocationInfo	PDSCH-CapacityAllocationInfo	Class-definitions		
PDSCH_CapacityAllocationInfo_r4	PDSCH-CapacityAllocationInfo-r4	Class-definitions		
PDSCH_CodeInfo	PDSCH-CodeInfo	Class-definitions		
PDSCH_CodeInfoList	PDSCH-CodeInfoList	Class-definitions		
PDSCH_CodeMap	PDSCH-CodeMap	Class-definitions		
PDSCH_CodeMapList	PDSCH-CodeMapList	Class-definitions		
PDSCH_CodeMapping	PDSCH-CodeMapping	Class-definitions		
PDSCH_Identity	PDSCH-Identity	Class-definitions		
PDSCH_Info	PDSCH-Info	Class-definitions		
PDSCH_Info_r4	PDSCH-Info-r4	Class-definitions		
PDSCH_Info_LCR_r4	PDSCH-Info-LCR-r4	Class-definitions		
PDSCH_PowerControlInfo	PDSCH-PowerControlInfo	Class-definitions		
PDSCH_SHO_DCH_Info	PDSCH-SHO-DCH-Info	Class-definitions		
PDSCH_SysInfo	PDSCH-SysInfo	Class-definitions		
PDSCH_SysInfo_HCR_r5	PDSCH-SysInfo-HCR-r5	Class-definitions		
PDSCH_SysInfo_LCR_r4	PDSCH-SysInfo-LCR-r4	Class-definitions		
PDSCH_SysInfoList	PDSCH-SysInfoList	Class-definitions		
PDSCH_SysInfoList_HCR_r5	PDSCH-SysInfoList-HCR-r5	Class-definitions		
PDSCH_SysInfoList_LCR_r4	PDSCH-SysInfoList-LCR-r4	Class-definitions		
PDSCH_SysInfoList_SFN	PDSCH-SysInfoList-SFN	Class-definitions		
PDSCH_SysInfoList_SFN_HCR_r5	PDSCH-SysInfoList-SFN-HCR-r5	Class-definitions		
PDSCH_SysInfoList_SFN_LCR_r4	PDSCH-SysInfoList-SFN-LCR-r4	Class-definitions		
PersistenceScalingFactor	PersistenceScalingFactor	Class-definitions		
PersistenceScalingFactorList	PersistenceScalingFactorList	Class-definitions		
PI_CountPerFrame	PI-CountPerFrame	Class-definitions		
PichChannelisationCodeList_LCR_r4	PichChannelisationCodeList-LCR-r4	Class-definitions		
PICH_Info	PICH-Info	Class-definitions		
PICH_Info_LCR_r4	PICH-Info-LCR-r4	Class-definitions		
PICH_PowerOffset	PICH-PowerOffset	Class-definitions		
PilotBits128	PilotBits128	Class-definitions		
PilotBits256	PilotBits256	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MeasurementPowerOfset	MeasurementPowerOfset	Class-definitions		
PositionFixedOrFlexible	PositionFixedOrFlexible	Class-definitions		
PowerControlAlgorithm	PowerControlAlgorithm	Class-definitions		
PowerOffsetPilot_pdpdch	PowerOffsetPilot-pdpdch	Class-definitions		
PowerOffsetTPC_pdpdch	PowerOffsetTPC-pdpdch	Class-definitions		
PowerRampStep	PowerRampStep	Class-definitions		
PRACH_ChanCodes_LCR_r4	PRACH-ChanCodes-LCR-r4	Class-definitions		
PRACH_Definition_LCR_r4	PRACH-Definition-LCR-r4	Class-definitions		
PRACH_Midamble	PRACH-Midamble	Class-definitions		
PRACH_Partitioning	PRACH-Partitioning	Class-definitions		
PRACH_Partitioning_LCR_r4	PRACH-Partitioning-LCR-r4	Class-definitions		
PRACH_PowerOffset	PRACH-PowerOffset	Class-definitions		
PRACH_RACH_Info	PRACH-RACH-Info	Class-definitions		
PRACH_RACH_Info_LCR_r4	PRACH-RACH-Info-LCR-r4	Class-definitions		
PRACH_SystemInformation	PRACH-SystemInformation	Class-definitions		
PRACH_SystemInformation_LCR_r4	PRACH-SystemInformation-LCR-r4	Class-definitions		
PRACH_SystemInformationList	PRACH-SystemInformationList	Class-definitions		
PRACH_SystemInformationList_LCR_r4	PRACH-SystemInformationList-LCR-r4	Class-definitions		
PreambleRetransMax	PreambleRetransMax	Class-definitions		
PreambleScramblingCodeWordNumber	PreambleScramblingCodeWordNumber	Class-definitions		
PreDefPhyChConfiguration	PreDefPhyChConfiguration	Class-definitions		
PrimaryCCPCH_Info	PrimaryCCPCH-Info	Class-definitions		
PrimaryCCPCH_Info_r4	PrimaryCCPCH-Info-r4	Class-definitions		
PrimaryCCPCH_Info_LCR_r4	PrimaryCCPCH-Info-LCR-r4	Class-definitions		
PrimaryCCPCH_Info_LCR_r4_ext	PrimaryCCPCH-Info-LCR-r4-ext	Class-definitions		
PrimaryCCPCH_InfoPost	PrimaryCCPCH-InfoPost	Class-definitions		
PrimaryCCPCH_InfoPostTDD_LCR_r4	PrimaryCCPCH-InfoPostTDD-LCR-r4	Class-definitions		
PrimaryCCPCH_TX_Power	PrimaryCCPCH-TX-Power	Class-definitions		
PrimaryCPICH_Info	PrimaryCPICH-Info	Class-definitions		
PrimaryCPICH_TX_Power	PrimaryCPICH-TX-Power	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
PrimaryScramblingCode	PrimaryScramblingCode	Class-definitions		
PuncturingLimit	PuncturingLimit	Class-definitions		
PUSCH_CapacityAllocationInfo	PUSCH-CapacityAllocationInfo	Class-definitions		
PUSCH_CapacityAllocationInfo_r4	PUSCH-CapacityAllocationInfo-r4	Class-definitions		
PUSCH_Identity	PUSCH-Identity	Class-definitions		
PUSCH_Info	PUSCH-Info	Class-definitions		
PUSCH_Info_r4	PUSCH-Info-r4	Class-definitions		
PUSCH_Info_LCR_r4	PUSCH-Info-LCR-r4	Class-definitions		
PUSCH_PowerControlInfo_r4	PUSCH-PowerControlInfo-r4	Class-definitions		
PUSCH_SysInfo	PUSCH-SysInfo	Class-definitions		
PUSCH_SysInfo_HCR_r5	PUSCH-SysInfo-HCR-r5	Class-definitions		
PUSCH_SysInfo_LCR_r4	PUSCH-SysInfo-LCR-r4	Class-definitions		
PUSCH_SysInfoList	PUSCH-SysInfoList	Class-definitions		
PUSCH_SysInfoList_HCR_r5	PUSCH-SysInfoList-HCR-r5	Class-definitions		
PUSCH_SysInfoList_LCR_r4	PUSCH-SysInfoList-LCR-r4	Class-definitions		
PUSCH_SysInfoList_SFN	PUSCH-SysInfoList-SFN	Class-definitions		
PUSCH_SysInfoList_SFN_HCR_r5	PUSCH-SysInfoList-SFN-HCR-r5	Class-definitions		
PUSCH_SysInfoList_SFN_LCR_r4	PUSCH-SysInfoList-SFN-LCR-r4	Class-definitions		
RACH_TransmissionParameters	RACH-TransmissionParameters	Class-definitions		
ReducedScramblingCodeNumber	ReducedScramblingCodeNumber	Class-definitions		
RepetitionPeriodAndLength	RepetitionPeriodAndLength	Class-definitions		
RepetitionPeriodLengthAndOffset	RepetitionPeriodLengthAndOffset	Class-definitions		
ReplacedPDSCH_CodeInfo	ReplacedPDSCH-CodeInfo	Class-definitions		
ReplacedPDSCH_CodeInfoList	ReplacedPDSCH-CodeInfoList	Class-definitions		
RepPerLengthOffset_PICH	RepPerLengthOffset-PICH	Class-definitions		
RestrictedTrCH	RestrictedTrCH	Class-definitions		
RestrictedTrCH_InfoList	RestrictedTrCH-InfoList	Class-definitions		
RL_AdditionInformation	RL-AdditionInformation	Class-definitions		
RL_AdditionInformation_r6	RL-AdditionInformation-r6	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RL_AdditionInformationList	RL-AdditionInformationList	Class-definitions		
RL_AdditionInformationList_r6	RL-AdditionInformationList-r6	Class-definitions		
RL_IdentifierList	RL-IdentifierList	Class-definitions		
RL_RemovalInformationList	RL-RemovalInformationList	Class-definitions		
RPP	RPP	Class-definitions		
S_Field	S-Field	Class-definitions		
SCCPCH_ChannelisationCode	SCCPCH-ChannelisationCode	Class-definitions		
SCCPCH_ChannelisationCodeList	SCCPCH-ChannelisationCodeList	Class-definitions		
SCCPCH_InfoForFA CH	SCCPCH-InfoForFA CH	Class-definitions		
SCCPCH_InfoForFA CH_r4	SCCPCH-InfoForFA CH-r4	Class-definitions		
SCCPCH_SystemInformation	SCCPCH-SystemInformation	Class-definitions		
SCCPCH_SystemInformation_LCR_r4_ext	SCCPCH-SystemInformation-LCR-r4-ext	Class-definitions		
SCCPCH_SystemInformationList	SCCPCH-SystemInformationList	Class-definitions		
SCCPCH_SystemInformationList_LCR_r4_ext	SCCPCH-SystemInformationList-LCR-r4-ext	Class-definitions		
SCCPCH_SystemInformation_MBMS_r6	SCCPCH-SystemInformation-MBMS-r6	Class-definitions		
ScramblingCodeChange	ScramblingCodeChange	Class-definitions		
ScramblingCodeType	ScramblingCodeType	Class-definitions		
SecondaryCCPCH_Info	SecondaryCCPCH-Info	Class-definitions		
SecondaryCCPCH_Info_r4	SecondaryCCPCH-Info-r4	Class-definitions		
SecondaryCCPCH_Info_LCR_r4_ext	SecondaryCCPCH-Info-LCR-r4-ext	Class-definitions		
SecondaryCCPCH_Info_MBMS_r6	SecondaryCCPCH-Info-MBMS-r6	Class-definitions		
SecondaryCPICH_Info	SecondaryCPICH-Info	Class-definitions		
SecondaryScramblingCode	SecondaryScramblingCode	Class-definitions		
SecondInterleavingMode	SecondInterleavingMode	Class-definitions		
SF256_AndCodeNumber	SF256-AndCodeNumber	Class-definitions		
SF512_AndCodeNumber	SF512-AndCodeNumber	Class-definitions		
SF512_AndPilot	SF512-AndPilot	Class-definitions		
SF_PDSCH	SF-PDSCH	Class-definitions		
SF_PRACH	SF-PRACH	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SFN_TimeInfo	SFN-TimeInfo	Class-definitions		
SpecialBurstScheduling	SpecialBurstScheduling	Class-definitions		
SpreadingFactor	SpreadingFactor	Class-definitions		
SRB_delay	SRB-delay	Class-definitions		
SSDT_CellIdentity	SSDT-CellIdentity	Class-definitions		
SSDT_Information	SSDT-Information	Class-definitions		
SSDT_Information_r4	SSDT-Information-r4	Class-definitions		
SSDT_UL	SSDT-UL	Class-definitions		
SynchronisationParameters_r4	SynchronisationParameters-r4	Class-definitions		
SYNC_UL_Procedure_r4	SYNC-UL-Procedure-r4	Class-definitions		
SYNC_UL_Info_r4	SYNC-UL-Info-r4	Class-definitions		
TDD_FPACH_CCode16_r4	TDD-FPACH-CCode16-r4	Class-definitions		
TDD_UL_Interference	TDD-UL-Interference	Class-definitions		
TDD_PICH_CCode	TDD-PICH-CCode	Class-definitions		
TDD_PRACH_CCode8	TDD-PRACH-CCode8	Class-definitions		
TDD_PRACH_CCode16	TDD-PRACH-CCode16	Class-definitions		
TDD_PRACH_CCode_LCR_r4	TDD-PRACH-CCode-LCR-r4	Class-definitions		
TDD_PRACH_CCodeList	TDD-PRACH-CCodeList	Class-definitions		
TFC_ControlDuration	TFC-ControlDuration	Class-definitions		
TFCI_Coding	TFCI-Coding	Class-definitions		
TGCFN	TGCFN	Class-definitions		
TGD	TGD	Class-definitions		
TGL	TGL	Class-definitions		
TGMP	TGMP	Class-definitions		
TGP_Sequence	TGP-Sequence	Class-definitions		
TGPS_Reconfiguration_CFN	TGPS-Reconfiguration-CFN	Class-definitions		
TGP_SequenceList	TGP-SequenceList	Class-definitions		
TGP_SequenceShort	TGP-SequenceShort	Class-definitions		
TGPL	TGPL	Class-definitions		
TGPRC	TGPRC	Class-definitions		
TGPS_ConfigurationParameters	TGPS-ConfigurationParameters	Class-definitions		
TGPSI	TGPSI	Class-definitions		
TGSN	TGSN	Class-definitions		
TimeInfo	TimeInfo	Class-definitions		
TimeslotList	TimeslotList	Class-definitions		
TimeslotList_r4	TimeslotList-r4	Class-definitions		
TimeslotNumber	TimeslotNumber	Class-definitions		
TimeslotNumber_LCR_r4	TimeslotNumber-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
TimeslotNumber_PRA CH_LCR_r4	TimeslotNumber-PRA CH-LCR-r4	Class-definitions		
TimeslotSync2	TimeslotSync2	Class-definitions		
TimingOffset	TimingOffset	Class-definitions		
TimingMaintainedSync hInd	TimingMaintainedSync hInd	Class-definitions		
TPC_CombinationIndex	TPC-CombinationIndex	Class-definitions		
TPC_StepSizeFDD	TPC-StepSizeFDD	Class-definitions		
TPC_StepSizeTDD	TPC-StepSizeTDD	Class-definitions		
TreconfirmAbort	TreconfirmAbort	Class-definitions		
TX_DiversityMode	TX-DiversityMode	Class-definitions		
UARFCN	UARFCN	Class-definitions		
UCSM_Info	UCSM-Info	Class-definitions		
UL_CCTrCH	UL-CCTrCH	Class-definitions		
UL_CCTrCH_r4	UL-CCTrCH-r4	Class-definitions		
UL_CCTrCHList	UL-CCTrCHList	Class-definitions		
UL_CCTrCHList_r4	UL-CCTrCHList-r4	Class-definitions		
UL_CCTrCHListToRe move	UL-CCTrCHListToRe move	Class-definitions		
UL_CCTrChTPCList	UL-CCTrChTPCList	Class-definitions		
UL_ChannelRequirement	UL-ChannelRequirement	Class-definitions		
UL_ChannelRequirement_r4	UL-ChannelRequirement-r4	Class-definitions		
UL_ChannelRequirement_r5	UL-ChannelRequirement-r5	Class-definitions		
UL_ChannelRequirementWithCPCH_SetID	UL-ChannelRequirementWithCPCH-SetID	Class-definitions		
UL_ChannelRequirementWithCPCH_SetID_r4	UL-ChannelRequirementWithCPCH-SetID-r4	Class-definitions		
UL_ChannelRequirementWithCPCH_SetID_r5	UL-ChannelRequirementWithCPCH-SetID-r5	Class-definitions		
UL_CompressedMode Method	UL-CompressedMode Method	Class-definitions		
UL_DL_Mode	UL-DL-Mode	Class-definitions		
UL_DPCCH_SlotFormat	UL-DPCCH-SlotFormat	Class-definitions		
UL_DPCH_Info	UL-DPCH-Info	Class-definitions		
UL_DPCH_Info_r4	UL-DPCH-Info-r4	Class-definitions		
UL_DPCH_Info_r5	UL-DPCH-Info-r5	Class-definitions		
UL_DPCH_Info_r6	UL-DPCH-Info-r6	Class-definitions		
UL_DPCH_InfoPostFDD	UL-DPCH-InfoPostFDD	Class-definitions		
UL_DPCH_InfoPostTDD	UL-DPCH-InfoPostTDD	Class-definitions		
UL_DPCH_InfoPostTDD_LCR_r4	UL-DPCH-InfoPostTDD-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UL_DPCH_InfoPredef	UL-DPCH-InfoPredef	Class-definitions		
UL_DPCH_PowerControlInfo	UL-DPCH-PowerControlInfo	Class-definitions		
UL_DPCH_PowerControlInfo_r4	UL-DPCH-PowerControlInfo-r4	Class-definitions		
UL_DPCH_PowerControlInfo_r5	UL-DPCH-PowerControlInfo-r5	Class-definitions		
UL_DPCH_PowerControlInfo_r6	UL-DPCH-PowerControlInfo-r6	Class-definitions		
UL_DPCH_PowerControlInfoPostFDD	UL-DPCH-PowerControlInfoPostFDD	Class-definitions		
UL_DPCH_PowerControlInfoPostTDD	UL-DPCH-PowerControlInfoPostTDD	Class-definitions		
UL_DPCH_PowerControlInfoPostTDD_LCR_r4	UL-DPCH-PowerControlInfoPostTDD-LCR-r4	Class-definitions		
UL_DPCH_PowerControlInfoPredef	UL-DPCH-PowerControlInfoPredef	Class-definitions		
UL_EDCH_Information_r6	UL-EDCH-Information-r6	Class-definitions		
UL_Interference	UL-Interference	Class-definitions		
UL_ScramblingCode	UL-ScramblingCode	Class-definitions		
UL_SynchronisationParameters_r4	UL-SynchronisationParameters-r4	Class-definitions		
UL_TargetSIR	UL-TargetSIR	Class-definitions		
UL_TimingAdvance	UL-TimingAdvance	Class-definitions		
UL_TimingAdvanceControl	UL-TimingAdvanceControl	Class-definitions		
UL_TimingAdvanceControl_r4	UL-TimingAdvanceControl-r4	Class-definitions		
UL_TimingAdvanceControl_LCR_r4	UL-TimingAdvanceControl-LCR-r4	Class-definitions		
UL_TS_ChannelisationCode	UL-TS-ChannelisationCode	Class-definitions		
UL_TS_ChannelisationCodeList	UL-TS-ChannelisationCodeList	Class-definitions		
UplinkAdditionalTimeslots	UplinkAdditionalTimeslots	Class-definitions		
UplinkAdditionalTimeslots_LCR_r4	UplinkAdditionalTimeslots-LCR-r4	Class-definitions		
UplinkTimeslotsCodes	UplinkTimeslotsCodes	Class-definitions		
UplinkTimeslotsCodes_LCR_r4	UplinkTimeslotsCodes-LCR-r4	Class-definitions		
Wi_LCR	Wi-LCR	Class-definitions		
AcquisitionSatInfo	AcquisitionSatInfo	Class-definitions		
AcquisitionSatInfoList	AcquisitionSatInfoList	Class-definitions		
AdditionalMeasurementID_List	AdditionalMeasurementID-List	Class-definitions		
AlmanacSatInfo	AlmanacSatInfo	Class-definitions		
AlmanacSatInfoList	AlmanacSatInfoList	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
AverageRLC_BufferPayload	AverageRLC-BufferPayload	Class-definitions		
AzimuthAndElevation	AzimuthAndElevation	Class-definitions		
BadSatList	BadSatList	Class-definitions		
Frequency_Band	Frequency-Band	Class-definitions		
BCCH_ARFCN	BCCH-ARFCN	Class-definitions		
BLER_MeasurementResults	BLER-MeasurementResults	Class-definitions		
BLER_MeasurementResultsList	BLER-MeasurementResultsList	Class-definitions		
BLER_TransChIdList	BLER-TransChIdList	Class-definitions		
BSIC_VerificationRequired	BSIC-VerificationRequired	Class-definitions		
BSICReported	BSICReported	Class-definitions		
BurstModeParameters	BurstModeParameters	Class-definitions		
CellDCH_ReportCriteria	CellDCH-ReportCriteria	Class-definitions		
CellDCH_ReportCriteria_LCR_r4	CellDCH-ReportCriteria-LCR-r4	Class-definitions		
CellIndividualOffset	CellIndividualOffset	Class-definitions		
CellInfo	CellInfo	Class-definitions		
CellInfo_r4	CellInfo-r4	Class-definitions		
CellInfoSI_RSCP	CellInfoSI-RSCP	Class-definitions		
CellInfoSI_RSCP_LCR_r4	CellInfoSI-RSCP-LCR-r4	Class-definitions		
CellInfoSI_ECN0	CellInfoSI-ECN0	Class-definitions		
CellInfoSI_ECN0_LCR_r4	CellInfoSI-ECN0-LCR-r4	Class-definitions		
CellInfoSI_HCS_RSCP	CellInfoSI-HCS-RSCP	Class-definitions		
CellInfoSI_HCS_RSCP_LCR_r4	CellInfoSI-HCS-RSCP-LCR-r4	Class-definitions		
CellInfoSI_HCS_ECN0	CellInfoSI-HCS-ECN0	Class-definitions		
CellInfoSI_HCS_ECN0_LCR_r4	CellInfoSI-HCS-ECN0-LCR-r4	Class-definitions		
CellMeasuredResults	CellMeasuredResults	Class-definitions		
CellMeasurementEventResults	CellMeasurementEventResults	Class-definitions		
CellMeasurementEventResults_LCR_r4	CellMeasurementEventResults-LCR-r4	Class-definitions		
CellReportingQuantities	CellReportingQuantities	Class-definitions		
CellSelectReselectInfoSIB_11_12	CellSelectReselectInfoSIB-11-12	Class-definitions		
CellSelectReselectInfoSIB_11_12_RSCP	CellSelectReselectInfoSIB-11-12-RSCP	Class-definitions		
CellSelectReselectInfoSIB_11_12_ECN0	CellSelectReselectInfoSIB-11-12-ECN0	Class-definitions		
CellSelectReselectInfoSIB_11_12_HCS_RSCP	CellSelectReselectInfoSIB-11-12-HCS-RSCP	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CellSelectReselectInfo SIB_11_12_HCS_EC N0	CellSelectReselectInfo SIB-11-12-HCS-E CN0	Class-definitions		
CellSelectReselectInfo _v590ext	CellSelectReselectInfo -v590ext	Class-definitions		
CellSelectReselectInfo PCHFACH_v5b0ext	CellSelectReselectInfo PCHFACH-v5b0ext	Class-definitions		
CellSelectReselectInfo TresselectionScaling_v5 c0ext	CellSelectReselectInfo TresselectionScaling-v 5c0ext	Class-definitions		
CellsForInterFreqMeas List	CellsForInterFreqMeas List	Class-definitions		
CellsForInterRATMeas List	CellsForInterRATMeas List	Class-definitions		
CellsForIntraFreqMeas List	CellsForIntraFreqMeas List	Class-definitions		
CellSynchronisationInf o	CellSynchronisationInf o	Class-definitions		
CellToReport	CellToReport	Class-definitions		
CellToReportList	CellToReportList	Class-definitions		
CodePhaseSearchWin dow	CodePhaseSearchWin dow	Class-definitions		
CountC_SF_N_Fram_e_ difference	CountC-SF_N-Fram_e_ -difference	Class-definitions		
CPICH_Ec_N0	CPICH-Ec-N0	Class-definitions		
CPICH_RSCP	CPICH-RSCP	Class-definitions		
DeltaPRC	DeltaPRC	Class-definitions		
DeltaQrxlevmin	DeltaQrxlevmin	Class-definitions		
DeltaRSCP	DeltaRSCP	Class-definitions		
DeltaRSCPPerCell	DeltaRSCPPerCell	Class-definitions		
DeltaRRC	DeltaRRC	Class-definitions		
DGPS_CorrectionSatl nfo	DGPS-CorrectionSat Info	Class-definitions		
DGPS_CorrectionSatl nfoList	DGPS-CorrectionSat InfoList	Class-definitions		
DiffCorrectionStatus	DiffCorrectionStatus	Class-definitions		
DL_TransportChannel BLER	DL-TransportChannel BLER	Class-definitions		
DopplerUncertainty	DopplerUncertainty	Class-definitions		
EllipsoidPoint	EllipsoidPoint	Class-definitions		
EllipsoidPointAltitude	EllipsoidPointAltitude	Class-definitions		
EllipsoidPointAltitudeE llipsoide	EllipsoidPointAltitudeE llipsoide	Class-definitions		
EllipsoidPointUncertCi rcle	EllipsoidPointUncertCi rcle	Class-definitions		
EllipsoidPointUncertEl lipse	EllipsoidPointUncertEl lipse	Class-definitions		
EnvironmentCharacte risation	EnvironmentCharacte risation	Class-definitions		
Event1a	Event1a	Class-definitions		
Event1a_r4	Event1a-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
Event1a_LCR_r4	Event1a-LCR-r4	Class-definitions		
Event1b	Event1b	Class-definitions		
Event1b_r4	Event1b-r4	Class-definitions		
Event1b_LCR_r4	Event1b-LCR-r4	Class-definitions		
Event1c	Event1c	Class-definitions		
Event1d	Event1d	Class-definitions		
Event1e	Event1e	Class-definitions		
Event1e_r6	Event1e-r6	Class-definitions		
Event1f	Event1f	Class-definitions		
Event1f_r6	Event1f-r6	Class-definitions		
Event1j_r6	Event1j-r6	Class-definitions		
Event2a	Event2a	Class-definitions		
Event2a_r6	Event2a-r6	Class-definitions		
Event2b	Event2b	Class-definitions		
Event2b_r6	Event2b-r6	Class-definitions		
Event2c	Event2c	Class-definitions		
Event2c_r6	Event2c-r6	Class-definitions		
Event2d	Event2d	Class-definitions		
Event2d_r6	Event2d-r6	Class-definitions		
Event2e	Event2e	Class-definitions		
Event2e_r6	Event2e-r6	Class-definitions		
Event2f	Event2f	Class-definitions		
Event2f_r6	Event2f-r6	Class-definitions		
Event3a	Event3a	Class-definitions		
Event3b	Event3b	Class-definitions		
Event3c	Event3c	Class-definitions		
Event3d	Event3d	Class-definitions		
EventIDInterFreq	EventIDInterFreq	Class-definitions		
EventIDInterRAT	EventIDInterRAT	Class-definitions		
EventIDIntraFreq	EventIDIntraFreq	Class-definitions		
EventResults	EventResults	Class-definitions		
ExtraDopplerInfo	ExtraDopplerInfo	Class-definitions		
FACH_MeasurementOccasionInfo	FACH-MeasurementOccasionInfo	Class-definitions		
FACH_MeasurementOccasionInfo_LCR_r4_ext	FACH-MeasurementOccasionInfo-LCR-r4-ext	Class-definitions		
FilterCoefficient	FilterCoefficient	Class-definitions		
FineSFN_SF	FineSFN-SF	Class-definitions		
ForbiddenAffectCell	ForbiddenAffectCell	Class-definitions		
ForbiddenAffectCell_r4	ForbiddenAffectCell-r4	Class-definitions		
ForbiddenAffectCell_LCR_r4	ForbiddenAffectCell-LCR-r4	Class-definitions		
ForbiddenAffectCellList	ForbiddenAffectCellList	Class-definitions		
ForbiddenAffectCellList_r4	ForbiddenAffectCellList-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
ForbiddenAffectCellList_LCR_r4	ForbiddenAffectCellList-LCR-r4	Class-definitions		
FreqQualityEstimateQuantity_FDD	FreqQualityEstimateQuantity-FDD	Class-definitions		
FreqQualityEstimateQuantity_TDD	FreqQualityEstimateQuantity-TDD	Class-definitions		
GPS_MeasurementParameter	GPS-MeasurementParameter	Class-definitions		
GPS_MeasurementParameterList	GPS-MeasurementParameterList	Class-definitions		
GSM_CarrierRSSI	GSM-CarrierRSSI	Class-definitions		
GSM_MeasuredResults	GSM-MeasuredResults	Class-definitions		
GSM_MeasuredResultsList	GSM-MeasuredResultsList	Class-definitions		
GPS_TOW_1msec	GPS-TOW-1msec	Class-definitions		
GPS_TOW_Assist	GPS-TOW-Assist	Class-definitions		
GPS_TOW_AssistList	GPS-TOW-AssistList	Class-definitions		
HCS_CellReselectInformation_RSCP	HCS-CellReselectInformation-RSCP	Class-definitions		
HCS_CellReselectInformation_ECNO	HCS-CellReselectInformation-ECNO	Class-definitions		
HCS_NeighbouringCellInformation_RSCP	HCS-NeighbouringCellInformation-RSCP	Class-definitions		
HCS_NeighbouringCellInformation_ECNO	HCS-NeighbouringCellInformation-ECNO	Class-definitions		
HCS_PRIO	HCS-PRIO	Class-definitions		
HCS_ServingCellInformation	HCS-ServingCellInformation	Class-definitions		
Hysteresis	Hysteresis	Class-definitions		
HysteresisInterFreq	HysteresisInterFreq	Class-definitions		
InterFreqCell	InterFreqCell	Class-definitions		
InterFreqCell_LCR_r4	InterFreqCell-LCR-r4	Class-definitions		
InterFreqCellID	InterFreqCellID	Class-definitions		
InterFreqCellInfoList	InterFreqCellInfoList	Class-definitions		
InterFreqCellInfoList_r4	InterFreqCellInfoList-r4	Class-definitions		
InterFreqCellInfoSI_List_RSCP	InterFreqCellInfoSI-List-RSCP	Class-definitions		
InterFreqCellInfoSI_List_ECNO	InterFreqCellInfoSI-List-ECNO	Class-definitions		
InterFreqCellInfoSI_List_HCS_RSCP	InterFreqCellInfoSI-List-HCS-RSCP	Class-definitions		
InterFreqCellInfoSI_List_HCS_ECNO	InterFreqCellInfoSI-List-HCS-ECNO	Class-definitions		
InterFreqCellInfoSI_List_RSCP_LCR	InterFreqCellInfoSI-List-RSCP-LCR	Class-definitions		
InterFreqCellInfoSI_List_ECNO_LCR	InterFreqCellInfoSI-List-ECNO-LCR	Class-definitions		
InterFreqCellInfoSI_List_HCS_RSCP_LCR	InterFreqCellInfoSI-List-HCS-RSCP-LCR	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
InterFreqCellInfoSI_List_HCS_ECN0_LCR	InterFreqCellInfoSI_List-HCS-ECN0-LCR	Class-definitions		
InterFreqCellList	InterFreqCellList	Class-definitions		
InterFreqCellList_LCR_r4_ext	InterFreqCellList-LCR-r4-ext	Class-definitions		
InterFreqCellMeasuredResultsList	InterFreqCellMeasuredResultsList	Class-definitions		
InterFreqEvent	InterFreqEvent	Class-definitions		
InterFreqEvent_r6	InterFreqEvent-r6	Class-definitions		
InterFreqEventList	InterFreqEventList	Class-definitions		
InterFreqEventList_r6	InterFreqEventList-r6	Class-definitions		
InterFrequencyMeasuredResultsList_v590ext	InterFrequencyMeasuredResultsList-v590ext	Class-definitions		
Inter_FreqEventCriteria_v590ext	Inter-FreqEventCriteria-v590ext	Class-definitions		
Inter_FreqEventCriteriaList_v590ext	Inter-FreqEventCriteriaList-v590ext	Class-definitions		
Intra_FreqEventCriteriaList_v590ext	Intra-FreqEventCriteriaList-v590ext	Class-definitions		
IntraFrequencyMeasuredResultsList_v590ext	IntraFrequencyMeasuredResultsList-v590ext	Class-definitions		
IntraFreqReportingCriteria_1b_r5	IntraFreqReportingCriteria-1b-r5	Class-definitions		
PeriodicReportingInfo_1b	PeriodicReportingInfo-1b	Class-definitions		
InterFreqEventResults	InterFreqEventResults	Class-definitions		
InterFreqEventResults_LCR_r4_ext	InterFreqEventResults-LCR-r4-ext	Class-definitions		
InterFreqMeasQuantity	InterFreqMeasQuantity	Class-definitions		
InterFreqMeasuredResults	InterFreqMeasuredResults	Class-definitions		
InterFreqMeasuredResultsList	InterFreqMeasuredResultsList	Class-definitions		
InterFreqMeasurementSysInfo_RSCP	InterFreqMeasurementSysInfo-RSCP	Class-definitions		
InterFreqMeasurementSysInfo_ECN0	InterFreqMeasurementSysInfo-ECN0	Class-definitions		
InterFreqMeasurementSysInfo_HCS_RSCP	InterFreqMeasurementSysInfo-HCS-RSCP	Class-definitions		
InterFreqMeasurementSysInfo_HCS_ECN0	InterFreqMeasurementSysInfo-HCS-ECN0	Class-definitions		
InterFreqMeasurementSysInfo_RSCP_LCR_r4	InterFreqMeasurementSysInfo-RSCP-LCR-r4	Class-definitions		
InterFreqMeasurementSysInfo_ECN0_LCR_r4	InterFreqMeasurementSysInfo-ECN0-LCR-r4	Class-definitions		
InterFreqMeasurementSysInfo_HCS_RSCP_LCR_r4	InterFreqMeasurementSysInfo-HCS-RSCP-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
InterFreqMeasurement SysInfo_HCS_ECN0 _LCR_r4	InterFreqMeasurement SysInfo-HCS-ECN0 -LCR-r4	Class-definitions		
InterFreqRACHRepCe llsList	InterFreqRACHRepCe llsList	Class-definitions		
InterFreqRACHReport ingInfo	InterFreqRACHReport ingInfo	Class-definitions		
InterFreqReportCriteri a	InterFreqReportCriteri a	Class-definitions		
InterFreqReportCriteri a_r4	InterFreqReportCriteri a-r4	Class-definitions		
InterFreqReportCriteri a_r6	InterFreqReportCriteri a-r6	Class-definitions		
InterFreqReportingCri teria	InterFreqReportingCri teria	Class-definitions		
InterFreqReportingCri teria_r6	InterFreqReportingCri teria-r6	Class-definitions		
InterFreqReportingQu antity	InterFreqReportingQu antity	Class-definitions		
InterFreqRepQuantity RACH_FDD	InterFreqRepQuantity RACH-FDD	Class-definitions		
InterFreqRepQuantity RACH_TDD	InterFreqRepQuantity RACH-TDD	Class-definitions		
InterFreqRepQuantity RACH_TDDList	InterFreqRepQuantity RACH-TDDList	Class-definitions		
InterFrequencyMeasur ement	InterFrequencyMeasur ement	Class-definitions		
InterFrequencyMeasur ement_r4	InterFrequencyMeasur ement-r4	Class-definitions		
InterFrequencyMeasur ement_r6	InterFrequencyMeasur ement-r6	Class-definitions		
InterRAT_TargetCellID escription	InterRAT-TargetCellID escription	Class-definitions		
InterRATCellID	InterRATCellID	Class-definitions		
InterRATCellInfoIndica tion	InterRATCellInfoIndica tion	Class-definitions		
InterRATCellInfoList	InterRATCellInfoList	Class-definitions		
InterRATCellInfoList_ B	InterRATCellInfoList- B	Class-definitions		
InterRATCellInfoList_r 4	InterRATCellInfoList-r 4	Class-definitions		
InterRATCellInfoList_r 6	InterRATCellInfoList-r 6	Class-definitions		
InterRATCellIndividual Offset	InterRATCellIndividual Offset	Class-definitions		
InterRATEvent	InterRATEvent	Class-definitions		
InterRATEventList	InterRATEventList	Class-definitions		
InterRATEventResults	InterRATEventResults	Class-definitions		
InterRATInfo	InterRATInfo	Class-definitions		
InterRATInfo_r6	InterRATInfo-r6	Class-definitions		
InterRATMeasQuantity	InterRATMeasQuantity	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
InterRATMeasuredRes ults	InterRATMeasuredRes ults	Class-definitions		
InterRATMeasuredRes ultsList	InterRATMeasuredRes ultsList	Class-definitions		
InterRATMeasurement	InterRATMeasurement	Class-definitions		
InterRATMeasurement _r4	InterRATMeasurement -r4	Class-definitions		
InterRATMeasurement _r6	InterRATMeasurement -r6	Class-definitions		
InterRATMeasurement SysInfo	InterRATMeasurement SysInfo	Class-definitions		
InterRATMeasurement SysInfo_B	InterRATMeasurement SysInfo-B	Class-definitions		
InterRATReportCriteri a	InterRATReportCriteri a	Class-definitions		
InterRATReportingCrit eria	InterRATReportingCrit eria	Class-definitions		
InterRATReportingQua ntity	InterRATReportingQua ntity	Class-definitions		
IntraFreqCellID	IntraFreqCellID	Class-definitions		
IntraFreqCellInfoList	IntraFreqCellInfoList	Class-definitions		
IntraFreqCellInfoList_ r4	IntraFreqCellInfoList- r4	Class-definitions		
IntraFreqCellInfoSI_Li st_RSCP	IntraFreqCellInfoSI-Li st-RSCP	Class-definitions		
IntraFreqCellInfoSI_Li st_ECNO	IntraFreqCellInfoSI-Li st-ECNO	Class-definitions		
IntraFreqCellInfoSI_Li st_HCS_RSCP	IntraFreqCellInfoSI-Li st-HCS-RSCP	Class-definitions		
IntraFreqCellInfoSI_Li st_HCS_ECNO	IntraFreqCellInfoSI-Li st-HCS-ECNO	Class-definitions		
IntraFreqCellInfoSI_Li st_RSCP_LCR_r4	IntraFreqCellInfoSI-Li st-RSCP-LCR-r4	Class-definitions		
IntraFreqCellInfoSI_Li st_ECNO_LCR_r4	IntraFreqCellInfoSI-Li st-ECNO-LCR-r4	Class-definitions		
IntraFreqCellInfoSI_Li st_HCS_RSCP_LCR _r4	IntraFreqCellInfoSI-Li st-HCS-RSCP-LCR -r4	Class-definitions		
IntraFreqCellInfoSI_Li st_HCS_ECNO_LCR _r4	IntraFreqCellInfoSI-Li st-HCS-ECNO-LCR -r4	Class-definitions		
IntraFreqEvent	IntraFreqEvent	Class-definitions		
IntraFreqEvent_r4	IntraFreqEvent-r4	Class-definitions		
IntraFreqEvent_LCR_ r4	IntraFreqEvent-LCR -r4	Class-definitions		
IntraFreqEvent_r6	IntraFreqEvent-r6	Class-definitions		
IntraFreqEvent_1d_r5	IntraFreqEvent-1d-r 5	Class-definitions		
IntraFreqEventCriteria	IntraFreqEventCriteria	Class-definitions		
IntraFreqEventCriteria _r4	IntraFreqEventCriteria -r4	Class-definitions		
IntraFreqEventCriteria _LCR_r4	IntraFreqEventCriteria -LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
IntraFreqEventCriteria_r6	IntraFreqEventCriteria-r6	Class-definitions		
IntraFreqEventCriteriaList	IntraFreqEventCriteriaList	Class-definitions		
IntraFreqEventCriteriaList_r4	IntraFreqEventCriteriaList-r4	Class-definitions		
IntraFreqEventCriteriaList_LCR_r4	IntraFreqEventCriteriaList-LCR-r4	Class-definitions		
IntraFreqEventCriteriaList_r6	IntraFreqEventCriteriaList-r6	Class-definitions		
IntraFreqEventResults	IntraFreqEventResults	Class-definitions		
IntraFreqMeasQuantity	IntraFreqMeasQuantity	Class-definitions		
IntraFreqMeasQuantity_FDD	IntraFreqMeasQuantity-FDD	Class-definitions		
IntraFreqMeasQuantity_TDD	IntraFreqMeasQuantity-TDD	Class-definitions		
IntraFreqMeasQuantity_TDDList	IntraFreqMeasQuantity-TDDList	Class-definitions		
IntraFreqMeasuredResultsList	IntraFreqMeasuredResultsList	Class-definitions		
IntraFreqMeasurementSysInfo_RSCP	IntraFreqMeasurementSysInfo-RSCP	Class-definitions		
IntraFreqMeasurementSysInfo_ECN0	IntraFreqMeasurementSysInfo-ECN0	Class-definitions		
IntraFreqMeasurementSysInfo_HCS_RSCP	IntraFreqMeasurementSysInfo-HCS-RSCP	Class-definitions		
IntraFreqMeasurementSysInfo_HCS_ECN0	IntraFreqMeasurementSysInfo-HCS-ECN0	Class-definitions		
IntraFreqMeasurementSysInfo_RSCP_LCR_r4	IntraFreqMeasurementSysInfo-RSCP-LCR-r4	Class-definitions		
IntraFreqMeasurementSysInfo_ECN0_LCR_r4	IntraFreqMeasurementSysInfo-ECN0-LCR-r4	Class-definitions		
IntraFreqMeasurementSysInfo_HCS_RSCP_LCR_r4	IntraFreqMeasurementSysInfo-HCS-RSCP-LCR-r4	Class-definitions		
IntraFreqMeasurementSysInfo_HCS_ECN0_LCR_r4	IntraFreqMeasurementSysInfo-HCS-ECN0-LCR-r4	Class-definitions		
IntraFreqReportCriteria	IntraFreqReportCriteria	Class-definitions		
IntraFreqReportCriteria_r4	IntraFreqReportCriteria-r4	Class-definitions		
IntraFreqReportCriteria_r6	IntraFreqReportCriteria-r6	Class-definitions		
IntraFreqReportingCriteria	IntraFreqReportingCriteria	Class-definitions		
IntraFreqReportingCriteria_r4	IntraFreqReportingCriteria-r4	Class-definitions		
IntraFreqReportingCriteria_LCR_r4	IntraFreqReportingCriteria-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
IntraFreqReportingCriteria_r6	IntraFreqReportingCriteria-r6	Class-definitions		
IntraFreqReportingQuantity	IntraFreqReportingQuantity	Class-definitions		
IntraFreqReportingQuantityForRACH	IntraFreqReportingQuantityForRACH	Class-definitions		
IntraFreqRepQuantityRACH_FDD	IntraFreqRepQuantityRACH-FDD	Class-definitions		
IntraFreqRepQuantityRACH_TDD	IntraFreqRepQuantityRACH-TDD	Class-definitions		
IntraFreqRepQuantityRACH_TDDList	IntraFreqRepQuantityRACH-TDDList	Class-definitions		
IntraFrequencyMeasurement	IntraFrequencyMeasurement	Class-definitions		
IntraFrequencyMeasurement_r4	IntraFrequencyMeasurement-r4	Class-definitions		
IntraFrequencyMeasurement_r6	IntraFrequencyMeasurement-r6	Class-definitions		
IODE	IODE	Class-definitions		
IP_Length	IP-Length	Class-definitions		
IP_PCCPCH_r4	IP-PCCPCH-r4	Class-definitions		
IP_Spacing	IP-Spacing	Class-definitions		
IP_Spacing_TDD	IP-Spacing-TDD	Class-definitions		
IS_2000SpecificMeasInfo	IS-2000SpecificMeasInfo	Class-definitions		
MaxNumberOfReportingCellsType1	MaxNumberOfReportingCellsType1	Class-definitions		
MaxNumberOfReportingCellsType2	MaxNumberOfReportingCellsType2	Class-definitions		
MaxNumberOfReportingCellsType3	MaxNumberOfReportingCellsType3	Class-definitions		
MaxReportedCellsOnRACH	MaxReportedCellsOnRACH	Class-definitions		
MaxReportedCellsOnRACHinterFreq	MaxReportedCellsOnRACHinterFreq	Class-definitions		
MeasuredResults	MeasuredResults	Class-definitions		
MeasuredResults_v390ext	MeasuredResults-v390ext	Class-definitions		
MeasuredResults_v590ext	MeasuredResults-v590ext	Class-definitions		
MeasuredResults_LCR_r4	MeasuredResults-LCR-r4	Class-definitions		
MeasuredResultsList	MeasuredResultsList	Class-definitions		
MeasuredResultsList_LCR_r4_ext	MeasuredResultsList-LCR-r4-ext	Class-definitions		
MeasuredResultsOnRACH	MeasuredResultsOnRACH	Class-definitions		
MeasuredResultsOnRACHinterFreq	MeasuredResultsOnRACHinterFreq	Class-definitions		
MeasurementCommand	MeasurementCommand	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MeasurementCommand_r4	MeasurementCommand-r4	Class-definitions		
MeasurementCommand_r6	MeasurementCommand-r6	Class-definitions		
MeasurementControlSysInfo	MeasurementControlSysInfo	Class-definitions		
MeasurementControlSysInfo_LCR_r4_ext	MeasurementControlSysInfo-LCR-r4-ext	Class-definitions		
MeasurementIdentity	MeasurementIdentity	Class-definitions		
MeasurementQuantityGSM	MeasurementQuantityGSM	Class-definitions		
MeasurementReportingMode	MeasurementReportingMode	Class-definitions		
MeasurementType	MeasurementType	Class-definitions		
MeasurementType_r4	MeasurementType-r4	Class-definitions		
MeasurementType_r6	MeasurementType-r6	Class-definitions		
MeasurementValidity	MeasurementValidity	Class-definitions		
MonitoredCellRACH_List	MonitoredCellRACH-List	Class-definitions		
MonitoredCellRACH_Result	MonitoredCellRACH-Result	Class-definitions		
MultipathIndicator	MultipathIndicator	Class-definitions		
N_CR_T_CRMMaxHyst	N-CR-T-CRMMaxHyst	Class-definitions		
NavigationModelSatInfo	NavigationModelSatInfo	Class-definitions		
NavigationModelSatInfoList	NavigationModelSatInfoList	Class-definitions		
EphemerisParameterNC_Mode	EphemerisParameterNC-Mode	Class-definitions		
Neighbour	Neighbour	Class-definitions		
Neighbour_v390ext	Neighbour-v390ext	Class-definitions		
NeighbourList	NeighbourList	Class-definitions		
NeighbourList_v390ext	NeighbourList-v390ext	Class-definitions		
NeighbourQuality	NeighbourQuality	Class-definitions		
NewInterFreqCell	NewInterFreqCell	Class-definitions		
NewInterFreqCell_r4	NewInterFreqCell-r4	Class-definitions		
NewInterFreqCellList	NewInterFreqCellList	Class-definitions		
NewInterFreqCellList_r4	NewInterFreqCellList-r4	Class-definitions		
NewInterFreqCellSI_RSCP	NewInterFreqCellSI-RSCP	Class-definitions		
NewInterFreqCellSI_ECNO	NewInterFreqCellSI-ECNO	Class-definitions		
NewInterFreqCellSI_HCS_RSCP	NewInterFreqCellSI-HCS-RSCP	Class-definitions		
NewInterFreqCellSI_HCS_ECNO	NewInterFreqCellSI-HCS-ECNO	Class-definitions		
NewInterFreqCellSI_RSCP_LCR_r4	NewInterFreqCellSI-RSCP-LCR-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
NewInterFreqCellSI_ECNO_LCR_r4	NewInterFreqCellSI_ECNO_LCR_r4	Class-definitions		
NewInterFreqCellSI_HCS_RSCP_LCR_r4	NewInterFreqCellSI_HCS_RSCP_LCR_r4	Class-definitions		
NewInterFreqCellSI_HCS_ECNO_LCR_r4	NewInterFreqCellSI_HCS_ECNO_LCR_r4	Class-definitions		
NewInterFreqCellSI_List_ECNO	NewInterFreqCellSI_List_ECNO	Class-definitions		
NewInterFreqCellSI_List_HCS_RSCP	NewInterFreqCellSI_List_HCS_RSCP	Class-definitions		
NewInterFreqCellSI_List_HCS_ECNO	NewInterFreqCellSI_List_HCS_ECNO	Class-definitions		
NewInterFreqCellSI_List_RSCP	NewInterFreqCellSI_List_RSCP	Class-definitions		
NewInterFreqCellSI_List_ECNO_LCR_r4	NewInterFreqCellSI_List_ECNO_LCR_r4	Class-definitions		
NewInterFreqCellSI_List_HCS_RSCP_LCR_r4	NewInterFreqCellSI_List_HCS_RSCP_LCR_r4	Class-definitions		
NewInterFreqCellSI_List_HCS_ECNO_LCR_r4	NewInterFreqCellSI_List_HCS_ECNO_LCR_r4	Class-definitions		
NewInterFreqCellSI_List_RSCP_LCR_r4	NewInterFreqCellSI_List_RSCP_LCR_r4	Class-definitions		
NewInterRATCell	NewInterRATCell	Class-definitions		
NewInterRATCell_B	NewInterRATCell_B	Class-definitions		
NewInterRATCellList	NewInterRATCellList	Class-definitions		
NewInterRATCellList_B	NewInterRATCellList_B	Class-definitions		
NewIntraFreqCell	NewIntraFreqCell	Class-definitions		
NewIntraFreqCell_r4	NewIntraFreqCell_r4	Class-definitions		
NewIntraFreqCellList	NewIntraFreqCellList	Class-definitions		
NewIntraFreqCellList_r4	NewIntraFreqCellList_r4	Class-definitions		
NewIntraFreqCellSI_RSCP	NewIntraFreqCellSI_RSCP	Class-definitions		
NewIntraFreqCellSI_ECNO	NewIntraFreqCellSI_ECNO	Class-definitions		
NewIntraFreqCellSI_HCS_RSCP	NewIntraFreqCellSI_HCS_RSCP	Class-definitions		
NewIntraFreqCellSI_HCS_ECNO	NewIntraFreqCellSI_HCS_ECNO	Class-definitions		
NewIntraFreqCellSI_RSCP_LCR_r4	NewIntraFreqCellSI_RSCP_LCR_r4	Class-definitions		
NewIntraFreqCellSI_ECNO_LCR_r4	NewIntraFreqCellSI_ECNO_LCR_r4	Class-definitions		
NewIntraFreqCellSI_HCS_RSCP_LCR_r4	NewIntraFreqCellSI_HCS_RSCP_LCR_r4	Class-definitions		
NewIntraFreqCellSI_HCS_ECNO_LCR_r4	NewIntraFreqCellSI_HCS_ECNO_LCR_r4	Class-definitions		
NewIntraFreqCellSI_List_RSCP	NewIntraFreqCellSI_List_RSCP	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
NewIntraFreqCellSI_List_ECNO	NewIntraFreqCellSI-List-ECNO	Class-definitions		
NewIntraFreqCellSI_List_HCS_RSCP	NewIntraFreqCellSI-List-HCS-RSCP	Class-definitions		
NewIntraFreqCellSI_List_HCS_ECNO	NewIntraFreqCellSI-List-HCS-ECNO	Class-definitions		
NewIntraFreqCellSI_List_RSCP_LCR_r4	NewIntraFreqCellSI-List-RSCP-LCR-r4	Class-definitions		
NewIntraFreqCellSI_List_ECNO_LCR_r4	NewIntraFreqCellSI-List-ECNO-LCR-r4	Class-definitions		
NewIntraFreqCellSI_List_HCS_RSCP_LCR_r4	NewIntraFreqCellSI-List-HCS-RSCP-LCR-r4	Class-definitions		
NewIntraFreqCellSI_List_HCS_ECNO_LCR_r4	NewIntraFreqCellSI-List-HCS-ECNO-LCR-r4	Class-definitions		
NonUsedFreqParameter	NonUsedFreqParameter	Class-definitions		
NonUsedFreqParameter_r6	NonUsedFreqParameter-r6	Class-definitions		
NonUsedFreqParameterList	NonUsedFreqParameterList	Class-definitions		
NonUsedFreqParameterList_r6	NonUsedFreqParameterList-r6	Class-definitions		
NonUsedFreqWList_r6	NonUsedFreqWList-r6	Class-definitions		
ObservedTimeDifferenceToGSM	ObservedTimeDifferenceToGSM	Class-definitions		
OTDOA_SearchWindowSize	OTDOA-SearchWindowSize	Class-definitions		
Pathloss	Pathloss	Class-definitions		
PenaltyTime_RSCP	PenaltyTime-RSCP	Class-definitions		
PenaltyTime_ECNO	PenaltyTime-ECNO	Class-definitions		
PendingTimeAfterTrigger	PendingTimeAfterTrigger	Class-definitions		
PeriodicalOrEventTrigger	PeriodicalOrEventTrigger	Class-definitions		
PeriodicalReportingCriteria	PeriodicalReportingCriteria	Class-definitions		
PeriodicalWithReportingCellStatus	PeriodicalWithReportingCellStatus	Class-definitions		
PLMNIdentitiesOfNeighbourCells	PLMNIdentitiesOfNeighbourCells	Class-definitions		
PLMNsOfInterFreqCellsList	PLMNsOfInterFreqCellsList	Class-definitions		
PLMNsOfIntraFreqCellsList	PLMNsOfIntraFreqCellsList	Class-definitions		
PLMNsOfInterRATCellsList	PLMNsOfInterRATCellsList	Class-definitions		
PositionEstimate	PositionEstimate	Class-definitions		
PositioningMethod	PositioningMethod	Class-definitions		
PRC	PRC	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
PrimaryCCPCH_RSCP	PrimaryCCPCH-RSCP	Class-definitions		
Q_HCS	Q-HCS	Class-definitions		
Q_OffsetS_N	Q-OffsetS-N	Class-definitions		
Q_QualMin	Q-QualMin	Class-definitions		
Q_RxlevMin	Q-RxlevMin	Class-definitions		
QualityEventResults	QualityEventResults	Class-definitions		
QualityMeasuredResults	QualityMeasuredResults	Class-definitions		
QualityMeasurement	QualityMeasurement	Class-definitions		
QualityReportCriteria	QualityReportCriteria	Class-definitions		
QualityReportingCriteria	QualityReportingCriteria	Class-definitions		
QualityReportingCriteriaSingle	QualityReportingCriteriaSingle	Class-definitions		
QualityReportingQuantity	QualityReportingQuantity	Class-definitions		
RAT_Type	RAT-Type	Class-definitions		
ReferenceCellPosition	ReferenceCellPosition	Class-definitions		
ReferenceLocation	ReferenceLocation	Class-definitions		
ReferenceTimeDifferenceToCell	ReferenceTimeDifferenceToCell	Class-definitions		
RemovedInterFreqCellList	RemovedInterFreqCellList	Class-definitions		
RemovedInterRATCellList	RemovedInterRATCellList	Class-definitions		
RemovedIntraFreqCellList	RemovedIntraFreqCellList	Class-definitions		
ReplacementActivationThreshold	ReplacementActivationThreshold	Class-definitions		
ReportDeactivationThreshold	ReportDeactivationThreshold	Class-definitions		
ReportingAmount	ReportingAmount	Class-definitions		
ReportingCellStatus	ReportingCellStatus	Class-definitions		
ReportingCellStatusOpt	ReportingCellStatusOpt	Class-definitions		
ReportingInfoForCellDCH	ReportingInfoForCellDCH	Class-definitions		
ReportingInfoForCellDCH_LCR_r4	ReportingInfoForCellDCH-LCR-r4	Class-definitions		
ReportingInterval	ReportingInterval	Class-definitions		
ReportingIntervalLong	ReportingIntervalLong	Class-definitions		
ReportingRange	ReportingRange	Class-definitions		
RL_AdditionInfoList	RL-AdditionInfoList	Class-definitions		
RL_InformationLists	RL-InformationLists	Class-definitions		
RLC_BuffersPayload	RLC-BuffersPayload	Class-definitions		
RRC	RRC	Class-definitions		
SatData	SatData	Class-definitions		
SatDataList	SatDataList	Class-definitions		
SatelliteStatus	SatelliteStatus	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SatID	SatID	Class-definitions		
SFN_Offset_Validity	SFN-Offset-Validity	Class-definitions		
SFN_SF_N_Drift	SFN-SFN-Drift	Class-definitions		
SFN_SF_N_ObsTimeDifference	SFN-SFN-ObsTimeDifference	Class-definitions		
SFN_SF_N_ObsTimeDifference1	SFN-SFN-ObsTimeDifference1	Class-definitions		
SFN_SF_N_ObsTimeDifference2	SFN-SFN-ObsTimeDifference2	Class-definitions		
SFN_SF_N_OTD_Type	SFN-SFN-OTD-Type	Class-definitions		
SFN_SF_N_RelTimeDifference1	SFN-SFN-RelTimeDifference1	Class-definitions		
SFN_TOW_Uncertainty	SFN-TOW-Uncertainty	Class-definitions		
SIR	SIR	Class-definitions		
SIR_MeasurementList	SIR-MeasurementList	Class-definitions		
SIR_MeasurementResults	SIR-MeasurementResults	Class-definitions		
SIR_TFCS	SIR-TFCS	Class-definitions		
SIR_TFCS_List	SIR-TFCS-List	Class-definitions		
SIR_TimeslotList	SIR-TimeslotList	Class-definitions		
SubFrame1Reserved	SubFrame1Reserved	Class-definitions		
T_ADVinfo	T-ADVinfo	Class-definitions		
T_CRMax	T-CRMax	Class-definitions		
T_CRMaxHyst	T-CRMaxHyst	Class-definitions		
TemporaryOffset1	TemporaryOffset1	Class-definitions		
TemporaryOffset2	TemporaryOffset2	Class-definitions		
TemporaryOffsetList	TemporaryOffsetList	Class-definitions		
Threshold	Threshold	Class-definitions		
Threshold_r6	Threshold-r6	Class-definitions		
ThresholdNonUsedFrequency_deltaList	ThresholdNonUsedFrequency-deltaList	Class-definitions		
ThresholdPositionChange	ThresholdPositionChange	Class-definitions		
ThresholdSFN_GPS_TOW	ThresholdSFN-GPS-TOW	Class-definitions		
ThresholdSFN_SF_N_Change	ThresholdSFN-SFN-Change	Class-definitions		
ThresholdUsedFrequency	ThresholdUsedFrequency	Class-definitions		
ThresholdUsedFrequency_r6	ThresholdUsedFrequency-r6	Class-definitions		
TimeInterval	TimeInterval	Class-definitions		
TimeslotInfo	TimeslotInfo	Class-definitions		
TimeslotInfo_LCR_r4	TimeslotInfo-LCR-r4	Class-definitions		
TimeslotInfoList	TimeslotInfoList	Class-definitions		
TimeslotInfoList_LCR_r4	TimeslotInfoList-LCR-r4	Class-definitions		
TimeslotInfoList_r4	TimeslotInfoList-r4	Class-definitions		
TimeslotISCP	TimeslotISCP	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
TimeslotISCP_List	TimeslotISCP-List	Class-definitions		
TimeslotListWithISCP	TimeslotListWithISCP	Class-definitions		
TimeslotWithISCP	TimeslotWithISCP	Class-definitions		
TimeToTrigger	TimeToTrigger	Class-definitions		
TrafficVolumeEventPa ram	TrafficVolumeEventPa ram	Class-definitions		
TrafficVolumeEventRe sults	TrafficVolumeEventRe sults	Class-definitions		
TrafficVolumeEventTy pe	TrafficVolumeEventTy pe	Class-definitions		
TrafficVolumeMeasQua ntity	TrafficVolumeMeasQua ntity	Class-definitions		
TrafficVolumeMeasSys Info	TrafficVolumeMeasSys Info	Class-definitions		
TrafficVolumeMeasure dResults	TrafficVolumeMeasure dResults	Class-definitions		
TrafficVolumeMeasure dResultsList	TrafficVolumeMeasure dResultsList	Class-definitions		
TrafficVolumeMeasure ment	TrafficVolumeMeasure ment	Class-definitions		
TrafficVolumeMeasure mentObjectList	TrafficVolumeMeasure mentObjectList	Class-definitions		
TrafficVolumeReportC riteria	TrafficVolumeReportC riteria	Class-definitions		
TrafficVolumeReportC riteriaSysInfo	TrafficVolumeReportC riteriaSysInfo	Class-definitions		
TrafficVolumeReportin gCriteria	TrafficVolumeReportin gCriteria	Class-definitions		
TrafficVolumeReportin gQuantity	TrafficVolumeReportin gQuantity	Class-definitions		
TrafficVolumeThreshol d	TrafficVolumeThreshol d	Class-definitions		
TransChCriteria	TransChCriteria	Class-definitions		
TransChCriteriaList	TransChCriteriaList	Class-definitions		
TransferMode	TransferMode	Class-definitions		
TransmittedPowerThre shold	TransmittedPowerThre shold	Class-definitions		
TriggeringCondition1	TriggeringCondition1	Class-definitions		
TriggeringCondition2	TriggeringCondition2	Class-definitions		
TX_InterruptionAfterT rigger	TX-InterruptionAfterT rigger	Class-definitions		
UDRE	UDRE	Class-definitions		
UE_6AB_Event	UE-6AB-Event	Class-definitions		
UE_6FG_Event	UE-6FG-Event	Class-definitions		
UE_AutonomousUpda teMode	UE-AutonomousUpda teMode	Class-definitions		
UE_InternalEventPara m	UE-InternalEventPar am	Class-definitions		
UE_InternalEventPara mList	UE-InternalEventPar amList	Class-definitions		
UE_InternalEventRes ults	UE-InternalEventRes ults	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_InternalMeasQuantity	UE-InternalMeasQuantity	Class-definitions		
UE_InternalMeasuredResults	UE-InternalMeasuredResults	Class-definitions		
UE_InternalMeasuredResults_LCR_r4	UE-InternalMeasuredResults-LCR-r4	Class-definitions		
UE_InternalMeasurement	UE-InternalMeasurement	Class-definitions		
UE_InternalMeasurement_r4	UE-InternalMeasurement-r4	Class-definitions		
UE_InternalMeasurementSysInfo	UE-InternalMeasurementSysInfo	Class-definitions		
UE_InternalReportCriteria	UE-InternalReportCriteria	Class-definitions		
UE_InternalReportingCriteria	UE-InternalReportingCriteria	Class-definitions		
UE_InternalReportingQuantity	UE-InternalReportingQuantity	Class-definitions		
UE_InternalReportingQuantity_r4	UE-InternalReportingQuantity-r4	Class-definitions		
UE_MeasurementQuantity	UE-MeasurementQuantity	Class-definitions		
UE_RX_TX_ReportEntry	UE-RX-TX-ReportEntry	Class-definitions		
UE_RX_TX_ReportEntryList	UE-RX-TX-ReportEntryList	Class-definitions		
UE_RX_TX_TimeDifferenceType1	UE-RX-TX-TimeDifferenceType1	Class-definitions		
UE_RX_TX_TimeDifferenceType2	UE-RX-TX-TimeDifferenceType2	Class-definitions		
UE_RX_TX_TimeDifferenceType2Info	UE-RX-TX-TimeDifferenceType2Info	Class-definitions		
UE_RX_TX_TimeDifferenceThreshold	UE-RX-TX-TimeDifferenceThreshold	Class-definitions		
UE_TransmittedPower	UE-TransmittedPower	Class-definitions		
UE_TransmittedPowerTDD_List	UE-TransmittedPowerTDD-List	Class-definitions		
UL_TrCH_Identity	UL-TrCH-Identity	Class-definitions		
UE_Positioning_Accuracy	UE-Positioning-Accuracy	Class-definitions		
UE_Positioning_CipherParameters	UE-Positioning-CipherParameters	Class-definitions		
UE_Positioning_Error	UE-Positioning-Error	Class-definitions		
UE_Positioning_ErrorCause	UE-Positioning-ErrorCause	Class-definitions		
UE_Positioning_EventParam	UE-Positioning-EventParam	Class-definitions		
UE_Positioning_EventParamList	UE-Positioning-EventParamList	Class-definitions		
UE_Positioning_EventSpecificInfo	UE-Positioning-EventSpecificInfo	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_Positioning_GPS_AcquisitionAssistance	UE-Positioning-GPS-AcquisitionAssistance	Class-definitions		
UE_Positioning_GPS_AdditionalAssistanceDataRequest	UE-Positioning-GPS-AdditionalAssistanceDataRequest	Class-definitions		
UE_Positioning_GPS_Almanac	UE-Positioning-GPS-Almanac	Class-definitions		
UE_Positioning_GPS_AssistanceData	UE-Positioning-GPS-AssistanceData	Class-definitions		
UE_Positioning_GPS_DGPS_Corrections	UE-Positioning-GPS-DGPS-Corrections	Class-definitions		
UE_Positioning_GPS_IonosphericModel	UE-Positioning-GPS-IonosphericModel	Class-definitions		
UE_Positioning_GPS_MeasurementResults	UE-Positioning-GPS-MeasurementResults	Class-definitions		
UE_Positioning_GPS_NavigationModel	UE-Positioning-GPS-NavigationModel	Class-definitions		
UE_Positioning_GPS_NavModelAddDataReq	UE-Positioning-GPS-NavModelAddDataReq	Class-definitions		
UE_Positioning_GPS_ReferenceCellInfo	UE-Positioning-GPS-ReferenceCellInfo	Class-definitions		
UE_Positioning_GPS_ReferenceTime	UE-Positioning-GPS-ReferenceTime	Class-definitions		
UE_Positioning_GPS_UTC_Model	UE-Positioning-GPS-UTC-Model	Class-definitions		
UE_Positioning_IPDL_Parameters	UE-Positioning-IPDL-Parameters	Class-definitions		
UE_Positioning_IPDL_Parameters_r4	UE-Positioning-IPDL-Parameters-r4	Class-definitions		
UE_Positioning_IPDL_Parameters_TDD_r4_ext	UE-Positioning-IPDL-Parameters-TDD-r4-ext	Class-definitions		
UE_Positioning_MeasuredResults	UE-Positioning-MeasuredResults	Class-definitions		
UE_Positioning_MeasuredResults_v390ext	UE-Positioning-MeasuredResults-v390ext	Class-definitions		
UE_Positioning_Measurement	UE-Positioning-Measurement	Class-definitions		
UE_Positioning_Measurement_v390ext	UE-Positioning-Measurement-v390ext	Class-definitions		
UE_Positioning_Measurement_r4	UE-Positioning-Measurement-r4	Class-definitions		
UE_Positioning_MeasurementEventResults	UE-Positioning-MeasurementEventResults	Class-definitions		
UE_Positioning_MeasurementInterval	UE-Positioning-MeasurementInterval	Class-definitions		
UE_Positioning_MethodType	UE-Positioning-MethodType	Class-definitions		
UE_Positioning_OTD_OA_AssistanceData	UE-Positioning-OTD-OA-AssistanceData	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_Positioning_OTD OA_AssistanceData_r4	UE-Positioning-OTD OA-AssistanceData-r4	Class-definitions		
UE_Positioning_OTD OA_AssistanceData_r4ext	UE-Positioning-OTD OA-AssistanceData-r4ext	Class-definitions		
UE_Positioning_OTD OA_AssistanceData_UEB	UE-Positioning-OTD OA-AssistanceData-UEB	Class-definitions		
UE_Positioning_IPDL _Parameters_TDDList_r4_ext	UE-Positioning-IPDL -Parameters-TDDList-r4-ext	Class-definitions		
UE_Positioning_OTD OA_Measurement	UE-Positioning-OTD OA-Measurement	Class-definitions		
UE_Positioning_OTD OA_Measurement_v390ext	UE-Positioning-OTD OA-Measurement-v390ext	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellInfo	UE-Positioning-OTD OA-NeighbourCellInfo	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellInfo_r4	UE-Positioning-OTD OA-NeighbourCellInfo-r4	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellInfo_UEB	UE-Positioning-OTD OA-NeighbourCellInfo-UEB	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellList	UE-Positioning-OTD OA-NeighbourCellList	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellList_r4	UE-Positioning-OTD OA-NeighbourCellList-r4	Class-definitions		
UE_Positioning_OTD OA_NeighbourCellList_UEB	UE-Positioning-OTD OA-NeighbourCellList-UEB	Class-definitions		
UE_Positioning_OTD OA_Quality	UE-Positioning-OTD OA-Quality	Class-definitions		
UE_Positioning_OTD OA_ReferenceCellInfo	UE-Positioning-OTD OA-ReferenceCellInfo	Class-definitions		
UE_Positioning_OTD OA_ReferenceCellInfo_r4	UE-Positioning-OTD OA-ReferenceCellInfo-r4	Class-definitions		
UE_Positioning_OTD OA_ReferenceCellInfo_UEB	UE-Positioning-OTD OA-ReferenceCellInfo-UEB	Class-definitions		
UE_Positioning_PositionEstimateInfo	UE-Positioning-PositionEstimateInfo	Class-definitions		
UE_Positioning_ReportCriteria	UE-Positioning-ReportCriteria	Class-definitions		
UE_Positioning_ReportingQuantity	UE-Positioning-ReportingQuantity	Class-definitions		
UE_Positioning_ReportingQuantity_v390ext	UE-Positioning-ReportingQuantity-v390ext	Class-definitions		
UE_Positioning_ReportingQuantity_r4	UE-Positioning-ReportingQuantity-r4	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_Positioning_ResponseTime	UE-Positioning-ResponseTime	Class-definitions		
UTRA_CarrierRSSI	UTRA-CarrierRSSI	Class-definitions		
UTRAN_GPS_DriftRate	UTRAN-GPS-DriftRate	Class-definitions		
UTRAN_GPSReferenceTime	UTRAN-GPSReferenceTime	Class-definitions		
UTRAN_GPSReferenceTimeResult	UTRAN-GPSReferenceTimeResult	Class-definitions		
VarianceOfRLC_BufferPayload	VarianceOfRLC-BufferPayload	Class-definitions		
W	W	Class-definitions		
BCC	BCC	Class-definitions		
BCCH_ModificationInfo	BCCH-ModificationInfo	Class-definitions		
BCCH_ModificationTime	BCCH-ModificationTime	Class-definitions		
BSIC	BSIC	Class-definitions		
CBS_DRX_Level1Information	CBS-DRX-Level1Information	Class-definitions		
CBS_DRX_Level1Information_extension_r6	CBS-DRX-Level1Information-extension-r6	Class-definitions		
CDMA2000_Message	CDMA2000-Message	Class-definitions		
CDMA2000_MessageList	CDMA2000-MessageList	Class-definitions		
CDMA2000_UMTS_Frequency_List	CDMA2000-UMTS-Frequency-List	Class-definitions		
CellValueTag	CellValueTag	Class-definitions		
ExpirationTimeFactor	ExpirationTimeFactor	Class-definitions		
FDD_UMTS_Frequency_List	FDD-UMTS-Frequency-List	Class-definitions		
FrequencyInfoCDMA2000	FrequencyInfoCDMA2000	Class-definitions		
GERAN_SystemInfoBlock	GERAN-SystemInfoBlock	Class-definitions		
GERAN_SystemInformation	GERAN-SystemInformation	Class-definitions		
GSM_BA_Range	GSM-BA-Range	Class-definitions		
GSM_BA_Range_List	GSM-BA-Range-List	Class-definitions		
GSM_Classmark2	GSM-Classmark2	Class-definitions		
GSM_Classmark3	GSM-Classmark3	Class-definitions		
GSM_MessageList	GSM-MessageList	Class-definitions		
GsmSecurityCapability	GsmSecurityCapability	Class-definitions		
GSM_TargetCellInfoList	GSM-TargetCellInfoList	Class-definitions		
GSM_TargetCellInfo	GSM-TargetCellInfo	Class-definitions		
IdentificationOfReceivedMessage	IdentificationOfReceivedMessage	Class-definitions		
InterRAT_ChangeFailureCause	InterRAT-ChangeFailureCause	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
GERANlu_MessageList	GERANlu-MessageList	Class-definitions		
GERANlu_RadioAccessCapability	GERANlu-RadioAccessCapability	Class-definitions		
InterRAT_UE_RadioAccessCapability	InterRAT-UE-RadioAccessCapability	Class-definitions		
InterRAT_UE_RadioAccessCapabilityList	InterRAT-UE-RadioAccessCapabilityList	Class-definitions		
InterRAT_UE_RadioAccessCapability_v590ext	InterRAT-UE-RadioAccessCapability-v590ext	Class-definitions		
InterRAT_UE_SecurityCapability	InterRAT-UE-SecurityCapability	Class-definitions		
InterRAT_UE_SecurityCapList	InterRAT-UE-SecurityCapList	Class-definitions		
InterRAT_HO_FailureCause	InterRAT-HO-FailureCause	Class-definitions		
MasterInformationBlock	MasterInformationBlock	Class-definitions		
MasterInformationBlock_v690ext	MasterInformationBlock-v690ext	Class-definitions		
MIB_ValueTag	MIB-ValueTag	Class-definitions		
NCC	NCC	Class-definitions		
PLMN_ValueTag	PLMN-ValueTag	Class-definitions		
PredefinedConfigIdentityAndValueTag	PredefinedConfigIdentityAndValueTag	Class-definitions		
ProtocolErrorInformation	ProtocolErrorInformation	Class-definitions		
ReceivedMessageType	ReceivedMessageType	Class-definitions		
Rplmn_Information	Rplmn-Information	Class-definitions		
Rplmn_Information_r4	Rplmn-Information-r4	Class-definitions		
SchedulingInformation	SchedulingInformation	Class-definitions		
SchedulingInformationSIB	SchedulingInformationSIB	Class-definitions		
SchedulingInformationSIBSb	SchedulingInformationSIBSb	Class-definitions		
SegCount	SegCount	Class-definitions		
SegmentIndex	SegmentIndex	Class-definitions		
SFN_Prime	SFN-Prime	Class-definitions		
SIB_Data_fixed	SIB-Data-fixed	Class-definitions		
SIB_Data_variable	SIB-Data-variable	Class-definitions		
SIBOccurIdentity	SIBOccurIdentity	Class-definitions		
SIBOccurrenceIdentityAndValueTag	SIBOccurrenceIdentityAndValueTag	Class-definitions		
SIBOccurValueTag	SIBOccurValueTag	Class-definitions		
SIB_ReferenceList	SIB-ReferenceList	Class-definitions		
SIBSb_ReferenceList	SIBSb-ReferenceList	Class-definitions		
SIB_ReferenceListFA CH	SIB-ReferenceListFA CH	Class-definitions		
SIB_Type	SIB-Type	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SIB_TypeAndTag	SIB-TypeAndTag	Class-definitions		
SIBSb_TypeAndTag	SIBSb-TypeAndTag	Class-definitions		
SibOFF	SibOFF	Class-definitions		
SibOFF_List	SibOFF-List	Class-definitions		
SysInfoType1	SysInfoType1	Class-definitions		
SysInfoType1_v3a0ext_IEs	SysInfoType1-v3a0ext-IEs	Class-definitions		
SysInfoType2	SysInfoType2	Class-definitions		
SysInfoType3	SysInfoType3	Class-definitions		
SysInfoType3_v4b0ext_IEs	SysInfoType3-v4b0ext-IEs	Class-definitions		
SysInfoType3_v590ext	SysInfoType3-v590ext	Class-definitions		
SysInfoType3_v5c0ext_IEs	SysInfoType3-v5c0ext-IEs	Class-definitions		
SysInfoType3_v670ext	SysInfoType3-v670ext	Class-definitions		
SysInfoType4	SysInfoType4	Class-definitions		
SysInfoType4_v4b0ext_IEs	SysInfoType4-v4b0ext-IEs	Class-definitions		
SysInfoType4_v590ext	SysInfoType4-v590ext	Class-definitions		
SysInfoType4_v5b0ext_IEs	SysInfoType4-v5b0ext-IEs	Class-definitions		
SysInfoType4_v5c0ext_IEs	SysInfoType4-v5c0ext-IEs	Class-definitions		
SysInfoType5	SysInfoType5	Class-definitions		
SysInfoType5_v4b0ext_IEs	SysInfoType5-v4b0ext-IEs	Class-definitions		
SysInfoType5_v590ext_IEs	SysInfoType5-v590ext-IEs	Class-definitions		
SysInfoType5_v650ext_IEs	SysInfoType5-v650ext-IEs	Class-definitions		
SysInfoType5_v680ext_IEs	SysInfoType5-v680ext-IEs	Class-definitions		
SysInfoType5_v690ext_IEs	SysInfoType5-v690ext-IEs	Class-definitions		
SysInfoType6	SysInfoType6	Class-definitions		
SysInfoType6_v4b0ext_IEs	SysInfoType6-v4b0ext-IEs	Class-definitions		
SysInfoType6_v590ext_IEs	SysInfoType6-v590ext-IEs	Class-definitions		
SysInfoType6_v650ext_IEs	SysInfoType6-v650ext-IEs	Class-definitions		
SysInfoType6_v690ext_IEs	SysInfoType6-v690ext-IEs	Class-definitions		
SysInfoType7	SysInfoType7	Class-definitions		
SysInfoType8	SysInfoType8	Class-definitions		
SysInfoType9	SysInfoType9	Class-definitions		
SysInfoType10	SysInfoType10	Class-definitions		
SysInfoType11	SysInfoType11	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SysInfoType11_v4b0e xt_IEs	SysInfoType11-v4b0e xt-IEs	Class-definitions		
SysInfoType11_v590e xt_IEs	SysInfoType11-v590e xt-IEs	Class-definitions		
SysInfoType11_v690e xt_IEs	SysInfoType11-v690e xt-IEs	Class-definitions		
SysInfoType12	SysInfoType12	Class-definitions		
SysInfoType12_v4b0e xt_IEs	SysInfoType12-v4b0e xt-IEs	Class-definitions		
SysInfoType12_v590e xt_IEs	SysInfoType12-v590e xt-IEs	Class-definitions		
SysInfoType12_v690e xt_IEs	SysInfoType12-v690e xt-IEs	Class-definitions		
SysInfoType13	SysInfoType13	Class-definitions		
SysInfoType13_v3a0e xt_IEs	SysInfoType13-v3a0e xt-IEs	Class-definitions		
SysInfoType13_v4b0e xt_IEs	SysInfoType13-v4b0e xt-IEs	Class-definitions		
SysInfoType13_1	SysInfoType13-1	Class-definitions		
SysInfoType13_2	SysInfoType13-2	Class-definitions		
SysInfoType13_3	SysInfoType13-3	Class-definitions		
SysInfoType13_4	SysInfoType13-4	Class-definitions		
SysInfoType14	SysInfoType14	Class-definitions		
SysInfoType15	SysInfoType15	Class-definitions		
SysInfoType15_v4b0e xt_IEs	SysInfoType15-v4b0e xt-IEs	Class-definitions		
SysInfoType15_1	SysInfoType15-1	Class-definitions		
SysInfoType15_2	SysInfoType15-2	Class-definitions		
SysInfoType15_3	SysInfoType15-3	Class-definitions		
SysInfoType16	SysInfoType16	Class-definitions		
SysInfoType17	SysInfoType17	Class-definitions		
SysInfoType17_v4b0e xt_IEs	SysInfoType17-v4b0e xt-IEs	Class-definitions		
SysInfoType17_v590e xt_IEs	SysInfoType17-v590e xt-IEs	Class-definitions		
SysInfoType18	SysInfoType18	Class-definitions		
SysInfoTypeSB1	SysInfoTypeSB1	Class-definitions		
SysInfoTypeSB2	SysInfoTypeSB2	Class-definitions		
TDD_UMTS_Frequenc y_List	TDD-UMTS-Frequen cy-List	Class-definitions		
ANSI_41_GlobalServi ceRedirectInfo	ANSI-41-GlobalServi ceRedirectInfo	Class-definitions		
ANSI_41_PrivateNeig hbourListInfo	ANSI-41-PrivateNeig hbourListInfo	Class-definitions		
ANSI_41_RAND_Inf ormation	ANSI-41-RAND-Inf ormation	Class-definitions		
ANSI_41_UserZonel D_Information	ANSI-41-UserZonel D-Information	Class-definitions		
ANSI_41_NAS_Para meter	ANSI-41-NAS-Para meter	Class-definitions		
Min_P_REV	Min-P-REV	Class-definitions		

Continued on next page

Continued from previous page

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
NAS_SystemInformationANSI_41	NAS-SystemInformationANSI-41	Class-definitions		
NID	NID	Class-definitions		
P_REV	P-REV	Class-definitions		
SID	SID	Class-definitions		
MBMS_FACHCarryingMTCH_List	MBMS-FACHCarryingMTCH-List	Class-definitions		
MBMS_JoinedInformation_r6	MBMS-JoinedInformation-r6	Class-definitions		
MBMS_MCCH_ConfigurationInfo_r6	MBMS-MCCH-ConfigurationInfo-r6	Class-definitions		
MBMS_ModifiedService_r6	MBMS-ModifiedService-r6	Class-definitions		
MBMS_ModifiedServiceList_r6	MBMS-ModifiedServiceList-r6	Class-definitions		
MBMS_MSCH_ConfigurationInfo_r6	MBMS-MSCH-ConfigurationInfo-r6	Class-definitions		
MBMS_MSCHSchedulingInfo	MBMS-MSCHSchedulingInfo	Class-definitions		
MBMS_NumberOfNeighbourCells_r6	MBMS-NumberOfNeighbourCells-r6	Class-definitions		
MBMS_PFLIndex	MBMS-PFLIndex	Class-definitions		
MBMS_PFLInfo	MBMS-PFLInfo	Class-definitions		
MBMS_PL_ServiceRestrictInfo_r6	MBMS-PL-ServiceRestrictInfo-r6	Class-definitions		
MBMS_PTMAActivationTime_r6	MBMS-PTMAActivationTime-r6	Class-definitions		
MBMS_RequiredUEAction_Mod	MBMS-RequiredUEAction-Mod	Class-definitions		
MBMS_ServiceIdentity_r6	MBMS-ServiceIdentity-r6	Class-definitions		
MBMS_SessionIdentity	MBMS-SessionIdentity	Class-definitions		
MBMS_TCTF_Presence	MBMS-TCTF-Presence	Class-definitions		
MBMS_TransmissionIdentity	MBMS-TransmissionIdentity	Class-definitions		
Detailed Comments :				

Encoding Definitions			
Encoding Rule Name	Reference	Default	Comments
PER_Unaligned	X.691		Packet encoding rules (X.691) unaligned and with adapted padding
GPRSPadding_Rule1	34.123-3 clause 6.10.2.9.1		To add 'padding bits' (null | 0 < spare padding >) to the end of GPRS RLC/MAC Control messages to pad to RLC block size
GSMSparePadding_Rule2	34.123-3 clause 6.10.2.9.2		To add 'spare padding' (<spare L>) to the end of specific GSM DL messages to pad to RLC a fixed message length of 23 octets
SACCHSysInfoSparePadding_Rule4	34.123-3 clause 6.10.2.9.5		To add 'spare padding' (<spare L>) to the end of System Information messages sent on SACCH to a fixed message length of 19 octets
MeasInfoSparePadding_Rule5	34.123-3 clause 6.10.2.9.6		To add 'spare padding' (<spare L>) to the end of Measurement Information messages sent on SACCH to a fixed message length of 21 octets
Detailed Comments :			

Encoding Variations			
Encoding Rule Name : GSMSparePadding_Rule2			
Type List :			
Comments :			
Encoding Variation	Reference	Default	Comments
LowHigh_Rule3	34.123-3 clause 6.10.2.9.3		A specific field of 1 or more bits that occurs only in Rest Octets of certain GSM DL messages. This field shall be encoded according to its position in the 'spare padding' mask
Detailed Comments :			

Test Suite Operation Definition	
Operation Name	: o_GSM_ToUTRANHO_PER_Encoding (p_Msg : HandoverToUTRANCommand ; p_Len : O1)
Result Type	: OCTETSTRING
Comments	: generate the 8-bit aligned PER codes with "Encoder added (0-7) bits padding" from the input downlink message
Description	
<p>The function of the o_GSM_ToUTRANHO_PER_Encoding is as the follows:</p> <p>it returns the aligned PER encoding of the input downlink message p_Msg (with "Encoder added (1-7) bits padding") of p_Len octets</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_LengthofHO_Cmd (p_Msg : HandoverToUTRANCommand)
Result Type	: O1
Comments	: generate the length of the input HO To UTRAN Cmd
Description	
<p>The function of the o_LengthofHO_Cmd is as the follows:</p> <p>it returns the no. of octets of the input downlink message p_Msg</p>	
Detailed Comments :	

Test Suite Operation Definition

Operation Name : o_P_CheckClassmark3(p_FromUE : MSCLSMK3; p_FDD, p_TDD, p_P_GSM_900_BAND, p_E_GSM_900_BAND, p_R_GSM_900_BAND, p_DCS_1800_BAND, p_PCS_1900_BAND, p_GSM_450_BAND, p_GSM_480_BAND, p_GSM_700_BAND, p_GSM_850_BAND, p_TypeGSMClass2, p_TypeGSMClass3, p_TypeGSMClass4, p_TypeGSMClass5, p_TypeDCSCClass1, p_TypeDCSCClass2, p_TypeDCSCClass3, p_TypePCSCClass1, p_TypePCSCClass2, p_TypePCSCClass3, p_TypeGSM850Class2, p_TypeGSM850Class3, p_TypeGSM850Class4, p_TypeGSM850Class5, p_DTM_Multislotclass5, p_DTM_Multislotclass9, p_DTM_SingleSlotAllocation, p_EOTD_Assist, p_A_GPS_Assist, p_A_GPS_Based, p_Conv_GPS, p_EOTD_Based, p_GERANFeatPackage1, p_GERANFeatPackage2, p_GERANluMode, p_DTMEnhancCap, p_TAOOffset : BOOLEAN; p_MultiSlotClass, p_EGPRS_MultiSlotClass : B5; p_SMS_Value, p_SM_Value, p_GSM400_RadioCapability, p_T400_RadioCapability, p_T900_RadioCapability : B4; p_RGSM_RadioCapability, p_DTMGPRSHighMultiSlotClass, p_DTM EGPRSHighMultiSlotClass : B3; p_DTM_EGPRS_MultiSlotSubClass, p_EDGE PwrCap1, p_EDGE PwrCap2, p_ExtDTM_MultiSlotClass, p_ExtDTM_EGPRS_MultiSlotClass, p_HighMultiSlotCap, p_GMSKPowerProfile, p_8PSKPowerProfile, p_TGSM400Support, p_DLAdvRxPerformance : B2; p_MS_ClsmkA5_4, p_MS_ClsmkA5_5, p_MS_ClsmkA5_6, p_MS_ClsmkA5_7, p_CDMA2000, p_ExtMeasCap, p_ModulationCapability, p_UCS2Treatment, p_RptACCHCap : B1)

Result Type : BOOLEAN

Comments : This is used when UE sends the MSCLSMK3 PDU in CLASSMARK CHANGE

Description

```

<Classmark 3 Value part> ::=
  < spare bit >
  {
    < Multiband supported : { 000 } >
      < A5 bits >
    |
    < Multiband supported : { 101 | 110 } >
      < A5 bits >
      < Associated Radio Capability 2 : bit(4) >
      < Associated Radio Capability 1 : bit(4) >
    |
    < Multiband supported : { 001 | 010 | 100 } >
      < A5 bits >
      < spare bit >(4)
      < Associated Radio Capability 1 : bit(4) > }
  { 0 | 1 < R Support > }
  { 0 | 1 < HSCSD Multi Slot Capability > }
  < UCS2 treatment: bit >
  < Extended Measurement Capability : bit >
  { 0 | 1 < MS measurement capability > }
  { 0 | 1 < MS Positioning Method Capability > }
  { 0 | 1 < ECSD Multi Slot Capability > }
  { 0 | 1 < 8-PSK Struct > }
  { 0 | 1 < GSM 400 Bands Supported : { 01 | 10 | 11 } >
    < GSM 400 Associated Radio Capability: bit(4) > }

  { 0 | 1 <GSM 850 Associated Radio Capability : bit(4) > }
  { 0 | 1 <GSM 1900 Associated Radio Capability : bit(4) > }
  < UMTS FDD Radio Access Technology Capability : bit >
  < UMTS 3.84 Mcps TDD Radio Access Technology Capability : bit >
  < CDMA 2000 Radio Access Technology Capability : bit >

  { 0 | 1
    < DTM GPRS Multi Slot Class : bit(2) >
      < Single Slot DTM : bit >
      { 0 | 1 < DTM EGPRS Multi Slot Class : bit(2) > } }
  { 0 | 1 < Single Band Support > } --- Release 4 starts here:
  { 0 | 1 <GSM 750 Associated Radio Capability : bit(4)>}

  < UMTS 1.28 Mcps TDD Radio Access Technology Capability : bit >
  < GERAN Feature Package 1 : bit >

  { 0 | 1 < Extended DTM GPRS Multi Slot Class : bit(2) >
    < Extended DTM EGPRS Multi Slot Class : bit(2) > }

  { 0 | 1 < High Multislot Capability : bit(2) > } ----Release 5 starts here.

```

Continued on next page

Test Suite Operation Definition	
Description	
<pre> { 0 | 1 < GERAN lu Mode Capabilities > } -- '1' also means support of GERAN lu mode < GERAN Feature Package 2 : bit > < GMSK Multislot Power Profile : bit (2) > < 8-PSK Multislot Power Profile : bit (2) > { 0 | 1 < T-GSM 400 Bands Supported : { 01 | 10 | 11 } > -- Release 6 starts here. < T-GSM 400 Associated Radio Capability: bit(4) > } { 0 | 1 < T-GSM 900 Associated Radio Capability: bit(4) > } < Downlink Advanced Receiver Performance : bit (2)> < DTM Enhancements Capability : bit > { 0 | 1 < DTM GPRS High Multi Slot Class : bit(3) > < Offset required : bit> { 0 | 1 < DTM EGPRS High Multi Slot Class : bit(3) > } } < Repeated ACCH Capability: bit > < spare bit > ; < A5 bits > ::= < A5/7 : bit > < A5/6 : bit > < A5/5 : bit > < A5/4 : bit > ; <R Support>::= < R-GSM band Associated Radio Capability : bit(3) > ; < HSCSD Multi Slot Capability > ::= < HSCSD Multi Slot Class : bit(5) > ; < MS Measurement capability > ::= < SMS_VALUE : bit (4) > < SM_VALUE : bit (4) > ; < MS Positioning Method Capability > ::= < MS Positioning Method : bit(5) > ; < ECSD Multi Slot Capability > ::= < ECSD Multi Slot Class : bit(5) > ; < 8-PSK Struct> : := < Modulation Capability : bit > { 0 | 1 < 8-PSK RF Power Capability 1: bit(2) > } { 0 | 1 < 8-PSK RF Power Capability 2: bit(2) > } < Single Band Support > ::= < GSM Band : bit (4) > ; < GERAN lu Mode Capabilities > ::= < Length : bit (4) > -- length in bits of lu mode only capabilities and spare bits -- Additions in release 6 < FLO lu Capability : bit > < spare bits>** ; -- expands to the indicated length -- may be used for future enhancements </pre>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name :	o_OctToInt(p_oct : OCTETSTRING)
Result Type :	INTEGER
Comments :	
Description	
Transform an OCTETSTRING of length 1 to 4 into an unsigned 32 bits INTEGER value. If the input octet string is larger than 4, then only the first 4 octets shall be considered.	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name :	o_IA5_IP_ToOct (p_String: IA5String; p_IP_V4: BOOLEAN)
Result Type :	OCTETSTRING
Comments :	
Description	
<p>o_IA5_IP_ToOct converts the string p_String from IA5String type to OCTETSTRING. In case of IPv4, p_String represents an IP address consisting of a number of fields of digits, separated by dots. Each one of the numbers of which the IP address consists is converted into one octet. The dots separating the numbers are ignored.</p> <p>EXAMPLE 1: o_IA5_IP_ToOct ("200.1.1.80", TRUE) = 'C8010150'O. EXAMPLE 2: o_IA5_IP_ToOct ("200.1.1.80.100", TRUE) should result in an appropriate error message. EXAMPLE 3: o_IA5_IP_ToOct ("300.1.1.80", TRUE) should result in an appropriate error message.</p> <p>In case of IPv6, p_String represents an IP address consisting of a number of fields of hexadecimal digits, separated by ":".</p> <p>a) In case of uncompressed IPv6 format each value separated by ";" is converted to 2 octets. The ":" separating the numbers are ignored.</p> <p>EXAMPLE 1: o_IA5_IP_ToOct(FEDC:BA98:7654:3210:FEDC:BA98:7654:3210, FALSE) = 'FEDCBA9876543210FEDCBA9876543210'O EXAMPLE 2: o_IA5_IP_ToOct(FEDC:BA98:7654:3210:FEDC:BA98:7654, FALSE) should result in an appropriate error message. EXAMPLE 3: o_IA5_IP_ToOct(1080:0:0:0:8:800:200C:417A,FALSE) = '1080000000000000000000080800200C417A'O EXAMPLE 4: o_IA5_IP_ToOct(1080:0:0:0:8:800:20H:417A,FALSE) should result in an appropriate error message.</p> <p>b) In case of compressed IPv6 format the use of "::" indicates multiple groups of 16-bits of zeros. The "::" can only appear once in an address.</p> <p>EXAMPLE 1: o_IA5_IP_ToOct(FF01::101,FALSE) = 'FF010000000000000000000000000101'O EXAMPLE 2: o_IA5_IP_ToOct(FEDC::7654:3210:FEDC::BA98:7654:3210, FALSE) should result in an appropriate error message.</p> <p>p_IP_V4 is a BOOLEAN. When TRUE, an IP Version 4 address is to be converted, the maximum length of which is 4 octets, otherwise an IP Version 6 address is to be converted, the maximum length of which is 16 octets. See 3GPP TS 24.008 [9], clause 10.5.6.4.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_ConcatStrg (p_String1, p_String2 : IA5String)
Result Type	: IA5String
Comments	:
Description	
<p>o_ConcatString concatenates p_String1 and p_String2 and returns the resulting string.</p> <p>For example: o_ConcatString ("AT+CBST=0" , ",0") = "AT+CBST=0,0"</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_IntToOct(p_N : INTEGER; p_L: INTEGER)
Result Type	: OCTETSTRING
Comments	:
Description	
<p>o_IntToOct converts the INTEGER p_N into OCTETSTRING with length = p_L.</p> <p>for example:</p> <p>o_IntToOct(14,1) = '0E'O; o_IntToOct(18,1) = '12'O; o_IntToOct(18,2) = '0012'O.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_OtherDigits(p_BCDdigits : HEXSTRING)
Result Type	: OCTETSTRING
Comments	: The input parameter 'bcdigits' is a BCD string (subset of HEXSTRING), the result is an even string of BCD digits, with eventually a filler 'F'H used.
Description	
<p>The function of the o_OtherDigits is as the follows:</p> <ol style="list-style-type: none"> 1. If the number of the p_BCDdigits is odd, the operation removes the most significant digit, and then reverses the order of each pair of digits; 2. If the number of the p_BCDdigits is even, first the operation suffixes the p_BCDdigits with 'F'H, then removes the most significant digit, and then reverses the order of each pair of digits. <p>for example:</p> <p>o_OtherDigi('12345') = '3254'O, o_OtherDigi('12345678') ='325476F8'O.</p> <p>See o_FirstDigit for the handling of the first digit.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_FirstDigit(p_BCDdigits : HEXSTRING)
Result Type	: B4
Comments	:
Description	
<p>The input parameter bcdigits shall be a BCD string (subset of HEXSTRING), the result is a BITSTRING[4] of a binary representation of one BCD digit.</p> <p>The function of the o_FirstDigit is to return the first (most significant) digit of the input parameter p_BCDdigits.</p> <p>for example:</p> <p>o_FirstDigit('12345') = '0001'B, o_FirstDigit('012345678') = '0000'B.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_OeBit(p_BCDdigits : HEXSTRING)
Result Type	: BITSTRING
Comments	: The input parameter 'bcdigits' is a BCD string (subset of HEXSTRING), the result is BITSTRING[1].
Description	
<p>The function of the o_OeBit is as the follows:</p> <ol style="list-style-type: none"> 1. it returns '1'B, if the length of the p_BCDdigits is odd, 2. it returns '0'B, if the length of the p_BCDdigits is even. <p>for example:</p> <p>o_OeBit('12583') = '1'B, o_OeBit('87259957') = '0'B.</p>	
Detailed Comments	:

Test Suite Operation Definition

Operation Name : o_AuthRspChk(p_AuthRsp: AuthRsp; p_AuthRspExt: AuthRspExt; p_K:BITSTRING; p_RAND: BITSTRING; p_Ext: BOOLEAN)

Result Type : BOOLEAN

Comments :

Description

Checks the input parameter p_AuthRsp and p_AuthRspExt, both received in an Authentication Response, according to the authentication algorithm defined in the following procedure.

The extension, p_AuthRspExt, is optional. Its presence is indicated by p_Ext.

Returns TRUE if the Authentication Response contained in parameters p_AuthRsp and eventually p_AuthRspExt is correct, FALSE otherwise.

The value of tcv_AuthN indicates whether the AuthRspExt has been provided by the UE or not ($n=31$, or $31 < n < 128$). See 3G TS 34.108 cl. 8.1.2.

If not the parameter p_AuthRspExt is not to be used.

Algorithm (without the knowledge of tcv_AuthN):

=====

if NOT p_Ext EvaluateAuthRsp else EvaluateAuthRspAndAuthRspExt

EvaluateAuthRsp:

=====

resultbitstring = o_BitstringXOR(XRES, AuthRsp)

if resultbitstring is all 0s then there is a match.

EvaluateAuthRspAndAuthRspExt:

=====

XREShigh = o_BitstringXtract(XRES, 32, 32, 0)

/* XRES divides into 2 parts: the higher part of 32 bits related to AuthRsp and the lower part related to AuthRspExt */

/* SourceLength of 32 is only to ensure usage of the procedure */

resultbitstring = o_BitstringXOR(XREShigh, AuthRsp)

if resultbitstring is all 0s then there is a match for the first 32 bits:EvaluateAuthRspExt else Authentication failed.

EvaluateAuthRspExt:

=====

/* As AuthRspExt may not be octet aligned the last octet indicated in AuthRspExt is not used for checking */

if (AuthRspExt.iel = 1) then Authentication passed

/* there was only 1 possibly incomplete octet which is not used */

else

{

AuthRspExthigh = o_BitstringXtract(AuthRspExt.authRsp, ((AuthRspExt.iel - 1) * 8), (AuthRspExt.iel - 1) * 8, 0)

/* extract (AuthRspExt.iel - 1) * 8 bits starting from bit 0 */

XRESlow = o_BitstringXtract(XRES, ((AuthRspExt.iel - 1) * 8 + 32), (AuthRspExt.iel - 1) * 8, 32)

/* extract (AuthRspExt.iel - 1) * 8 bits starting from bit 32 */

resultbitstring = o_BitstringXOR(XRESlow, AuthRspExthigh, (AuthRspExt.iel - 1) * 8)

if resultbitstring is all 0s then there is a match for the bits following the first 32 bits else Authentication failed

}

Detailed Comments :

Test Suite Operation Definition	
Operation Name	: o_BitstringConcat(p_Str1, p_Str2: BITSTRING; p_Len1, p_Len2: INTEGER)
Result Type	: BITSTRING
Comments	:
Description	
<p>Performs the concatenation of 2 bitstrings of possibly different lengths. The bit significance is from left to right, ie the MSB is at the lefthand side.</p> <p>Returns a resulting bitstring p_Str1 || p_Str2 of length p_Len1 + p_Len.</p> <p>Example: o_BitstringConcat('010101'B, '11'B) produces '01010111'B of length 6 + 2 = 8..</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_BitstringXOR(p_Str1, p_Str2: BITSTRING; p_Len: INTEGER)
Result Type	: BITSTRING
Comments	:
Description	
<p>Performs an XOR operation using 2 bitstrings of the same length (p_Len).</p> <p>Returns a resulting Bitstring of length p_Len.</p> <p>Example: o_BitstringXOR('0011'B, '0101'B, 4) produces '0110'B</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_BitstringXtract(p_Str: BITSTRING; p_SrcLen, p_TargetLen, p_Offset: INTEGER)
Result Type	: BITSTRING
Comments	:
Description	
<p>Performs the wrap around extract of a bitstring. The length of the string from which extraction is to be made is specified in p_SrcLen. The length of the bitstring to be extracted is indicated as p_TargetLen, the offset in the original string is indicated in p_Offset. The bit position 0 is at the left. Returns a resulting bitstring of length p_TargetLen.</p> <p>Examples:</p> <p>o_BitstringXtract('101010'B, 6, 2, 1) produces '01'B. o_BitstringXtract('101010'B, 6, 4, 3) produces '0101'B, wrapping around. o_BitstringXtract('111000'B, 6, 4, 5) produces '0111'B, wrapping around.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_ConvertIMSI(p_Imsi : HEXSTRING)
Result Type	: IMSI_GSM_MAP
Comments	: The input parameter 'imsi' is a BCD string (subset of HEXSTRING), the result is of type IMSI_GSM_MAP.
Description	
<p>The input parameter p_Imsi is a BCD string (subset of HEXSTRING), the result is of type IMSI_GSM_MAP.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name : o_ConvtPLMN(p_MCC, p_MNC : HEXSTRING)	
Result Type : OCTETSTRING	
Comments :	
Description	
<p>the functions of o_ConvtPLMN are as following:</p> <ol style="list-style-type: none"> 1. The least significant HEX of p_MNC is removed from p_MNC and inserted into p_MCC in the position left to the third HEX to form a new p_MCC of 4 HEXs, then swap the first HEX (left most, most significant Hex) with the second HEX of the new p_MCC. 2. Swap the first Hex with the second HEX of the remaining part of p_MNC and append it to the new p_MCC formed in Step1 above. <p>For example: o_ConvtPLMN('123'H, '456'H) = '216354'O o_ConvtPLMN ('234'H, '01F'H) = '32F410'O</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name : o_GetN_OctetsFromPRBS(p_Start, p_N: INTEGER)	
Result Type : OCTETSTRING	
Comments :	
Description	
<p>This operation returns N octets from a repeated pseudo random bit sequence, starting with octet position p_Start. The PRBS is the 2047 bit pseudo random test pattern defined in ITU-T Recommendation O.153 for measurements at 64 kbit/s and N x 64 kbit/s</p> <p>o_GetN_OctetsFromPRBS(p_Start, p_N) generates an OCTETSTRING containing p_N octets starting from octet number p_Start in the PRBS.</p> <p>Requirements p_Start >= 0 p_N >= 1</p> <p>Definition Define the 2047 bit PRBS sequence b(i) as an m-sequence produced by using the following primitive (over GF(2)) generator polynomial of degree 11:</p> $X^{11} + X^9 + 1$ <p>This sequence is defined recursively as:</p> $b(i) = 1, i = 0, 1, \dots, 10$ $b(i) = b(i - 2) + b(i - 11) \text{ modulo } 2, i = 11, 16, \dots, 2046$ <p>The OCTETSTRING, o(j) generated by the present TSO is produced by extracting p_N octets from the repeated sequence b(i) as follows:</p> $o(j,k) = b(((n_Start + j) * 8 + k) \text{ modulo } 2047)$ <p>where:</p> $j = 0, 1, \dots, p_N - 1$ $k = 0, 1, \dots, 7$ <p>o(j,k) is the kth bit of the jth octet in o(j), o(j,0) is the MSB of the jth octet in o(j), o(j,7) is the LSB of the jth octet in o(j),</p> <p>Example results: o_GetN_OctetsFromPRBS(0, 25) and o_GetN_OctetsFromPRBS(2047, 25) both return:</p> <pre>'FFE665A5C5CA3452085408ABEECE4B0B813FD337873F2CD1E2'O</pre> <p>o_GetN_OctetsFromPRBS(255, 25) and o_GetN_OctetsFromPRBS(255 + 2047, 25) both return</p> <pre>'01FFCCCB4B8B9468A410A81157DD9C9617027FA66F0E7E59A3'O</pre>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name : o_HexToDigitsMCC(p_BCDdigits : HEXSTRING) Result Type : MCC Comments :	
Description	
<p>The input parameter p_BCDdigits shall be a BCD string (subset of HEXSTRING), the result is a SEQUENCE (SIZE(3)) OF digit (MCC).</p> <p>NOTE: The length of p_BCDdigits shall be 3. User shall take the responsibility of fulfilling this requirement.</p> <p>for example:</p> <p>o_HexToDigitsMCC('111'H) = {1, 1, 1} o_HexToDigitsMCC('123'H) = {1, 2, 3}.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name : o_HexToDigitsMNC(p_BCDdigits : HEXSTRING) Result Type : MNC Comments :	
Description	
<p>The length of the input parameter p_BCDdigits shall be 3 HEX DIGITS, the first two shall be BCDdigit (subset of HEXSTRING) the result is a SEQUENCE (SIZE(2..3)) OF Digit (MNC).</p> <p>The function of this operation is:</p> <ol style="list-style-type: none"> 1. the least significant HEX is removed if it is 'F' and the operation returns SEQUENCE (SIZE(2)) OF Digit. 2. the operation returns SEQUENCE (SIZE(3)) OF Digit if all 3 HEX digits in p_BCDdigits are BCD Digit. <p>for example:</p> <p>o_HexToDigitsMNC('123'H) = {1, 2, 3} o_HexToDigitsMNC('13F'H) = {1, 3}.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_OctetstringConcat(p_Str1, p_Str2: OCTETSTRING)
Result Type	: OCTETSTRING
Comments	:
Description	
<p>o_OctetstringConcat Performs the concatenation of 2 octetstrings of possibly different lengths. The octet significance is from left to right, i.e. the MSB is at the lefthand side.</p> <p>Returns a resulting octetstring p_Str1 || p_Str2 .</p> <p>Example: o_OctetstringConcat('135'O, '9A38'O) = '1359A38'O.</p>	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_OctToBit (p_OctetStr: OCTETSTRING)
Result Type	: BITSTRING
Comments	: Converts an OCTETSTRING into a BITSTRING
Description	
<p>The size of the resulting BITSTRING is 8 times the size of the input OCTETSTRING</p>	
Detailed Comments :	

Test Suite Operation Definition

Operation Name : o_SIB_PER_Encoding(p_SIB : SIB)

Result Type : BITSTRING

Comments : generate the unaligned PER codes without "Encoder added (0–7) bits padding" from the input system information block

Description

The function of the o_SIB_PER_Encoding is as the follows:

it returns the unaligned PER encoding (BIT STRING) of the input system information block p_SIB (without "Encoder added (1–7) bits padding"). The bits corresponding to the encoding of the CHOICE of the SIB type shall be removed.

Example:

for the following SIBType1 value:

```
    SysInfoType1 ::=
    {
    cn_CommonGSM_MAP_NAS_SysInfo    '0080'O,
    cn_DomainSysInfoList             {{cn_DomainIdentity ps_domain,
                                     cn_Type             gsm_MAP: '0000'O,
                                     cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength
                                     },
                                     {cn_DomainIdentity cs_domain,
                                     cn_Type             gsm_MAP: o_OctetstringConcat(p_T3212,
                                     o_IntToOct(p_ATTFlag, 1)),
                                     cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength
                                     }
                                     },
    ue_ConnTimersAndConstants        {
                                     t_301 ms2000,
                                     n_301 2,
                                     t_302 ms4000,
                                     n_302 3,
                                     t_304 ms1000,
                                     n_304 3,
                                     t_305 m60,
                                     t_307 s50,
                                     t_308 ms320,
                                     t_309 8,
                                     t_310 ms320,
                                     n_310 5,
                                     t_311 ms500,
                                     t_312 5,
                                     n_312 s200,
                                     t_313 10,
                                     n_313 s20,
                                     t_314 s20,
                                     t_315 s30,
                                     n_315 s200,
                                     t_316 s50,
                                     t_317 s1800
                                     },
    ue_IdleTimersAndConstants        {
                                     t_300 ms400,
                                     n_300 7,
                                     t_312 10,
                                     n_312 s200
                                     },
    nonCriticalExtensions             {}
    }
```

The operation returns

BITSTRING:"1110010000000010000000011000100000000000000001000010000000000000000000111111111111111111111101001011000110110111001101111111111111101001010101110101001110100111010010111010011"

Continued on next page

Continued from previous page

Test Suite Operation Definition
Detailed Comments : 3GPP TS 25.331 clause 12.1

Test Suite Operation Definition
Operation Name : o_SIB_Segmentation(p_SIBBitString : BITSTRING) Result Type : SegmentsOfSysInfoBlock Comments : The returned result is a structured type.
Description
The function of the o_SIB_Segmentation is as following: 1. If the p_SIBBitString is less than or equal to 226 bits, the bit string is fit into one segment. If the bit string is less than 226 bits but more than 214 bits, the segment shall be padded to 226 bits long with padding bits set to '0'B. 2. If the input operand p_SIBBitString is longer than 226 bits it is segmented from left to right into segments, each segment except the last one is 222 bits . The last segment may be 222 bits or shorter. If the length of last segment is greater than 214 bits pad it to 222 bits with padding bits set to '0'B. 3. The number of segments is assigned to segCount field of the result. 4. The first segment is assigned to seg1 field of the result, the second segment is assigned to the seg2 field of the result, the third segment is assigned to the seg3 field of the result, and so on till the last segment.
Detailed Comments :

Test Suite Operation Definition
Operation Name : o_CheckUtranClassmark(p_InterRATHOInfo : OCTETSTRING; p_RACap : UE_RadioAccessCapability) Result Type : ResAndStartValue Comments : Checks the UE_CapabilityContainer of InterRATHandoverInfo, input as an octetstring, against the other input: p_RACap. Returns Res of TRUE if this matches. Also returns the Start Value from p_InterRATHOInfo
Description
This function decodes the InterRATHandoverInfo IE, received from an incoming UtranClassmarkChange message as an octetstring, as the ASN.1 definition InterRATHandoverInfo. It then compares the contents of the input parameter p_RACap against the field p_InterRATHOInfo.ue_CapabilityContainer.present and returns the boolean result in ResAndStartValue.res It also extracts the field START_Value from p_InterRATHOInfo.uE_SecurityInformation.present.start_CS and returns this in ResAndStartValue.start Other fields in the InterRATHandoverInfo IE are not checked. This function is required in order to decode the PER encoded element of the tabular structured UtranClassmarkChange message.
Detailed Comments :

Test Suite Operation Definition	
Operation Name	: o_PagingGroupCalculate(p_IMSI : HEXSTRING;p_CCCH_Conf : B3; p_N : INTEGER)
Result Type	: INTEGER
Comments	: returns the calculated Paging Group
Description	
PAGING_GROUP (0 .. N-1) = ((IMSI mod 1000) mod (BS_CC_CHANS x N)) mod N where N = number of paging blocks "available" on one CCCH = (number of paging blocks "available" in a 51-multiframe on one CCCH) x BS_PA_MFRMS. IMSI = International Mobile Subscriber Identity, as defined in GSM 03.03. mod = Modulo.	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_PacketPagingGroupCalculate(IMSI : HEXSTRING;KC_Conf, M, N : INTEGER; SplitPGCycle : B8)
Result Type	: INTEGER
Comments	: returns the calculated Packet Paging Group
Description	
$\text{PAGING_GROUP} (0 \dots M-1) = (((\text{IMSI mod } 1000) \text{ div } (\text{KC} \cdot \text{N})) \cdot \text{N} + (\text{IMSI mod } 1000) \text{ mod } \text{N} + \text{Max}((\text{m} \cdot \text{M}) \text{ div } \text{SPLIT_PG_CYCLE}, \text{m})) \text{ mod } \text{M}$ <p>for m = 0, ... , Min(M, SPLIT_PG_CYCLE) - 1 where KC = number of (P)CCCH in the cell = BS_PCC_CHANS for PCCCH or BS_CC_CHANS for CCCH</p> <p>M = number of paging blocks "available" on one (P)CCCH = (12 - BS_PAG_BLK_RES - BS_PBCCH_BLK) * 64 for PCCCH (9 - BS_AG_BLK_RES) * 64 for CCCH not combined (3 - BS_AG_BLK_RES) * 64 for CCCH + SDCCH combined</p> <p>N= 1 for PCCCH (9 - BS_AG_BLK_RES) * BS_PA_MFRMS for CCCH not combined (3 - BS_AG_BLK_RES) * BS_PA_MFRMS for CCCH/SDCCH combined</p> <p>SPLIT_PG_CYCLE is an MS specific parameter negotiated at GPRS attach (see 3GPP TS 04.60)</p> <p>IMSI = International Mobile Subscriber Identity, as defined in 3GPP TS 03.03.</p>	
Detailed Comments :	

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_A_GPS_Assist	BOOLEAN	51.010-2 A.2/60	Support of MS assisted GPS
pc_A_GPS_Based	BOOLEAN	51.010-2 A.2/59	Support of MS based GPS
pc_Conv_GPS	BOOLEAN	51.010-2 A.1/65	Support of conventional GPS
pc_DTMEnhancCap	BOOLEAN	34.123-2 ?	UE supports DTM Enhancements, used in Classmark3
pc_DTM_Multislotclass5	BOOLEAN	51.010-2 A.1/60	
pc_DTM_Multislotclass9	BOOLEAN	51.010-2 A.1/61	
pc_DTM_SingleSlotAllocation	BOOLEAN	51.010-2 A.1/62	
pc_EOTD_Assist	BOOLEAN	51.010-2 A.2/57	Support of MS assisted EOTD
pc_GERANFeaturePackage1	BOOLEAN	A.20/69, 51.010-2 A.2/72	Used in Classmark 3
pc_GERANFeaturePackage2	BOOLEAN	A.20/70	Used in Classmark 3
pc_GERANIuMode	BOOLEAN	A.20/71	Used in Classmark3
pc_GSM_710_BAND	BOOLEAN	51.010-2, ???	IF GSM band of 710 is supported
pc_GSM_750_BAND	BOOLEAN	51.010-2,A.1/54	IF GSM band of 750 is supported
pc_GSM_Data	BOOLEAN	51.010 A.25/4	At least one data service
pc_GSM_FRData	BOOLEAN	51.010 A.25/5	Full rate data service
pc_TAOffset	BOOLEAN	34.123-2 ?	Timing Advance Offset required, used in Classmark3
pc_T_GSM_810_BAND	BOOLEAN	51.010-2, ???	IF T-GSM band of 810 is supported
pc_TypeDCSClass1	BOOLEAN	51.010-2 A.1/12	UE supports DCS power class 1
pc_TypeDCSClass2	BOOLEAN	51.010-2 A.1/13	UE supports DCS power class 2
pc_TypeDCSClass3	BOOLEAN	51.010-2 A.1/14	UE supports DCS power class 3
pc_TypeGSM850Class2	BOOLEAN	51.010-2 A.1/125	UE supports GSM 850 power class 2
pc_TypeGSM850Class3	BOOLEAN	51.010-2 A.1/126	UE supports GSM 850 power class 3
pc_TypeGSM850Class4	BOOLEAN	51.010-2 A.1/127	UE supports GSM 850 power class 4
pc_TypeGSM850Class5	BOOLEAN	51.010-2 A.1/128	UE supports GSM 850 power class 5
pc_TypeGSMClass2	BOOLEAN	51.010-2 A.1/8	UE supports GSM power class 2
pc_TypeGSMClass3	BOOLEAN	51.010-2 A.1/9	UE supports GSM power class 3
pc_TypeGSMClass4	BOOLEAN	51.010-2 A.1/10	UE supports GSM power class 4
pc_TypeGSMClass5	BOOLEAN	51.010-2 A.1/11	UE supports GSM power class 5
pc_TypePCSClass1	BOOLEAN	51.010-2 A.1/19	UE supports PCS power class 1
pc_TypePCSClass2	BOOLEAN	51.010-2 A.1/20	UE supports PCS power class 2

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_TypePCSCClass3	BOOLEAN	51.010-2 A.1/21	UE supports PCS power class 3
px_8PSKPowerProfile	B2	PIXIT	Used in Classmark 3
px_CDMA2000	B1	Used in Classmark3	UE support of CDMA2000
px_DLAdvRxPerformance	B2	used in Classmark3	
px_DTMEGPRSHighMultiSlotClass	B3	used in Classmark3	
px_DTMGPRSHighMultiSlotClass	B3	used in Classmark3	
px_DTM_EGPRS_MultiSlotSubClass	B2	Used in Classmark3	indicates DTM EGPRS capabilities of the UE
px_EDGE PwrCap1	B2	Used in Classmark3	EDGE power class
px_EDGE PwrCap2	B2	Used in Classmark3	EDGE power class
px_EGPRS_MultiSlotClass	B5	51.010-2 A.1/96-124	Used in Classmark3 to define EGPRS multislotclass supported by the UE
px_EOTD_Based	BOOLEAN	Used in Classmark3	Support of MS based EOTD
px_ExtDTM_EGPRS_MultiSlotClass	B2	PIXIT	Used in Classmark 3
px_ExtDTM_MultiSlotClass	B2	PIXIT	Used in Classmark 3
px_ExtMeasCap	B1	Used in Classmark3	UE support of Extended Measurements
px_GMSKPowerProfile	B2	PIXIT	Used in Classmark 3
px_GSM400_RadioCapability	B4	Used in classmark3	
px_HighMultiSlotCap	B2	PIXIT	Used in Classmark 3
px_ModulationCapability	B1	Used in Classmark3 to specify supported modulation schemes other than GMSK	0 = 8PSK supported for downlink only 1 = 8PSK supported for uplink and downlink
px_MultiSlotClass	B5	51.010-2 A.1/22-50	Used in Classmark3 to define multislotclass supported by the UE
px_RGSM_RadioCapability	B3	Used in classmark3	
px_RptACCHCap	B1	used in Classmark3	0 – UE does not support repeated SACCH 1 – UE supports repeated SACCH and repeated dl FACCH note: a UE that supports only repeated dl FACCH should set this field to '0'
px_SMS_Value	B4	Used in Classmark3 – Switch-Measure-Switch Value	Indicates the time needed for the UE to switch from one radio channel to another, perform a neighbour cell power measurement and then switch from that radio channel to another radio channel

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_SM_Value	B4	Used in Classmark3 – Switch–Measure Value	Indicates the time needed for the UE to switch from one radio channel to another and perform a neighbour cell power measurement
px_T400_RadioCapability	B4	used in Classmark3	
px_T900_RadioCapability	B4	used in Classmark3	
px_TGSM400Support	B2	used in Classmark3	Bit 1 – TGSM 380 supported Bit 2 – TGSM 410 supported
pc_DL_TC	BOOLEAN	PICS Table A.18a/1	Support for turbo decoding for downlink. Default value: TRUE
pc_FDD	BOOLEAN	PICS Table A.1/1	FDD(DS)
pc_LosslessSRNS_Reloc	BOOLEAN	PICS Table A.19a/2	Lossless SRNS Relocation is supported
pc_RAB_A_18c_15	BOOLEAN	PICS Table A.18c/15	UE supports UTRAN Streaming/unknown/uplink:1 4.4 DL:14.4 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_RAB_A_18c_16	BOOLEAN	PICS Table A.18c/16	UE supports UTRAN Streaming/unknown/uplink:2 8.8 DL:28.8 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_RAB_A_18c_17	BOOLEAN	PICS Table A.18c/17	UE supports UTRAN Streaming/unknown/uplink:5 7.6 DL:57.6 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_RAB_A_18c_4	BOOLEAN	PICS Table A.18c/4	RAB for TC_14_2_4
pc_RFC2507	BOOLEAN	PICS Table A.19a/1	IP header compression protocol RFC 2507 is supported
pc_SimultaneousSCCPCH_DPCH_DPDCH_Reception	BOOLEAN	PICS Table A.18a/6	Part of SimultaneousSCCPCH_DPCH_Reception.
pc_SimultaneousSCCPCH_DPCH_Reception	BOOLEAN	PICS Table A.18a/5	Downlink support. Part of DL_PhysChCapabilityFDD.
pc_TDD	BOOLEAN	PICS Table A.1/2	Dual Mode FDD(DS)/TDD
pc_UL_TC	BOOLEAN	PICS Table A.18a/2	Support for turbo encoding for uplink. Default value: TRUE
px_DL_MaxTC_TB_Bits	MaxNoBits	PIXIT Table B.5	Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant. Default value: b163840
px_MaxHcContextSpace	MaxHcContextSpace	PIXIT Table B.5	MaxHcContextSpace if RFC 2507 is supported. Default value: by512
px_MaxNoSCCPCH_RL	MaxNoSCCPCH_RL	PIXIT Table B.5	Part of SimultaneousSCCPCH_DPCH_Reception. Default value: r11

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_UL_MaxTC_TB_Bits	MaxNoBits	PIXIT Table B.5	Maximum sum of number of bits of all turbo coded transport blocks being transmitted at an arbitrary time instant. Default value: b163840
pc_AT_SupportToInit_PS_Call	BOOLEAN	PICS Table A.20/42	This PIXIT when set to TRUE, AT command set (CGACT, CGEQREQ , CGDCONT, CGEQMIN)will be used to initiate PS call and strict check of desired QoS parameters is done. IF it is set to FALSE, only CGACT command to act PDP context will be used to initiate the call, and checking of QoS Parameters sent by UE in PDP Context Req will not be performed. Default value: TRUE
pc_AltSpeechFax_TS61	BOOLEAN	PICS Table A.10/2	Teleservice 61: alternate speech/fax supported
pc_Async31kHz_14400	BOOLEAN	PICS Table A.4/2	Asynchronous 3.1 kHz audio with FNUR 14400bit/s general bearer service supported
pc_Async31kHz_19200	BOOLEAN	PICS Table A.4/3	Asynchronous 3.1 kHz audio with FNUR 19200 bit/s general bearer service supported
pc_Async31kHz_28800	BOOLEAN	PICS Table A.4/4	Asynchronous 3.1 kHz audio with FNUR 28800 bit/s general bearer service supported
pc_Async31kHz_9600	BOOLEAN	PICS Table A.4/1	Asynchronous 3.1 kHz audio with FNUR 9600 bit/s general bearer service supported
pc_Async31kHz_AutoBauding1	BOOLEAN	PICS Table A.4/5	Asynchronous 3.1 kHz audio with modem AutoBauding 1 general bearer service supported
pc_AsyncFTM_56000	BOOLEAN	PICS Table A.4/20	Asynchronous Frame Tunneling Mode (FTM) 56000bit/s general bearer service supported
pc_AsyncFTM_64000	BOOLEAN	PICS Table A.4/21	Asynchronous Frame Tunneling Mode (FTM) 64000bit/s general bearer service supported
pc_AsyncPIAFS_32000	BOOLEAN	PICS Table A.4/18	Asynchronous PIAFS 32000bit/s general bearer service supported
pc_AsyncPIAFS_64000	BOOLEAN	PICS Table A.4/19	Asynchronous PIAFS 64000bit/s general bearer service supported

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_AsyncV110_14400	BOOLEAN	PICS Table A.4/7	Asynchronous V110 UDI 14400bit/s general bearer service supported
pc_AsyncV110_19200	BOOLEAN	PICS Table A.4/8	Asynchronous V110 UDI 19200bit/s general bearer service supported
pc_AsyncV110_28800	BOOLEAN	PICS Table A.4/9	Asynchronous V110 UDI 28800bit/s general bearer service supported
pc_AsyncV110_38400	BOOLEAN	PICS Table A.4/10	Asynchronous V110 UDI 38400bit/s general bearer service supported
pc_AsyncV110_9600	BOOLEAN	PICS Table A.4/6	Asynchronous V110 UDI 9600bit/s general bearer service supported
pc_AsyncV120_14400	BOOLEAN	PICS Table A.4/12	Asynchronous V120 14400bit/s general bearer service supported
pc_AsyncV120_19200	BOOLEAN	PICS Table A.4/13	Asynchronous V120 19200bit/s general bearer service supported
pc_AsyncV120_28800	BOOLEAN	PICS Table A.4/14	Asynchronous V120 28800bit/s general bearer service supported
pc_AsyncV120_38400	BOOLEAN	PICS Table A.4/15	Asynchronous V120 38400bit/s general bearer service supported
pc_AsyncV120_48000	BOOLEAN	PICS Table A.4/16	Asynchronous V120 48000bit/s general bearer service supported
pc_AsyncV120_56000	BOOLEAN	PICS Table A.4/17	Asynchronous V120 56000bit/s general bearer service supported
pc_AsyncV120_9600	BOOLEAN	PICS Table A.4/11	Asynchronous V120 9600bit/s general bearer service supported
pc_DetachOnUSIM_Rmv	BOOLEAN	PICS Table A.20/34	detach on USIM remove supported
pc_EmergSpeech	BOOLEAN	PICS Table A.2/2	Emergency speech call teleservice supported
pc_MS_ClsmkCM3	B1	PICS Table A.20/52	default Classmark 3 Indicator. Default value: '0'B(The MS does not support any options that are indicated in CM3)
pc_MS_ClsmkCMSP	B1	PICS Table A.20/55	default CM Service Prompt Support. Default value: '0'B ("Network initiated MO CM connection request" not supported.)
pc_MS_ClsmkFreqCap	B1	PICS Table A.20/53	default Frequency Capability. Default value: '0'B (The MS does not support the E-GSM or R-GSM band)

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_MS_ClsmkLCSVA_Cap	B1	PICS Table A.20/54	default LCSVA Capabilities Support. Default value: '0'B(LCS value added location request notification capability not supported)
pc_MS_ClsmkPS_Cap	B1	51.010-2, A.25/61	default Pseudo Synchronisation Capability. Default value: '0'B(PS capability not present)
pc_MS_ClsmkSM_Cap	B1	51.010-2 A.3/3	default Short Message Capability. Default value: '1'B(Mobile station supports mobile terminated point to point SMS)
pc_MS_ClsmkSoLSA	B1	51.010 A.2/38	default SoLSA Support. Default value: '0'B (The ME does not support SoLSA.)
pc_MS_ClsmkUCS2	B1	51.010-2 A26.4/3	default UCS2 Encoding Support. Default value: '0'B (the ME has a preference for the default alphabet (defined in 3GPP TS 23.038 [8b]) over UCS2)
pc_MS_ClsmkVBS	B1	51.010-2 A.3/9	default VBS Capability. Default value: '0'B (no VBS capability or no notifications wanted)
pc_MS_ClsmkVGCS	B1	51.010-2 A.3/8	default VGCS Capability. Default value: '0'B (no VGCS capability or no notifications wanted)
pc_SS_Phase2Supp	B1	PICS Table A.20/64	Set to '1'B if Supplementary Service Phase 2 is supported, set to '0'B if not supported. Default value: '1'B (The MS supports SS phase 2)
pc_Speech	BOOLEAN	PICS Table A.2/1	Speech (narrow band speech AMR) teleservice supported
pc_Sync31kHzA_14400	BOOLEAN	PICS Table A.5/2	Synchronous 3.1kHz Audio 14400bit/s general bearer service supported
pc_Sync31kHzA_19200	BOOLEAN	PICS Table A.5/3	Synchronous 3.1kHz Audio 19200bit/s general bearer service supported
pc_Sync31kHzA_28800	BOOLEAN	PICS Table A.5/4	Synchronous 3.1kHz Audio 28800bit/s general bearer service supported
pc_Sync31kHzA_9600	BOOLEAN	PICS Table A.5/1	Synchronous 3.1kHz Audio 9600bit/s general bearer service supported

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_SyncBTM_56000	BOOLEAN	PICS Table A.5/22	Synchronous Bit TransparentMode (BTM) 56000bit/s general bearer service supported
pc_SyncBTM_64000	BOOLEAN	PICS Table A.5/23	Synchronous Bit TransparentMode (BTM) 64000bit/s general bearer service supported
pc_SyncMmediaCall_28800	BOOLEAN	PICS Table A.5/24	Synchronous Multimedia Call 28000bit/s general bearer service supported
pc_SyncMmediaCall_32000	BOOLEAN	PICS Table A.5/25	Synchronous Multimedia Call 32000bit/s general bearer service supported
pc_SyncMmediaCall_33600	BOOLEAN	PICS Table A.5/26	Synchronous Multimedia Call 33600bit/s general bearer service supported
pc_SyncMmediaCall_56000	BOOLEAN	PICS Table A.5/27	Synchronous Multimedia Call 56000bit/s general bearer service supported
pc_SyncMmediaCall_64000	BOOLEAN	PICS Table A.5/28	Synchronous Multimedia Call 64000bit/s general bearer service supported
pc_SyncV110_28800	BOOLEAN	PICS Table A.5/5	Synchronous V110 28800bit/s general bearer service supported
pc_SyncV110_48000	BOOLEAN	PICS Table A.5/6	Synchronous V110 48000bit/s general bearer service supported
pc_SyncV110_56000	BOOLEAN	PICS Table A.5/7	Synchronous V110 56000bit/s general bearer service supported
pc_SyncV120_14400	BOOLEAN	PICS Table A.5/16	Synchronous V120 14400bit/s general bearer service supported
pc_SyncV120_19200	BOOLEAN	PICS Table A.5/17	Synchronous V120 19200bit/s general bearer service supported
pc_SyncV120_28800	BOOLEAN	PICS Table A.5/18	Synchronous V120 28800bit/s general bearer service supported
pc_SyncV120_38400	BOOLEAN	PICS Table A.5/19	Synchronous V120 38400bit/s general bearer service supported
pc_SyncV120_48000	BOOLEAN	PICS Table A.5/20	Synchronous V120 48000bit/s general bearer service supported
pc_SyncV120_56000	BOOLEAN	PICS Table A.5/21	Synchronous V120 56000bit/s general bearer service supported
pc_SyncV120_9600	BOOLEAN	PICS Table A.5/15	Synchronous V120 9600bit/s general bearer service supported

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_SyncX31_14400	BOOLEAN	PICS Table A.5/9	Synchronous X.31 flag stuffing UDI 14400bit/s general bearer service supported
pc_SyncX31_19200	BOOLEAN	PICS Table A.5/10	Synchronous X.31 flag stuffing UDI 19200bit/s general bearer service supported
pc_SyncX31_28800	BOOLEAN	PICS Table A.5/11	Synchronous X.31 flag stuffing UDI 28800bit/s general bearer service supported
pc_SyncX31_38400	BOOLEAN	PICS Table A.5/12	Synchronous X.31 flag stuffing UDI 38400bit/s general bearer service supported
pc_SyncX31_48000	BOOLEAN	PICS Table A.5/13	Synchronous X.31 flag stuffing UDI 48000bit/s general bearer service supported
pc_SyncX31_56000	BOOLEAN	PICS Table A.5/14	Synchronous X.31 flag stuffing UDI 56000bit/s general bearer service supported
pc_SyncX31_9600	BOOLEAN	PICS Table A.5/8	Synchronous X.31 flag stuffing UDI 9600bit/s general bearer service supported
px_BcapDataCompression	B1	PIXIT Table B.2	Data compression supported(used in the Bearer Capability). Default value: '0'B
px_BcapFNUR	B5	PIXIT Table B.2	Fixed Network User rate supported: '00001'B: FNUR 9.6 kbit/s '00010'B: FNUR 14.4 kbit/s '00011'B: FNUR 19.2 kbit/s '00100'B: FNUR 28.8 kbit/s '00101'B: FNUR 38.4 kbit/s '00110'B: FNUR 48.0 kbit/s '00111'B: FNUR 56.0 kbit/s '01000'B: FNUR 64.0 kbit/s '01001'B: FNUR 33.6 kbit/s '01010'B: FNUR 32.0 kbit/s. Default value: '00001'B
px_BcapITC	ITC_Int	PIXIT Table B.2	Information transfer capability supported (used for the generation of the Bearer Capability) 0 – UDI 1 – RDI 2 – 31 kHz Audio 3 – Other. Default value: 2
px_BcapModemType	B5	PIXIT Table B.2	Modem type supported(used in the Bearer Capability). Default value: '00110'B

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_BcapNumberDataBits	B1	PIXIT Table B.2	Number of data bits supported(used in the Bearer Capability). Default value: '1'B
px_BcapNumberStopBits	B1	PIXIT Table B.2	Number of Stops bits supported(used in the Bearer Capability). Default value: '1'B
px_BcapOtherModemType	B2	PIXIT Table B.2	Other modem type supported (used in the Bearer Capability). Default value: '10'B
px_BcapParity	B3	PIXIT Table B.2	Parity supported(used in the Bearer Capability). Default value: '011'B
px_BcapSACP	B3	PIXIT Table B.2	Signalling access protocol supported (used in the Bearer Capability). Default value: '001'B
px_BcapSyncAsync	B1	PIXIT Table B.2	Synchronous '0'B or Asynchronous '1'B mode supported by IUT. Default value: '1'B
px_BcapUeFlowControl	FlowControl	PIXIT Table B.2	UE flow control. 0–outband, 1–inband, 2–no flow control. 3– X.25 4– X.75 default : 0, outband flow control. Default value: 0
px_CC_CallDiallingDigits	IA5String	PIXIT Table B.2	Dialling digits used to initiate a CC MO call (used with the AT dial D command). Default value: "0123456902"
px_CC_Serv	Services	PIXIT Table B.2	Service selected for Mobile Originated calls and Mobile Terminated calls. The possible values are ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Fascimile"). Default value: "31kHz"
px_PDP_IP_AddrInfoDCH	IA5String	PIXIT Table B.2	A string parameter that identifies the MT in the address space applicable to the IP PDP for DCH. Default value: "200.1.1.80"
px_PDP_IP_AddrInfoFACH	IA5String	PIXIT Table B.2	A string parameter that identifies the MT in the address space applicable to the IP PDP for FACH. Default value: "200.1.1.90"

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_AutomaticAttachSwitch ON	BOOLEAN	PICS Table A.20/38	Parameter is TRUE if UE supports automatic triggering of GMM Attach procedure when switched on
pc_Background	BOOLEAN	PICS Table A.6/4	Background QoS/traffic class supported
pc_CS	BOOLEAN	PICS Table A.3/1	Circuit Switched
pc_Conversational	BOOLEAN	PICS, Table A.6/1	Conversational supported
pc_Interactive	BOOLEAN	PICS Table A.6/3	Interactive QoS/traffic class supported
pc_MS_ClsmkA5_1	B1	51.010-2 A.2/17	default Algorithm A5/1 supported. Default value: '0'B (i.e. A5/1 is supported)
pc_MS_ClsmkA5_2	B1	PICS Table A.20/46	default Algorithm A5/2 supported. Default value: '0'B (encryption algorithm A5/2 not available)
pc_MS_ClsmkA5_3	B1	PICS Table A.20/47	default Algorithm A5/3 supported. Default value: '0'B (encryption algorithm A5/3 not available)
pc_MS_ClsmkA5_4	B1	PICS Table A.20/48	default Algorithm A5/3 supported. Default value: '0'B (encryption algorithm A5/4 not available)
pc_MS_ClsmkA5_5	B1	PICS Table A.20/49	default Algorithm A5/3 supported. Default value: '0'B (encryption algorithm A5/5 not available)
pc_MS_ClsmkA5_6	B1	PICS Table A.20/50	default Algorithm A5/3 supported. Default value: '0'B (encryption algorithm A5/6 not available)
pc_MS_ClsmkA5_7	B1	PICS Table A.20/51	default Algorithm A5/7 supported. Default value: '0'B (encryption algorithm A5/7 not available)
pc_PS	BOOLEAN	PICS Table A.3/2	Packet Switched
pc_Streaming	BOOLEAN	PICS Table A.6/2	Streaming supported
pc_SupportForSF_512	BOOLEAN	PICS Table A.18a/3	Downlink support. Part of DL_PhysChCapabilityFDD.
pc_SupportOfMultiCarrier	BOOLEAN	PICS Table A.1/6	Multi carrier supported
pc_SwitchOnOff	BOOLEAN	PICS Table A.20/35	switch on/off supported
pc_UEA1_Supp	BOOLEAN	PICS Table A.20/27	Support of UMTS encryption algorithm UEA1
pc_UE_PositioningBasedOT DOA_Sup	BOOLEAN	PICS Table A.8a/3	UE positioning capability: the Based OTDOA is supporting by UE Default value TRUE

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_UE_PositioningGPS_TimingOfCellFramesSup	BOOLEAN	PICS Table A.8a/2	UE positioning capability: the UE supports the GPS timing of cell frames Default value TRUE
pc_UE_PositioningIPDL_Supp	BOOLEAN	PICS Table A.8a/1	UE positioning capability: support for IPDL Default value TRUE
pc_UE_PositioningStandaloneLocMethodsSup	BOOLEAN	PICS Table A.8a/4	UE positioning capability: the standalone location method is supporting by UE Default value TRUE
pc_UMTS_GSM	BOOLEAN	PICS Table A.1/4	To check if the UE supports both UMTS as well as GSM. If the variable is set as TRUE, means that both UMTS and GSM is supported. If the variable is set as FALSE, means that UE supports only UMTS
pc_USIM_Rmv	BOOLEAN	PICS Table A.20/36	USIM removable without power down supported
px_AuthAMF	BITSTRING	PIXIT Table B.1	Authentication Management Field (16 bits). The value shall be different from '1111 1111 1111 111'B (AMFresynch). Default value: no default value can be proposed
px_AuthK	BITSTRING	PIXIT Table B.1	Authentication Key (128 bits). Default value: '0000000000000001000000100000001100000100000001001010000011000000111000100000001001000010100000101100001100000011010000111000001111'B
px_AuthN	INTEGER	PIXIT Table B.1	value of n to initialize tcv_AuthN (length of extended response) min 31, max 127 (TS 34.108 cl. 8.1.2). Default value: 127
px_AuthRAND	BITSTRING	PIXIT Table B.1	Random Challenge (128 bits). Default value: '010101..01'B The value shall not be repeatable with 3 bits i.e. something like '001001001001...001'B not allowed.
px_CN_DomainTested	CN_DomainIdentity	PIXIT Table B.1	CN domain to be tested. This parameter is used in test cases that handle both PS and CS domains. Default value: cs_domain

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_CipherAlg	B3	PIXIT Table B.1	Cipher algorithm. Default value: (A5/1) '001'B
px_CipheringOnOff	BOOLEAN	PIXIT Table B.1	Security mode – TRUE if ciphering is applicable. Default value: TRUE
px_DL_MaxCCTrCH	MaxSimultaneousCCTrCH_Count	PIXIT Table B.1	Maximum number of Simultaneous CCTrCH for downlink Default value: 8
px_DL_MaxCC_TB_Bits	MaxNoBits	PIXIT Table B.1	Maximum sum of number of bits of all convolutionally coded transport blocks being received at an arbitrary time instant. Default value: b163840
px_DL_MaxTB_Bits	MaxNoBits	PIXIT Table B.1	Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant. Default value: b163840
px_DL_MaxTF	MaxNumberOfTF	PIXIT Table B.1	Maximum number of TF for downlink Default value: tf1024
px_DL_MaxTFS	MaxNumberOfTFC_DL	PIXIT Table B.1	Maximum number of TFC in the TFCS for downlink Default value: tfc1024
px_DL_MaxTTI_TB	MaxTransportBlocksDL	PIXIT Table B.1	Maximum total number of transport blocks received within TTIs that end within the same 10 ms interval. Default value: tb512
px_DL_MaxTrCHs	MaxSimultaneousTransChsDL	PIXIT Table B.1	Maximum number of simultaneous transport channels for downlink. Default value: e32
px_FDD_OperationBand	INTEGER	PIXIT Table B.1	The operation band under test, as defined in 34.108 clause 5.1.1. Value 1 means Band 1, 2 means Band 2, 3 means Band 3, 6 means Band 6. Rest of the values are not defined. This pixit shall be set in synchronisation with the values that are being set to 6 other Pixits viz: px_UARFCN_D_High, px_UARFCN_D_Mid, px_UARFCN_L_Mid
px_FRESH	Fresh	PIXIT Table B.1	FRESH. Default value: no default value can be proposed
px_IMSI_Def	HEXSTRING	PIXIT Table B.1	default IMSI. Default value: '001010123456063'H

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_IP_Version	IP_VersionType		IP version under test. Default value IPv4
px_MS_ClsmkESIND	B1	PICS Table B.1	default Early Sending Indication. Default value: '0'B("Controlled Early Classmark Sending" option is not implemented in the MS")
px_MS_ClsmkRevLvl	B2	PIXIT Table B.1	default Revision Level. Default value: '10'B
px_MaxAM_EntityNumberRLC_Cap	MaximumAM_EntityNumberRLC_Cap	PIXIT Table B.1	Maximum AM Entity Number for RLC. Default value: am30
px_MaxNoDPCH_PDSCH_Codes	INTEGER	PIXIT Table B.1	Part of DL_PhysChCapabilityFDD. INTEGER (1..8). Default value: 8
px_MaxNoDPDCH_BitsTransmitted	MaxNoDPDCH_BitsTransmitted	PIXIT Table B.1	Part of UL_PhysChCapabilityFDD. Default value: b57600
px_MaxNoPhysChBitsReceived	MaxNoPhysChBitsReceived	PIXIT Table B.1	Part of DL_PhysChCapabilityFDD. Default value: b76800
px_MaxRLC_WindowSize	MaximumRLC_WindowSize	PIXIT Table B.1	Maximum RLC window size. Default value: mws4095
px_PTMSI_Def	OCTETSTRING	PIXIT Table B.1	default PTMSI . Default value: '12345678'O
px_PTMSI_SigDef	OCTETSTRING	PIXIT Table B.1	default PTMSI signature (3 octets, 3GPP 24.008 / 10.5.5.8). Default value: 'AB1234'O
px_PreCfgSRB3Ciph	BOOLEAN	PIXIT Table B.1	If set to TRUE, UL-SRB3 ciphering is pre-configured Default value: FALSE
px_PriScrmCode	PrimaryScramblingCode	PIXIT Table B.1	Primary scrambling code. Default value: 100
px_RAT	RatType	PIXIT Table B.1	This parameter is used to specify which radio access technology is being used for the current test execution. Valid values: fdd and tdd. Default value: fdd
px_RRC_CS_ServTested	RRC_ServTested	PIXIT Table B.1	CS service to be tested for RRC test cases. Default value: Speech
px_RRC_PS_ServTested	RRC_ServTested	PIXIT Table B.1	PS service to be tested for RRC test cases. Default value: Speech
px_SRNC_Id	SRNC_Identity	PIXIT Table B.1	SRNC Id. Default value: '000000000001'B
px_SRNTI	S_RNTI	PIXIT Table B.1	S RNTI. Default value: '00000000000000000001'B

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_TCellA	Tcell	PIXIT Table B.1	TCell value for cell A. Except for the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 256
px_TCellB	Tcell	PIXIT Table B.1	TCell value for cell B. Except for the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 512
px_TCellC	Tcell	PIXIT Table B.1	TCell value for cell C. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 1536
px_TCellD	Tcell	PIXIT Table B.1	TCell value for cell D. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 321
px_TCellE	Tcell	PIXIT Table B.1	TCell value for cell E. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 833
px_TCellF	Tcell	PIXIT Table B.1	TCell value for cell F. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 6577
px_TCellG	Tcell	PIXIT Table B.1	TCell value for cell G. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 7253
px_TCellH	Tcell	PIXIT Table B.1	TCell value for cell H. Except the first created cell, the value 0 applied in ts_SS_CellCfg. Default value: 4351
px_TMSI_Def	OCTETSTRING	PIXIT Table B.1	default TMSI. Default value: '12345678'O
px_TimerDequeuePCO	INTEGER	PIXIT Table B.1	Duration of the timer to empty the PCO queue at the beginning of each test case (in ms). Default value: 5000 ms
px_TotalRLC_AM_BufferSize	TotalRLC_AM_BufferSize	PIXIT Table B.1	Total RLC AM buffer size. Default value: kb1000
px_UARFCN_D_High	INTEGER	PIXIT Table B.1	High Range downlink UARFCN value. Default value: 10837
px_UARFCN_D_Low	INTEGER	PIXIT Table B.1	Low Range downlink UARFCN value. Default value: 10563
px_UARFCN_D_Mid	INTEGER	PIXIT Table B.1	Mid Range downlink UARFCN value. Default value: 10700

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_UE_OpModeDef	UE_OperationMode	PIXIT Table B.1	Default UE operation mode (either opModeA or opModeC). (For most UEs this corresponds class-A or class-C, and can not be changed by the user). Default value: opModeA
px_UE_PositioningNetworkAssistedGPS_Sup	NetworkAssistedGPS_Supported	PIXIT Table B.1	UE positioning capability: supports the network assisted GPS. Default value: networkBased
px_UE_PowerClass	UE_PowerClass	PIXIT Table B.1	UE_PowerClass value. Default value: 1
px_UL_MaxCC_TB_Bits	MaxNoBits	PIXIT Table B.1	Maximum sum of number of bits of all convolutionally coded transport blocks being transmitted at an arbitrary time instant. Default value: b163840
px_UL_MaxTB_Bits	MaxNoBits	PIXIT Table B.1	Maximum sum of number of bits of all transport blocks being transmitted at an arbitrary time instant. Default value: b163840
px_UL_MaxTF	MaxNumberOfTF	PIXIT Table B.1	Maximum number of TF for uplink. Default value: tf1024
px_UL_MaxTFS	MaxNumberOfTFC_UL	PIXIT Table B.1	Maximum number of TFC in the TFCS for uplink. Default value: tfc1024
px_UL_MaxTTI_TB	MaxTransportBlocksUL	PIXIT Table B.1	Maximum total number of transport blocks transmitted within TTIs that start at the same time. Default value: tb512
px_UL_MaxTrCHs	MaxSimultaneousTransChsUL	PIXIT Table B.1	Maximum number of simultaneous transport channels for uplink. Default value: e32
px_UL_ScramblingCode	UL_ScramblingCode	PIXIT Table B.1	UL scrambling code value to be used by UE. Default value : 0
px_UTRAN_GERAN	UTRAN_GERAN	PIXIT Table B.1	This parameter is used to specify for which region the system information blocks are broadcast in the test execution. Valid values: "UTRAN only" and "UTRAN and GERAN". Default value: "UTRAN and GERAN"
pc_DCS_1800_BAND	BOOLEAN	51.010-2, A.1/4	IF GSM band of 1800 is supported
pc_DTM	BOOLEAN	34.123-2, A.1/7; 51.010-2, A.2/62	
pc_E_GSM_900_BAND	BOOLEAN	51.010-2, A.1/2	IF GSM band of E-900 is supported

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
pc_GPRS	BOOLEAN	51.010 – 2 Table A.2/41	
pc_GSM_14_4	BOOLEAN	51.010–2 A.25/72	UE supports GSM 14.4 kbps data (HSCSD or full rate traffic channel for 14.4 kbit/s user data (TCH/F14.4))
pc_GSM_450_BAND	BOOLEAN	51.010–2, A.1/16	IF GSM band of 450 is supported
pc_GSM_480_BAND	BOOLEAN	51.010–2, A.1/17	IF GSM band of 480 is supported
pc_GSM_700_BAND	BOOLEAN	51.010–2, A.1/53	IF GSM band of 700 is supported
pc_GSM_850_BAND	BOOLEAN	51.010–2, A.1/55	IF GSM band of 850 is supported
pc_GSM_AMR	BOOLEAN	51.010–2, A.25/79	IF GSM AMR is Supported by the Mobile
pc_GSM_EFR	BOOLEAN	51.010–2, A.25/65	IF GSM EFR is Supported by the Mobile
pc_GSM_FR	BOOLEAN	51.010–2, A.25/2	IF GSM FR is Supported by the Mobile
pc_GSM_HR	BOOLEAN	51.010–2, A.25/3	IF GSM HR is Supported by the Mobile
pc_G_HSCSD	BOOLEAN	51.010–2, A.1/15	IF GSM High speed Circuit switched data is supported.
pc_G_operation_mode_C	BOOLEAN	51.010 A.2/49	GERAN UE Operation Mode C
pc_PCS_1900_BAND	BOOLEAN	51.010–2, A.1/18	IF GSM band of 1900 is supported
pc_P_GSM_900_BAND	BOOLEAN	51.010–2, A.1/1	IF GSM band of 900 is supported
pc_RLPSupported	BOOLEAN	A.20/68	
pc_R_GSM_900_BAND	BOOLEAN	51.010–2, A.1/3	IF GSM band of 900 is supported
px_CipherKey	B64	PIXIT B.8	Cipher Key (64 bits). Default value: '010111100100101010110 0110101100010010001001 101110101110100101010' B
px_GPRS_CipherAlg	B3	PIXIT B.11	GPRS Cipher algorithm. Default value: (GEA/1) '001'B

Continued on next page

Continued from previous page

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Ref	Comments
px_GSM_BandUnderTest	INTEGER		indicates which band is under test: 1 -> GSM450; 2 -> GSM480; 3 -> GSM750; 4 -> GSM850; 5 -> GSM-P-900; 6-> GSM-E-900; 7-> DCS1800; 8 -> PCS1900. 9 -> 450 & 900 MultiBand test 10 -> 450 & 1800 MultiBand test 11 -> 480 & 900 MultiBand test 12 -> 480 & 1800 MultiBand test 13 -> 900 & 1800 MultiBand test 14 -> GSM710; 15 -> T-GSM810 other values are not defined currently.
px_GSM_CipherAlg	B3	PIXIT B.11	GSM Cipher algorithm.
px_GSM_CipheringOnOff	B1	PIXIT B.8	Default value: (A5/1) '000'B GSM Ciphering to be started or not Default value: '1'B i.e Ciphering to be started
px_MS_TXPWR_MAX_CCH	B5	PIXIT B.8	MS_TXPWR_MAX_CCH.
px_PowerLevel	B5		Default value: '01010'B power level value for L1 header
px_RXLEV_ACCESS_MIN	B6	PIXIT B.8	minimum received signal level at MS. Default value: '000000'B
px_SplitOnCCCH	B1	PIXIT B.8	Split pg cycle on CCCH supported indication (1 bit) Default value: '0'B not supported
px_TSC	B3	PIXIT B.8	?? shall be a PICS question Training sequence code for traffic channels. Default value: '011'B
px_TimingAdvance	B7		Timing advance value for L1 header. Default value: '0000000'B
Detailed Comments :			

Test Case Selection Expression Definitions		
Expression Name	Selection Expression	Comments
GERAN_C286	pc_FDD AND pc_RAB_A_18c_15 AND (((pc_GSM_FRData OR pc_G_HSCSD) AND pc_GSM_14_4) OR (pc_RAB_A_18c_16 AND (pc_G_HSCSD OR pc_GSM_FRData)) OR (pc_RAB_A_18c_17 AND pc_GSM_Data)) AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_PCS_1900_BAND OR pc_GSM_850_BAND OR pc_GSM_710_BAND OR pc_GSM_750_BAND OR pc_T_GSM_810_BAND)	C286
GERAN_C287	pc_FDD AND ((pc_RAB_A_18c_16 AND (pc_GSM_FRData OR pc_G_HSCSD) AND pc_GSM_14_4) OR (pc_RAB_A_18c_17 AND (pc_G_HSCSD OR pc_GSM_FRData) AND pc_GSM_14_4) OR (pc_RAB_A_18c_17 AND (pc_G_HSCSD OR pc_GSM_FRData))) AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_PCS_1900_BAND OR pc_GSM_850_BAND OR pc_GSM_710_BAND OR pc_GSM_750_BAND OR pc_T_GSM_810_BAND)	C287
GERAN_Band_SpeechAllBands	pc_FDD AND pc_RAB_A_18c_4 AND pc_GSM_FR AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_GSM_700_BAND OR pc_GSM_850_BAND OR pc_PCS_1900_BAND OR pc_GSM_710_BAND OR pc_GSM_750_BAND OR pc_T_GSM_810_BAND)	C289

Continued on next page

Continued from previous page

Test Case Selection Expression Definitions		
Expression Name	Selection Expression	Comments
GERAN_Band_SpeechAnyRate	pc_FDD AND pc_RAB_A_18c_4 AND (pc_GSM_FR OR pc_GSM_HR OR pc_GSM_EFR OR pc_GSM_AMR) AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_PCS_1900_BAND OR pc_GSM_850_BAND OR pc_GSM_710_BAND OR pc_GSM_750_BAND OR pc_T_GSM_810_BAND)	C285
GERAN_Band_SpeechFR	pc_FDD AND pc_RAB_A_18c_4 AND pc_GSM_FR AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_PCS_1900_BAND OR pc_GSM_710_BAND OR pc_GSM_750_BAND OR pc_T_GSM_810_BAND OR pc_GSM_850_BAND)	C288
UMTS_GPRS	pc_FDD AND pc_GPRS	C324
RRC_FDD_DTM	pc_FDD AND pc_DTM	C315
Detailed Comments :		

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_S_RNTI_2	INTEGER	1	The value of S_RNTI 2 to be used in IR_G test cases
tsc_ECMSHigh	B1	'1'B	Beware: this is a L | H value
tsc_3GECMSHigh	B1	'1'B	Beware: this is a L | H value
tsc_ChPwrLvl_60dBm	TX_Power	53	113 – (Mod) (–60) dBm = 53 dBuVemf
tsc_ChPwrLvl_77dBm	TX_Power	36	113 – (Mod) (–77) dBm = 36 dBuVemf
tsc_G_TimeSlot	B3	'011'B	time slot GSM 04.08, 10.5.2.5 BITSTRING [3] suitable for Single slot operation, Value Arbitrarily taken
tsc_Sf16	SpreadingFactor	sf16	
tsc_Sf64	SpreadingFactor	sf64	
tsc_Sfc32_0	SF512_AndCodeNumber	sf32: 0	
tsc_Sfd128_8	SF512_AndPilot	sfd128: pb8	
tsc_AccessPtNameDCH	IA5String	"ABCDEF"	The logical name for the GGSN or the external packet world for the DCH PDP context. Default value: "ABCDEF"
tsc_AccessPtNameFACH	IA5String	"GHIJK"	The logical name for the GGSN or the external packet world for the FACH PDP context. Default value: "GHIJK"
tsc_AttenuationCellOFF	INTEGER	123	Value of attenuator to be used when setting a Cell OFF (3GPP 34.108 / Table 6.1.3)
tsc_Bcap14400	B5	'00010'B	FNUR 14.4 kbit/s
tsc_Bcap19200	B5	'00011'B	FNUR 19.2 kbit/s
tsc_Bcap28800	B5	'00100'B	FNUR 28.8 kbit/s
tsc_Bcap32000	B5	'01010'B	FNUR 32.0 kbit/s
tsc_Bcap33600	B5	'01001'B	FNUR 33.6 kbit/s
tsc_Bcap38400	B5	'00101'B	FNUR 38.4 kbit/s
tsc_Bcap48000	B5	'00110'B	FNUR 48.0 kbit/s
tsc_Bcap56000	B5	'00111'B	FNUR 56.0 kbit/s
tsc_Bcap64000	B5	'01000'B	FNUR 64.0 kbit/s
tsc_Bcap9600	B5	'00001'B	FNUR 9.6 kbit/s
tsc_BcapASync	B1	'1'B	Synchronous
tsc_BcapCE_NT	B2	'01'B	Connection element NT – used for the generation of the Bcap
tsc_BcapCE_T	B2	'00'B	Connection element Transparent – used for the generation of the Bcap
tsc_BcapDataB8	B1	'1'B	Number of data bits: 8 bits
tsc_BcapDataBitSpare	B1	'0'B	Number of data bits: spare (7 bits)
tsc_BcapFlowInband	FlowControl	1	1–inband

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_BcapFlowNoFlowCtrl	FlowControl	2	2--no flow control
tsc_BcapFlowNoX25	FlowControl	3	3--X25
tsc_BcapFlowNoX75	FlowControl	4	4--X75
tsc_BcapFlowOutband	FlowControl	0	0--outband
tsc_BcapITC_31kHz	B3	'010'B	ITC 3.1 kHz audio
tsc_BcapITC_Fax3	B3	'011'B	ITC facsimile group 3
tsc_BcapITC_Int31kHzA	ITC_Int	2	ITC : 3.1 kHzA (integer value)
tsc_BcapITC_IntRDI	ITC_Int	1	ITC : RDI (integer value)
tsc_BcapITC_IntUDI	ITC_Int	0	ITC : UDI (integer value)
tsc_BcapITC_Other	B3	'101'B	ITC: other ITC
tsc_BcapITC_UDI	B3	'001'B	ITC : UDI
tsc_BcapMT_Autobaud1	B5	'01000'B	Modem type : autobauding type 1
tsc_BcapMT_None	B5	'00000'B	Modem type : none
tsc_BcapMT_V32	B5	'00110'B	ModemType: V32
tsc_BcapOtherITC_RDI	B2	'00'B	Other ITC : RDI
tsc_BcapOtherITC_Spare	B2	'00'B	Other ITC : spare
tsc_BcapOtherMT_None	B2	'00'B	Other modem type: none
tsc_BcapOtherMT_V34	B2	'10'B	Other modem type: V34
tsc_BcapOtherRA_H223	B2	'01'B	Other rate adaptation: H.223&H.245
tsc_BcapOtherRA_PIAFS	B2	'10'B	Other rate adaptation: PIAFS
tsc_BcapOtherRA_Spare	B2	'00'B	Other rate adaptation: spare
tsc_BcapOtherRA_V120	B2	'00'B	Other rate adaptation: V120
tsc_BcapParityNone	B3	'011'B	parity: none
tsc_BcapRA_No	B2	'00'B	rate Adaptation: No rate adaptation
tsc_BcapRA_Other	B2	'11'B	rate Adaptation: Other rate adaptation
tsc_BcapRA_V110	B2	'01'B	rate adaptation : V.110
tsc_BcapRA_X31	B2	'10'B	rate adaptation : X.31 flag
tsc_BcapSACP_I440450	B3	'001'B	SACP I.440/I.450
tsc_BcapSACP_X32	B3	'110'B	SACP X.32
tsc_BcapStopBitSpare	B1	'0'B	Number of stops bits: spare
tsc_BcapSync	B1	'0'B	Asynchronous
tsc_BcapU2_CopNoFict	B5	'01100'B	User info layer 2 protocol: No flow control
tsc_BcapU2_Iso6429	B5	'01000'B	User info layer 2 protocol: Inband flow control
tsc_BcapU2_X25	B5	'00110'B	User info layer 2 protocol: X.25
tsc_BcapU2_X75	B5	'01101'B	User info layer 2 protocol: X.75
tsc_DL_DCH2	INTEGER	7	identity for transport channel DCH2 (downlink), in AMR speech this transport channel is used for RAB subflow#2

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_DL_DCH3	INTEGER	8	identity for transport channel DCH4 (downlink), in AMR speech this transport channel is used for RAB subflow#3
tsc_DL_DPCH1_ChC_Speech	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_SFP_Speech	SF512_AndPilot	sfd128 : pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_SFP_Streaming	SF512_AndPilot	sfd32 : NULL	Spreading factor and pilot bits for tsc_DL_DPCH1 for a Streaming 57.6 kbps configuration
tsc_DL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (downlink)
tsc_DL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (downlink)
tsc_PDP_TypeOrg	B4	'0001'B	Default value can be ETSI provided. A string parameter which specifies the type of packet data protocol X.25 IP OSPIH PPP. Default value: '0000'B
tsc_RejCauPDP_CtxtDeact	RejCau	'24'O	reject cause: regular PDP Context Deactivation
tsc_Sf32	SpreadingFactor	sf32	
tsc_Sfc64	SF512_AndCodeNumber	sf64: 63	
tsc_Sfd64	SF512_AndPilot	sfd64:NULL	
tsc_Srv31kHz	Services	"31kHz"	Service: 3.1kHz Audio
tsc_SrvAltSpeechFax	Services	"Alternate Speech/Facsimile"	TeleService: Alternate Speech/Facsimile (TS61)
tsc_SrvBTM	Services	"BTM"	Service: Bit Transfer Mode
tsc_SrvEmgCall	Services	"EmergencyCall"	Service: Emergency Call
tsc_SrvFTM	Services	"FTM"	Service: Frame Tunneling Mode
tsc_SrvMmediaCall	Services	"MmediaCall"	Service: Multimedia Call
tsc_SrvPIAFS	Services	"PIAFS"	Service: PIAFS
tsc_SrvTelephony	Services	"Telephony"	Service: Telephony
tsc_SrvV110	Services	"V110"	Service: V.110 UDI
tsc_SrvV120	Services	"V120"	Service: V.120
tsc_SrvX31	Services	"X31"	Service: X.31 flag stuffing UDI
tsc_UL_DCH3	INTEGER	3	identity for transport channel DCH3 (uplink), in AMR speech this transport channel is used for RAB subflow#3

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_UL_DPDCH_SF_Speech	SpreadingFactor	sf64	Channelization code for UL DPDCH for a speech configuration
tsc_UL_DPDCH_SF_Streaming	SpreadingFactor	sf16	Channelization code for UL DPDCH for a Streaming 57.6 kbps configuration
tsc_UL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (uplink)
tsc_UL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (uplink)
tsc_WaitDetach	INTEGER	5000	Wait for an RRC CONNECTION REQUEST message including a 'detach' cause.
maxLogCHperTrCH	INTEGER	15	This constant is from MCI ASP proposal, but there is no value for it in the proposal. value 8 is for temporary use
maxdlTrCH	INTEGER	16	
maxulTrCH	INTEGER	16	
tsc_AICH1	INTEGER	7	Physical channel identity for AICH channel associated with first PRACH
tsc_AICH1_ChC	ChannelisationCode256	3	Channelization code for tsc_AICH1
tsc_AICH2	INTEGER	12	Physical channel identity for AICH2 channel associated with second PRACH
tsc_AT_ResultOK	IA5String	"<CR><LF>OK<CR><LF>"	
tsc_AttOn	INTEGER	1	Attach flag value On
tsc_AttenuationServingCell	INTEGER	0	Value of attenuator to be used when setting a Serving Cell.
tsc_BCCH1	INTEGER	1	Logical channel identity for logical channel BCCH mapped on BCH
tsc_BCCH6	INTEGER	6	Logical channel identity for logical channel BCCH mapped on FACH
tsc_BCH1	INTEGER	11	Identity for transport channel BCH
tsc_CRNTI	C_RNTI	'0000000000000001'B	C RNTI. Default value: '0000 0000 0000 0001'B
tsc_CS_Domain	CN_DomainIdentity	cs_domain	
tsc_CellA	INTEGER	0	Identity of Cell A
tsc_CellB	INTEGER	1	Identity of Cell B
tsc_CellC	INTEGER	2	Identity of Cell C
tsc_CellD	INTEGER	3	Identity of Cell D
tsc_CellDedicated	INTEGER	-1	Identity of the dedicated cell.
tsc_CellE	INTEGER	4	Identity of Cell E
tsc_CellF	INTEGER	5	Identity of Cell F

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_CellG	INTEGER	6	Identity of Cell G
tsc_CellH	INTEGER	7	Identity of Cell H
tsc_CellIdCellA	BITSTRING	'00'B	
tsc_CellIdCellB	BITSTRING	'0000000000000000000000000000000000000001'B	
tsc_CellIdCellC	BITSTRING	'0000000000000000000000000000000000000010'B	
tsc_CellIdCellD	BITSTRING	'0000000000000000000000000000000000000011'B	
tsc_CellIdCellE	BITSTRING	'00000000000000000000000000000000000000100'B	
tsc_CellIdCellF	BITSTRING	'00000000000000000000000000000000000000101'B	
tsc_CellIdCellG	BITSTRING	'00000000000000000000000000000000000000110'B	
tsc_CellIdCellH	BITSTRING	'00000000000000000000000000000000000000111'B	
tsc_DC_ControlPDU	DC_Field	'0'B	Value for D/C field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.1
tsc_DL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped on FACH (downlink)
tsc_DL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (downlink), used by signalling radio bearer 1
tsc_DL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (downlink), used by signalling radio bearer 2
tsc_DL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (downlink), used by signalling radio bearer 3
tsc_DL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (downlink), used by signalling radio bearer 4
tsc_DL_DCH1	INTEGER	6	identity for transport channel DCH1 (downlink), in AMR speech this transport channel is used for RAB subflow#1
tsc_DL_DCH5	INTEGER	10	identity for transport channel DCH5 (downlink), in most case this transport channel is used for signalling bearers.
tsc_DL_DPCH1	INTEGER	26	physical channel identity for DPCH1(downlink)
tsc_DL_DPCH1_2ndScrC	SecondaryScramblingCode	1	secondary scrambling code for DL DPCH1
tsc_DL_DPCH1_ChC_64k_CS	SF512_AndCodeNumber	sf32:0	Channelization code for tsc_DL_DPCH1 for a 64 kbps CS configuration

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_DL_DPCH1_ChC_SRB	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a SRB connection with a RAB established
tsc_DL_DPCH1_SFP_SRB	SF512_AndPilot	sfd128:pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for an SRB connection with a RAB established
tsc_DL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (downlink)
tsc_DL_TxPower_DPCH	DL_TxPower	-5	down link transmit power level of DPCH used for CS RABS. Default value is -5 dBm
tsc_DPCCH_PowerOffset	DPCCH_PowerOffset	-40	DPCCH power offset value. Default value: -80 (IE Value *2),
tsc_DPCH_PowerOffsetPILOT	INTEGER	0	Power offset value of PILOT on DPCH
tsc_DPCH_PowerOffsetTFCl	INTEGER	0	Power offset value of TFCI on DPCH
tsc_DPCH_PowerOffsetTPC	INTEGER	0	Power offset value of TPC on DPCH
tsc_DefaultDPCH_OffsetValue	DefaultDPCH_OffsetValueFDD	459	Default DPCH offset value. Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 Default value : 459
tsc_DelayAfterRRC_ConnRel	INTEGER	1000	Delay before sending after receiving RRC CONNECTION RELEASE complete in AM Mode (value in ms), so as to allow SS RLC layer to send ACK to UE.
tsc_DelayBeforeRRC_ConnRel	INTEGER	1000	Delay before sending RRC CONNECTION RELEASE (value in ms)
tsc_FACH1	INTEGER	13	transport channel identity for FACH
tsc_FACH2	INTEGER	14	transport channel identity for second FACH when it is connected to a secondary CCPCH together with PCH (transport channel identity = 14)
tsc_GMM_PD	ProtocolDiscriminator	'1000'B	GMM protocol discriminator 3GPP 24.008 clause 10.4
tsc_GainFactorBetaC_Below64k	INTEGER	11	Gain factor Beta C value to be used for RAB UL below 64kbps
tsc_GainFactorBetaC_Higher64k	INTEGER	9	Gain factor Beta C value to be used for RAB UL higher than 64kbps
tsc_GainFactorBetaD	INTEGER	15	

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_IntegrProtAlgCap	B16	'00000000000000010'B	Integrity Protection Algorithm Capability
tsc_KeySeqDef	KeySeq	'111'B	default Key Sequence. Default value: '111'B
tsc_LAC_Def	OCTETSTRING	'0001'O	
tsc_MCC_Def	HEXSTRING	'001'H	
tsc_MNC_Def	HEXSTRING	'01F'H	
tsc_MSN	INTEGER	0	
tsc_MessAuthCode	BITSTRING	'000000000000000000000000 000000000000'B	
tsc_N300	INTEGER	3	
tsc_NMO_I	OCTETSTRING	'00'O	Network Mode of Operation I (3GPP 24.008 / 10.5.1.12.3)
tsc_NMO_II	OCTETSTRING	'01'O	Network Mode of Operation II (3GPP 24.008 / 10.5.1.12.3)
tsc_Now	INTEGER	512	To indicate the system information change starts immediately.
tsc_PCCH1	INTEGER	1	Logical channel identity for logical channel PCCH
tsc_PCH1	INTEGER	12	identity for transport channel PCH1
tsc_PDP_TypeNoIPv4	PDP_TypeNo	'21'O	Indicates IP v4. Default is IPv4 (0 0 1 0 0 0 0 1). Default value: '21'O
tsc_PDP_TypeNoIPv6	PDP_TypeNo	'57'O	Indicates IP v6. Default is IPv6 (0 1 0 1 0 1 1 1). Default value: '57'O
tsc_PDU_TypeStatus	CtrlPDU_Type	'000'B	Value for PDU type field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.2
tsc_PICH1	INTEGER	6	Physical channel identity for PICH channel associated with first secondary CCPCH
tsc_PICH1_ChC	ChannelisationCode256	2	Channelization code for tsc_PICH1
tsc_PICH2	INTEGER	11	Physical channel identity for PICH2 channel associated with second secondary CCPCH
tsc_PRACH1	INTEGER	8	Physical channel identity for first PRACH channel
tsc_PRACH1_SF	SF_PRACH	sfpr64	Channelization code for UL DPDCH for PRACH1
tsc_PRACH1_ScrC	PreambleScramblingCodeWordNumber	0	Scrambling code for preamble of PRACH1

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_PRACH1_Signatures	AvailableSignatures	'000000011111111'B	available signatures for PRACH. (from 34.108 cl. 6.1 (SIB5))
tsc_PRACH2	INTEGER	9	Physical channel identity for second PRACH channel
tsc_PS_Domain	CN_DomainIdentity	ps_domain	
tsc_P_CCPCH	INTEGER	4	Physical channel identity for primary CCPCH channel
tsc_P_CPICH	INTEGER	0	Physical channel identity for primary CPICH channel
tsc_P_SCH	INTEGER	1	Physical channel identity for primary SCH channel
tsc_PowerAICH	AICH_PowerOffset	-5	relative transmission power level of AICH. The power level is specified relatively to power level of CPICH in terms of AICH_Ec. Default is -5 dBm/3.84MHz
tsc_PowerPICH	PICH_PowerOffset	-5	relative transmission power level of PICH. The power level is specified relatively to power level of CPICH in terms of PICH_Ec. Default is -5 dBm/3.84MHz
tsc_PowerpCCPCH	DL_TxPower	-2	transmission power level of primary CCPCH relative to CPICH. Default is -2 dBm.
tsc_PowerpCPICH	DL_TxPower_PCPICH	-60	transmission power level of primary CPICH. The power level is specified in terms of CPICH_Ec. Default is -60 dBm.
tsc_PowerpSCH	DL_TxPower	-5	transmission power level of primary SCH relative to CPICH. Default is -5 dBm.
tsc_PowersCCPCH1	DL_TxPower	-2	transmission power level of secondary CCPCH1 relative to CPICH. Default is -2 dBm
tsc_PowersSCH	DL_TxPower	-5	transmission power level of secondary SCH relative to CPICH. Default is -5 dBm
tsc_PuncLimit	PuncturingLimit	p11	puncturing limit for PRACH. default value is 1. Default value: P11
tsc_RAB_DefCS	B8	'00000001'B	Default AB Id for the CS domain
tsc_RAB_DefPS	B8	'00000101'B	Default AB Id for the PS domain
tsc_RACH1	INTEGER	15	transport channel identity for RACH

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_RAC_Def	OCTETSTRING	'05'O	Routing Area Code, 1 octet, 3GPP 24.008 clause 10.5.1.12.3
tsc_RB0	INTEGER	0	signalling radio bearer on TM + CCCH
tsc_RB1	INTEGER	1	signalling radio bearer on UM + DCCH
tsc_RB10	INTEGER	10	radio access bearer identity, in AMR speech this RB is RAB subflow#1, in other cases this is a radio access bearer
tsc_RB11	INTEGER	11	radio access bearer identity, in AMR speech this RB is RAB subflow#2, in some other cases this is the signalling radio bearer for TM + BCCH_FACH.
tsc_RB12	INTEGER	12	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH
tsc_RB13	INTEGER	13	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH
tsc_RB2	INTEGER	2	signalling radio bearer on AM + DCCH
tsc_RB20	INTEGER	20	radio access bearer for PS RAB
tsc_RB21	INTEGER	21	radio access bearer for PS RAB
tsc_RB22	INTEGER	22	Second AM radio access bearer for PS
tsc_RB24	INTEGER	24	Second AM radio access bearer for PS
tsc_RB25	INTEGER	25	PS Radio Bearer associated with a DTCH on HS-DSCH
tsc_RB29	INTEGER	29	RB Id for Radio bearer that carries the 2nd CCCH in the DL
tsc_RB3	INTEGER	3	signalling radio bearer on AM + DCCH for high priority NAS_DT
tsc_RB30	INTEGER	30	radio access bearer for CBS RAB
tsc_RB31	INTEGER	31	
tsc_RB4	INTEGER	4	signalling radio bearer on AM + DCCH for low priority NAS_DT
tsc_RB_2ndCCCH	INTEGER	-5	uplink signalling radio bearer on TM + second CCCH

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_RB_2ndPCCH	INTEGER	-4	radio bearer identity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.
tsc_RB_AM_15_RLC	SS_RB_Identity	-13	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_AM_7_RLC	SS_RB_Identity	-12	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_BCCH	INTEGER	-1	radio bearer identity for bearer on TM + BCCH + BCH used for broadcasting system information blocks
tsc_RB_BCCH_FACH	INTEGER	-3	signalling radio bearer on TM + BCCH + FACH + sCCPCH1
tsc_RB_BCCH_FACH_RAB	INTEGER	-19	RB Id for Radio bearer that carries the 2nd BCCH
tsc_RB_CCCH_FACH_MAC	SS_RB_Identity	-18	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the CCCH mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_RB_DCCH_DCH_MAC	SS_RB_Identity	-15	<p>RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to DCH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated.</p> <p>A negative value is used to indicate that the SS configuration is not identical to the UE configuration.</p>
tsc_RB_DCCH_FACH_M C	SS_RB_Identity	-14	<p>RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated.</p> <p>A negative value is used to indicate that the SS configuration is not identical to the UE configuration.</p>
tsc_RB_PCCH	INTEGER	-2	<p>radio bearer identity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.</p>
tsc_RB_PCCH2	INTEGER	-4	
tsc_RB_UM_15_RLC	SS_RB_Identity	-11	<p>RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated.</p> <p>A negative value is used to indicate that the SS configuration is not identical to the UE configuration.</p>

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_RB_UM_7_RLC	SS_RB_Identity	-10	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_SFN_OffsetA	INTEGER	0	SFN offset values for cell A Default value: 0
tsc_SFN_OffsetB	INTEGER	0	SFN offset values for cell B Default value: 0
tsc_SFN_OffsetC	INTEGER	0	SFN offset values for cell C Default value: 0
tsc_SFN_OffsetD	INTEGER	3000	SFN offset values for cell D Default value: 3000
tsc_SFN_OffsetE	INTEGER	3000	SFN offset values for cell E Default value: 3000
tsc_SFN_OffsetF	INTEGER	678	SFN offset values for cell F Default value: 678
tsc_SFN_OffsetG	INTEGER	1356	SFN offset values for cell G Default value: 1356
tsc_SFN_OffsetH	INTEGER	2034	SFN offset values for cell H Default value: 2034
tsc_SMPD	ProtocolDiscriminator	'1010'B	SM protocol discriminator
tsc_SS_CS_Domain	SS_CN_DomainIdentity	0	
tsc_SS_PS_Domain	SS_CN_DomainIdentity	1	
tsc_S_CCPCH1	INTEGER	5	Physical channel identity for first secondary CCPCH channel
tsc_S_CCPCH1_ChC	SF256_AndCodeNumber	sf64:1	Channelization code for tsc_S_CCPCH1
tsc_S_CCPCH2	INTEGER	10	Physical channel identity for second secondary CCPCH channel
tsc_S_CCPCH3	INTEGER	13	Physical channel identity forThird secondary CCPCH channel
tsc_S_CCPCH_2ndScrCode	INTEGER	0	Secondary scrambling code for S-CCPCH channels
tsc_S_SCH	INTEGER	2	Physical channel identity for secondary SCH channel

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_SlotFormatsCCPCH1	SCCPCHSlotFormat	8	channelization code for secondary CCPCH1 when spreading factor = 64, default value is 8. Default value: 8
tsc_T3212_Def	OCTETSTRING	'1E'O	infinite
tsc_TPC_CombinationIndex	TPC_CombinationIndex	0	
tsc_TimingsCCPCH1	INTEGER	0	timing offset for secondary CCPCH1. default is 0. Default value: 0
tsc_TpcStepSize	TPC_StepSizeFDD	0	Value 0 corresponds to 1 dB
tsc_UL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped RACH (uplink)
tsc_UL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (uplink), used by signalling radio bearer 1
tsc_UL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (uplink), used by signalling radio bearer 2
tsc_UL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (uplink), used by signalling radio bearer 3
tsc_UL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (uplink), used by signalling radio bearer 4
tsc_UL_DCH1	INTEGER	1	identity for transport channel DCH1 (uplink), in AMR speech this transport channel is used for RAB subflow#1
tsc_UL_DCH2	INTEGER	2	identity for transport channel DCH2 (uplink), in AMR speech this transport channel is used for RAB subflow#2
tsc_UL_DCH5	INTEGER	5	identity for transport channel DCH5 (uplink), in most case this transport channel is used for signalling bearers.
tsc_UL_DPCH1	INTEGER	20	physical channel identity for DPCH1(uplink)
tsc_UL_DPDCH_SF_SRB	SpreadingFactor	sf64	Channelization code for UL DPDCH for an SRB connection with a RAB established
tsc_UL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (uplink)
tsc_UL_MAC_Prt1	MAC_LogicalChannelPriority	1	
tsc_UL_MAC_Prt2	MAC_LogicalChannelPriority	2	
tsc_UL_MAC_Prt3	MAC_LogicalChannelPriority	3	

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_UL_MAC_Prt4	MAC_LogicalChannelPriority	4	
tsc_URA_IdCellA	BITSTRING	'0000000000000001'B	
tsc_URA_IdCellB	BITSTRING	'0000000000000001'B	
tsc_URA_IdCellC	BITSTRING	'0000000000000010'B	
tsc_URA_IdCellD	BITSTRING	'0000000000000010'B	
tsc_URA_IdCellE	BITSTRING	'0000000000000011'B	
tsc_URA_IdCellF	BITSTRING	'0000000000000011'B	
tsc_URA_IdCellG	BITSTRING	'000000000000100'B	
tsc_URA_IdCellH	BITSTRING	'000000000000100'B	
tsc_USIM_NeedRmv	BOOLEAN	TRUE	Removal of USIM is needed in a test case (USIM is not always inserted)
tsc_sCCPCH_PowerOffsetPILOT	INTEGER	6	Power offset value of PILOT on sCCPCH
tsc_sCCPCH_PowerOffsetTFCI	INTEGER	6	Power offset value of TFCI on sCCPCH
tsc_GSM_PCS1900Band_Test	INTEGER	8	indicates GSM PCS 1900 Band is under test
tsc_GSM_DCS1800Band_Test	INTEGER	7	indicates GSM DCS 1800 Band is under test
tsc_GSM_E_900Band_Test	INTEGER	6	indicates GSM E 900 Band is under test
tsc_GSM_P_900Band_Test	INTEGER	5	indicates GSM P 900 Band is under test
tsc_GSM_850Band_Test	INTEGER	4	indicates GSM 850 Band is under test
tsc_GSM_710Band_Test	INTEGER	14	indicates GSM 710 Band is under test
tsc_GSM_750Band_Test	INTEGER	15	indicates GSM 750 Band is under test
tsc_T_GSM_810Band_Test	INTEGER	16	indicates T-GSM 810 Band is under test
tsc_GSM_480Band_Test	INTEGER	2	indicates GSM 480 Band is under test
tsc_GSM_450Band_Test	INTEGER	1	indicates GSM 450 Band is under test
tsc_AGCH	G_LogicalChType	3	GERAN AGCH channel type
tsc_BCCH	G_LogicalChType	0	GERAN BCCH channel type
tsc_BasicPhyChCombType1	ChannelCombination	1	
tsc_BasicPhyChCombType10	ChannelCombination	10	
tsc_BasicPhyChCombType11	ChannelCombination	11	
tsc_BasicPhyChCombType13	ChannelCombination	13	
tsc_BasicPhyChCombType18	ChannelCombination	18	
tsc_BasicPhyChCombType19	ChannelCombination	19	
tsc_BasicPhyChCombType2	ChannelCombination	2	

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_BasicPhyChCombType20	ChannelCombination	20	
tsc_BasicPhyChCombType21	ChannelCombination	21	
tsc_BasicPhyChCombType5	ChannelCombination	5	
tsc_BasicPhyChCombType8	ChannelCombination	8	
tsc_BasicPhyChCombType9	ChannelCombination	9	
tsc_CS1	INTEGER	1	CS-1 coding for GPRS
tsc_CipheringModeCommand_Msg_Type	O1	'35'O	
tsc_CipheringModeComplete_Msg_Type	O1	'32'O	
tsc_GSM_CellA	CellId	1	
tsc_GSM_CellB	CellId	2	
tsc_GSM_CellC	CellId	3	
tsc_Gen_SkipIndicator	B4	'0000'B	Skip Indicator field consists of latter half byte after Protocol discriminator field. Its value is '0000'B in all the messages.
tsc_ImmediateAssignmentMsg_Type	O1	'3F'O	Message type for Immediate assignment
tsc_LocationUpdatingAccept_Msg_Type	B8	'00000010'B	'02'H Message type for Location Update Accept
tsc_MM_Msgs_Proto_Disc	B4	'0101'B	Protocol discriminator for all the MM messages for non-GPRS is '0101'B
tsc_NormalPaging	INTEGER	0	
tsc_PACCH_F	G_LogicChType	19	GERAN PACCH/F channel type
tsc_PRACH	G_LogicChType	15	GERAN PRACH channel type
tsc_PhyCh0	PhysicalChId	0	this physical channel identity is always used for channel combination 4 or 5.
tsc_PhyCh1	PhysicalChId	1	
tsc_RR_HopOff	B1	'0'B	hopping off
tsc_RR_Msgs_Proto_Disc	B4	'0110'B	Protocol discriminator for all the RR messages is '0110'B.
tsc_RR_PagingNormal	B2	'00'B	Normal paging type
tsc_SAPI_0	INTEGER	0	
tsc_SignallingOnly	B8	'00000000'B	
tsc_SysInfoType1	SysInfoType	25	
tsc_SysInfoType13	SysInfoType	0	
tsc_SysInfoType15	SysInfoType	67	
tsc_SysInfoType2	SysInfoType	26	
tsc_SysInfoType2bis	SysInfoType	2	
tsc_SysInfoType2quater	SysInfoType	7	
tsc_SysInfoType3	SysInfoType	27	
tsc_SysInfoType4	SysInfoType	28	
tsc_SysInfoType5	SysInfoType	29	

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_SysInfoType5bis	SysInfoType	5	
tsc_SysInfoType6	SysInfoType	30	
tsc_TN0	TN	'000'B	
tsc_LR_Category	PSI_Category	2	2--low repetition category.
tsc_HR_Category	PSI_Category	1	1--high repetition category
tsc_Position0	PositionInList	0	
tsc_Position1	PositionInList	1	
tsc_Position2	PositionInList	2	
tsc_Position3	PositionInList	3	
tsc_RlcMacEntity1	INTEGER	1	
tsc_USF1	B3	'001'B	
tsc_CCCHConf_Combined	B3	'001'B	
tsc_ChPwrLvl_70dBm	TX_Power	43	113 – (Mod) (–70) dBm = 43 dBuVemf
tsc_ChPwrLvl_75dBm	TX_Power	38	113 – (Mod) (–75) dBm = 38 dBuVemf
tsc_DefUSF	B3	'000'B	
tsc_downlinkTFI	B5	'00001'B	
tsc_G_HSN	INTEGER	2	Hopping sequence number
			value range: 0 – 63. 0=cyclic hopping. Refer to GSM 11.10 for the value to be used in a particular test case
tsc_G_MAIO	INTEGER	5	mobile allocation index offset, value range: 0 – 63
tsc_G_TCH_H_SubA	B1	'0'B	TDMA offset of half rate subchannel
tsc_G_TrchId1	PhysicalChId	2	Now use Phy Ch 2, to avoid conflict with GPRS channel
tsc_G_TS0	B3	'000'B	time slot 0
tsc_LLEntity	INTEGER	1	
tsc_PAGCH_LogicalType	INTEGER	17	
tsc_PBCCH_LogicalType	INTEGER	14	
tsc_RlcMode_Ack	B1	'0'B	
tsc_TLLI_Initial	O4	'FFFFFFF'O	
tsc_uplinkTFI	B5	'00000'B	
tsc_PPCH_LogicalType	INTEGER	16	
tsc_LLC_NoCiph	B1	'0'B	
tsc_LLC_Cipher	B1	'1'B	
tsc_LLC_PM	B1	'1'B	
tsc_LLCsapi_GMM	INTEGER	1	
tsc_LLC_SAPI_11	SAPI	11	
tsc_RFLContentsLen_3	B4	'0011'B	
tsc_RFLContentsLen_6	B4	'0110'B	
tsc_MALen_3	B6	'000011'B	
tsc_MALen_5	B6	'000101'B	
tsc_MALen_7	B6	'000111'B	
tsc_StartFreq_5	B10	'0000000101'B	5

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_StartFreq_90	B10	'0001011010'B	Used in PSI3bis Instance 1
tsc_StartFreq_100	B10	'0001100100'B	Used in PSI3Bis instance 2
tsc_StartFreq_122	B10	'0001111010'B	Used in PSI3bis Instance 3
tsc_StartFreq_137	B10	'0010001001'B	137
tsc_StartFreq_177	B10	'0010110001'B	177
tsc_StartFreq_207	B10	'0011001111'B	207
tsc_StartFreq_217	B10	'0011011001'B	217
tsc_StartFreq_438	B10	'0110110110'B	438
tsc_StartFreq_467	B10	'0111010011'B	467
tsc_StartFreq_477	B10	'0111011101'B	477
tsc_StartFreq_502	B10	'0111110110'B	502
tsc_StartFreq_515	B10	'1000000011'B	515
tsc_StartFreq_655	B10	'1010001111'B	655
tsc_StartFreq_700	B10	'1010111100'B	700
tsc_StartFreq_780	B10	'1100001100'B	780
tsc_StartFreq_875	B10	'1101101011'B	875
tsc_FreqDiffLen_2bits	B3	'001'B	2 bits
tsc_FreqDiffLen_3bits	B3	'010'B	3 bits
tsc_FreqDiffLen_4bits	B3	'011'B	4 bits
tsc_FreqDiffLen_5bits	B3	'100'B	5 bits
tsc_FreqDiffLen_7bits	B3	'110'B	
tsc_FreqDiffLen_8bits	B3	'111'B	8 bits
tsc_FreqDiff_2	BITSTRING	'10'B	diff 2
tsc_FreqDiff_5	BITSTRING	'101'B	Diff 5
tsc_FreqDiff_9	BITSTRING	'1001'B	Diff 9
tsc_FreqDiff_10	BITSTRING	'1010'B	Diff 10
tsc_FreqDiff_20	BITSTRING	'10100'B	Diff 20
tsc_FreqDiff_30	BITSTRING	'11110'B	Diff 30
tsc_FreqDiff_75	BITSTRING	'1001011'B	Diff 75
tsc_FreqDiff_80	BITSTRING	'1010000'B	diff 80
tsc_FreqDiff_85	BITSTRING	'1010101'B	diff 85
tsc_FreqDiff_155	BITSTRING	'10011011'B	diff 155
tsc_FreqDiff_170	BITSTRING	'10101010'B	diff 170
tsc_PSI2_INST2_RFL_Contents_GSM	OCTETSTRING	'8C0528D9E630'O	
tsc_PSI2_INST2_RFL_Contents_GSM700	OCTETSTRING	'8CDFA8D96650'O	
tsc_PSI2_INST2_RFL_Contents_GSM850	OCTETSTRING	'8C44A8D9E630'O	
tsc_PSI2_INST2_RFL_Contents_DCSPCS	OCTETSTRING	'8904053D8280'O	
tsc_PSI2_INST3_RFL_Contents_GSM	OCTETSTRING	'8C0A1ED94B58'O	
tsc_PSI2_INST3_RFL_Contents_DCSPCS	OCTETSTRING	'892C0A3B053B761428'O	
tsc_PSI2_INST3_RFL_Contents_GSM700	OCTETSTRING	'8CE49ED94B58'O	
tsc_PSI2_INST3_RFL_Contents_GSM850	OCTETSTRING	'8C499ED94B58'O	

Continued on next page

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Type	Value	Comments
tsc_PSI2_MABitmap_GSM	BITSTRING	'001111'B	
tsc_PSI2_MABitmap2_DCS PCS	BITSTRING	'10101010'B	
tsc_PSI2_MABitmap3_DCS PCS	BITSTRING	'1111'B	
tsc_G_TMSI_Def	OCTETSTRING	'34567812'O	different from the TMSI used in the UTRAN cell
Detailed Comments :			

Test Suite Constant Declarations By Reference

Constant Name	Type	Value Reference	Module Identifier	Comments
hiPDSCHidentities	INTEGER	hiPDSCHidentities	Class-definitions	
hiPUSCHidentities	INTEGER	hiPUSCHidentities	Class-definitions	
hiRM	INTEGER	hiRM	Class-definitions	
maxAC	INTEGER	maxAC	Class-definitions	
maxAdditionalMeas	INTEGER	maxAdditionalMeas	Class-definitions	
maxASC	INTEGER	maxASC	Class-definitions	
maxASCmap	INTEGER	maxASCmap	Class-definitions	
maxASCpersist	INTEGER	maxASCpersist	Class-definitions	
maxCCTrCH	INTEGER	maxCCTrCH	Class-definitions	
maxCellMeas	INTEGER	maxCellMeas	Class-definitions	
maxCellMeas_1	INTEGER	maxCellMeas-1	Class-definitions	
maxCNdomains	INTEGER	maxCNdomains	Class-definitions	
maxCPCHsets	INTEGER	maxCPCHsets	Class-definitions	
maxDPCH_DLchan	INTEGER	maxDPCH-DLchan	Class-definitions	
maxDPDCH_UL	INTEGER	maxDPDCH-UL	Class-definitions	
maxDRACclasses	INTEGER	maxDRACclasses	Class-definitions	
maxE_DCHMACdFlow	INTEGER	maxE-DCHMACdFlow	Class-definitions	
maxE_DCHMACdFlow_1	INTEGER	maxE-DCHMACdFlow-1	Class-definitions	
maxEDCHRL	INTEGER	maxEDCHRL	Class-definitions	
maxFACHPCH	INTEGER	maxFACHPCH	Class-definitions	
maxFreq	INTEGER	maxFreq	Class-definitions	
maxFreqBandsFDD	INTEGER	maxFreqBandsFDD	Class-definitions	
maxFreqBandsTDD	INTEGER	maxFreqBandsTDD	Class-definitions	
maxFreqBandsGSM	INTEGER	maxFreqBandsGSM	Class-definitions	
maxGERAN_SI	INTEGER	maxGERAN-SI	Class-definitions	
maxGSMTargetCells	INTEGER	maxGSMTargetCells	Class-definitions	
maxHProcesses	INTEGER	maxHProcesses	Class-definitions	
maxHSSCCHs	INTEGER	maxHSSCCHs	Class-definitions	
maxInterSysMessages	INTEGER	maxInterSysMessages	Class-definitions	
maxLoCHperRLC	INTEGER	maxLoCHperRLC	Class-definitions	
maxMAC_d_PDUsizes	INTEGER	maxMAC-d-PDUsizes	Class-definitions	
maxMBMS_Freq	INTEGER	maxMBMS-Freq	Class-definitions	
maxMBMSservModif	INTEGER	maxMBMSservModif	Class-definitions	
maxMeasEvent	INTEGER	maxMeasEvent	Class-definitions	
maxMeasIntervals	INTEGER	maxMeasIntervals	Class-definitions	
maxMeasParEvent	INTEGER	maxMeasParEvent	Class-definitions	
maxNumCDMA2000Freqs	INTEGER	maxNumCDMA2000Freqs	Class-definitions	
maxNumGSMFreqRanges	INTEGER	maxNumGSMFreqRanges	Class-definitions	
maxNumFDDFreqs	INTEGER	maxNumFDDFreqs	Class-definitions	
maxNumTDDFreqs	INTEGER	maxNumTDDFreqs	Class-definitions	
maxOtherRAT	INTEGER	maxOtherRAT	Class-definitions	
maxOtherRAT_16	INTEGER	maxOtherRAT-16	Class-definitions	
maxPage1	INTEGER	maxPage1	Class-definitions	
maxPCPCH_APsigs	INTEGER	maxPCPCH-APsigs	Class-definitions	

Continued on next page

Continued from previous page

Test Suite Constant Declarations By Reference				
Constant Name	Type	Value Reference	Module Identifier	Comments
maxPCPCH_ApSubCh	INTEGER	maxPCPCH-APsubCh	Class-definitions	
maxPCPCH_CDsig	INTEGER	maxPCPCH-CDsig	Class-definitions	
maxPCPCH_CDsubCh	INTEGER	maxPCPCH-CDsubCh	Class-definitions	
maxPCPCH_SF	INTEGER	maxPCPCH-SF	Class-definitions	
maxPCPCHs	INTEGER	maxPCPCHs	Class-definitions	
maxPDCPAlgoType	INTEGER	maxPDCPAlgoType	Class-definitions	
maxPDSCH	INTEGER	maxPDSCH	Class-definitions	
maxPDSCH_TFCIgroups	INTEGER	maxPDSCH-TFCIgroups	Class-definitions	
maxPRACH	INTEGER	maxPRACH	Class-definitions	
maxPRACH_FPACH	INTEGER	maxPRACH-FPACH	Class-definitions	
maxPUSCH	INTEGER	maxPUSCH	Class-definitions	
maxQueueIDs	INTEGER	maxQueueIDs	Class-definitions	
maxRABsetup	INTEGER	maxRABsetup	Class-definitions	
maxRAT	INTEGER	maxRAT	Class-definitions	
maxRB	INTEGER	maxRB	Class-definitions	
maxRBallRABs	INTEGER	maxRBallRABs	Class-definitions	
maxRBMuxOptions	INTEGER	maxRBMuxOptions	Class-definitions	
maxRBperRAB	INTEGER	maxRBperRAB	Class-definitions	
maxReportedGSMCells	INTEGER	maxReportedGSMCells	Class-definitions	
maxRL	INTEGER	maxRL	Class-definitions	
maxRL_1	INTEGER	maxRL-1	Class-definitions	
maxRLCPDUsizePerLogChan	INTEGER	maxRLCPDUsizePerLogChan	Class-definitions	
maxROHC_PacketSizes_r4	INTEGER	maxROHC-PacketSizes-r4	Class-definitions	
maxROHC_Profile_r4	INTEGER	maxROHC-Profile-r4	Class-definitions	
maxSat	INTEGER	maxSat	Class-definitions	
maxSCCPCH	INTEGER	maxSCCPCH	Class-definitions	
maxSIB	INTEGER	maxSIB	Class-definitions	
maxSIB_FACH	INTEGER	maxSIB-FACH	Class-definitions	
maxSIBperMsg	INTEGER	maxSIBperMsg	Class-definitions	
maxSRBsetup	INTEGER	maxSRBsetup	Class-definitions	
maxSystemCapability	INTEGER	maxSystemCapability	Class-definitions	
maxTF	INTEGER	maxTF	Class-definitions	
maxTF_CPCH	INTEGER	maxTF-CPCH	Class-definitions	
maxTFC	INTEGER	maxTFC	Class-definitions	
maxTFCsub	INTEGER	maxTFCsub	Class-definitions	
maxTFCI_2_Combs	INTEGER	maxTFCI-2-Combs	Class-definitions	
maxTGPS	INTEGER	maxTGPS	Class-definitions	
maxTrCH	INTEGER	maxTrCH	Class-definitions	
maxTrCHpreconf	INTEGER	maxTrCHpreconf	Class-definitions	
maxTS	INTEGER	maxTS	Class-definitions	
maxTS_1	INTEGER	maxTS-1	Class-definitions	
maxTS_LCR	INTEGER	maxTS-LCR	Class-definitions	

Continued on next page

Continued from previous page

Test Suite Constant Declarations By Reference				
Constant Name	Type	Value Reference	Module Identifier	Comments
maxTS_LCR_1	INTEGER	maxTS-LCR-1	Class-definitions	
maxURA	INTEGER	maxURA	Class-definitions	
maxURNTI_Group	INTEGER	maxURNTI-Group	Class-definitions	
Detailed Comments :				

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_G_ClassmarkChange	CLASSMARKCHANGE		
tcv_GSM_ToUTRAN_HO_Cmd	HandoverToUTRANCommand		To hold the HOTOUTRAN Cmd
tcv_LengthOfHO_Cmd	O1		To store the no. of octets in the HO To UTRAN message
tcv_P_Classmark3	MSCLSMK3		To store contents of classmark3 IE sent from UE in MSCLSMK3
tcv_FN1	INTEGER		framenumber
tcv_FN2	INTEGER		framenumber
tcv_RFN2	RFN		To store the reduced frame number
tcv_G_UtranClassmarkChange	UTRANCLASSMARKCHANGE		
tcv_DL_TurboSupport	TurboSupport	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_PDCP_Capability	PDCP_Capability	{ losslessSRNS_RelocationSupport FALSE, supportForRfc2507 notSupported: NULL }	
tcv_SimultaneousSCCPCH_DPCH_Reception	SimultaneousSCCPCH_DPCH_Reception	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_UE_PowerClassExt	UE_PowerClassExt	class1	
tcv_UL_TurboSupport	TurboSupport	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_AT_Cmd	IA5String	""	To hold acommandline to be sent to the UT
tcv_ActPDP_ContextReq	ACTIVATEPDPCONTEXTREQUESTul		To hold the received ACTIVATE PDPD CONTEXT REQUEST PDU
tcv_ActiveService	Services	"31kHz"	Service that is currently used in a test case
tcv_BcapCE	B2	'00'B	To hold the connection element value that shall be used in setup MO pdu.
tcv_CC_RB_ConfigType	RB_ConfigType	cell_DCH_Speech	To hold the CC RAB to be used. This variable is used by CC test steps and test cases only.
tcv_DlyClass	B3	'011'B	To store Delay class
tcv_EstCause	EstablishmentCause	terminatingConversationalCall	Establishment cause used to setup the RRC connection. This variable is assigned in the steps: ts_CC_BasicServiceMO or ts_CC_BasicServiceMT
tcv_Len	INTEGER	0	
tcv_LenBit	Length	'00'O	

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_PagingCau	PagingCause	terminatingConversationalCall	To hold the paging cause corresponding to the CC service – this tcv is assigned in ts_CC_InitTCVMT
tcv_PktDataProtoAddr	PktDataProtoAddr_lv		To hold the Packet Data Protocol address
tcv_SetupMO	SETUPul		to hold the setup message received from UE
tcv_SetupMT	SETUPdl	cs_SetupMT(cs_BcapSpeechMT)	to hold the SETUP MT pdu prepared in the ts_BasicSrvMT step
tcv_StaticPDP_AddressReceived	BOOLEAN	FALSE	This variable is used to flag if in the PDP Context Req message UE has requested for Static PDP context address, so that PDP address will not be re allocated in PDP context Accept.
tcv_TI_R	TI	cs_TI_MT	Transaction Identifier value used to receive CC PDU
tcv_TI_S	TI	cs_TI_MT	Transaction Identifier value used to send CC PDU
tcv_TrafficClass	B3	'011'B	To store Traffic class
tcv_UE_Id_IMSI	BOOLEAN	FALSE	If this variable is set to TRUE, UE ID used will be IMSI
tcv_ActTime	ActivationTime	0	Activation Time
tcv_AssignedPTMSI	OCTETSTRING	px_PTMSI_Def	Current assigned PTMSI
tcv_AssignedTMSI	OCTETSTRING	px_TMSI_Def	Current assigned TMSI
tcv_Assigned_PTMSI_Sig	O3	px_PTMSI_SigDef	Current assigned PTMSI signature
tcv_AuthAK	BITSTRING	INT_TO_BIT (0, 48)	Anonymity Key 48 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthAMF	BITSTRING	px_AuthAMF	Authentication Management Field 16 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthAUTN	B128	INT_TO_BIT (0, 128)	to hold complete calculated AUTN 128 bits (TS24.008 cl 10.5.3.1.1)
tcv_AuthAUTN_1	B48	INT_TO_BIT (0, 48)	to hold first part of calculated AUTN 64 bits
tcv_AuthAUTN_2	B80	INT_TO_BIT (0, 80)	to hold second part of calculated AUTN 64 bits
tcv_AuthCDOUT	BITSTRING	INT_TO_BIT (0, 64)	CDOUT 64 bits (TS 34.108 cl. 8.1.2)
tcv_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_AuthCK_1	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st part (bits 0–63) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthCK_2	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 2nd part (bits 64–127) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthCK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthIK_1	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st part (bits 0–63) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK_2	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 2nd part (bits 64–127) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthK	BITSTRING	px_AuthK	Authentication Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthKcGSM	BITSTRING	INT_TO_BIT (0, 64)	GSM Cipher Key 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthMAC	BITSTRING	INT_TO_BIT (0, 64)	Message Authentication Code 64 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthN	INTEGER	px_AuthN	min 31, max 127 (TS 34.108 cl. 8.1.2)
tcv_AuthRAND	BITSTRING	px_AuthRAND	Random Challenge 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthRsp	AuthRsp	INT_TO_BIT (0,32)	to hold a Authentication Response parameter value received from the UE 32 bits (TS 24.008 cl 10.5.3.2)
tcv_AuthRspExt	AuthRspExt		to hold a Authentication Response Extension parameter value received from the UE 96 bits (TS24.008 cl 10.5.3.2.1)
tcv_AuthRspPDU	AUTHENTICATIONRESPONSE		to hold a Authentication Response PDU
tcv_AuthXDOUT	BITSTRING	INT_TO_BIT (0, 128)	XDOUT 128 bits (TS 34.108 cl. 8.1.2)
tcv_AuthXDOUT_Half	BITSTRING	INT_TO_BIT (0, 64)	lower half of XDOUT 64 bits (TS 34.108 cl. 8.1.2)

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_AuthXRES	BITSTRING	INT_TO_BIT (0, 32)	XRES min 32, max 128 bits (TS 34.108 cl. 8.1.2)
tcv_BCCH_ModifyTime	INTEGER	512	To hold the BCCH modification time to be used by PAGING TYPE1 or SYSTEM INFORMATION CHANGE INDICATION. The initial value indicates changing now.
tcv_CN_Domain	CN_DomainIdentity	cs_domain	
tcv_CS_KeySeq	KeySeq	tsc_KeySeqDef	
tcv_CellIndInfo	CellIndependantInfo	c_CellIndInfoDef	
tcv_CellInfoA	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid), px_UL_ScramblingCode)	
tcv_CellInfoB	CellInfoCfg	c_CellInfoDef (tsc_CellB, px_PriScrmCode, tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, c_FreqInfo (px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 1000) MOD 16777216))	
tcv_CellInfoC	CellInfoCfg	c_CellInfoDef (tsc_CellC, px_PriScrmCode, tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, c_FreqInfo (px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 2000) MOD 16777216))	
tcv_CellInfoD	CellInfoCfg	c_CellInfoDef (tsc_CellD, px_PriScrmCode, tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, c_FreqInfo (px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 3000) MOD 16777216))	

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_CellInfoE	CellInfoCfg	c_CellInfoDef (tsc_CellE, px_PriScrmCode, tsc_URA_IdCellE, px_TCellE, tsc_SFN_OffsetE, c_FreqInfo (px_UARFCN_D_Mid, ((px_UL_ScramblingCode + 4000) MOD 16777216))	
tcv_CellInfoF	CellInfoCfg	c_CellInfoDef (tsc_CellF, px_PriScrmCode, tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, c_FreqInfo (px_UARFCN_D_Mid, ((px_UL_ScramblingCode + 5000) MOD 16777216))	
tcv_CellInfoG	CellInfoCfg	c_CellInfoDef (tsc_CellG, px_PriScrmCode, tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, c_FreqInfo (px_UARFCN_D_Mid, ((px_UL_ScramblingCode + 6000) MOD 16777216))	
tcv_CellInfoH	CellInfoCfg	c_CellInfoDef (tsc_CellH, px_PriScrmCode, tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, c_FreqInfo (px_UARFCN_D_Mid, ((px_UL_ScramblingCode + 7000) MOD 16777216))	
tcv_CipherActTime	ActivationTime	0	Activation Time
tcv_Count	INTEGER	0	To hold a temporary counter value.
tcv_DefaultRadioCnf	BOOLEAN	TRUE	To be used in test cases that require a non default radio configuration. TRUE: a default radio configuration is to be used FALSE: a non default radio configuration is to be used.
tcv_FDD_OperationBand	FrequencyBandFDD	c_RadioFrequencyBandFDD_1	To old the operationBand under test
tcv_FrameNumber	INTEGER	0	Values 0..4095
tcv_FreqInfoHigh	FrequencyInfo	c_FreqInfo (px_UARFCN_D_High)	
tcv_FreqInfoLow	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Low)	

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_FreqInfoMid	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Mid)	
tcv_GMM_AttachExpect	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile
tcv_GMM_AttachRec	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile
tcv_GMM_DetachExpect	BOOLEAN	FALSE	This TCV is to be used in the Detach Handling
tcv_GMM_RAU_Expect	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler
tcv_GMM_RAU_Rec	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler
tcv_HFN	B20	'00000000000000000000'B	Hyper Frame Number for CS or PS domain – to be used in security steps
tcv_IP_TypeNo	PDP_TypeNo	tsc_PDP_TypeNoIPv4	This variable is used to indicate which version of IP is used: IP v4 or IP v6. Default is IPv4 (0 0 1 0 0 0 0 1).
tcv_IPv4_Flag	BOOLEAN	TRUE	This variable is set to TRUE for IPv4 and FALSE for IPv6.
tcv_InitialUE_Id	InitialUE_Identity	c_UE_IdDefIMSI	Used to store the UE Identity
tcv_Int_ModifyFlag	BOOLEAN	FALSE	This Flag will be used in Security related steps. If it is set to True, it means that A Integrity Modification is being done at that stage.
tcv_K	INTEGER	0	
tcv_MIB	MasterInformationBlock	c_MIB_Def (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid, px_UL_ScramblingCode))	the initial value c_MIB_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_MIB shall be re-initialized to c_MIB_Def_UTRAN.
tcv_MIB_ValueTagChanged	BOOLEAN	TRUE	initial value = TRUE, set to TRUE after MIBValueTag changed, set to FALSE after MIB delivered to SS.

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_MM_TestExecution	BOOLEAN	FALSE	Indication of MM test execution, set to TRUE once NMO II is set, used to properly handle ATTACH and DETACH procedures in MM tests
tcv_N308	INTEGER	2	
tcv_NumCfgCell	INTEGER	0	Number of cells configured
tcv_PDP_Type	IA5String	"IP"	This variable will be used to hold the PDP type
tcv_PS_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_PS_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_PS_KeySeq	KeySeq	tsc_KeySeqDef	Ciphering key sequence number for PS domain
tcv_PollSDU	Poll_SDU	sdu1	number of SDU's between pollings, this initial value is for ts_SS_CreateCellFACH. (from 34.123-1). used in RB2, RB3, RB4.
tcv_PollWindow	PollWindow	pw99	percentage of transmission window, threshold for polling, this initial value is for ts_SS_CreateCellFACH. (from 34.123-1). used in RB2, RB3, RB4.
tcv_RAB_Id	B8	'00000000'B	to hold the RABId received in a SETUP or a CALL CONFIRMED message
tcv_RB_ActivationTimeInfoList	RB_ActivationTimeInfoList	cs_RB_ActTimeInfoListSRBs (0,0,0,0)	
tcv_RB_SigResumed	BOOLEAN	FALSE	
tcv_RLC_IgnoreStatus	BOOLEAN	FALSE	This variable is used to indicate that an RLC STATUS PDU may be received and should be ignored .
tcv_RLC_SeqNumDL_RB1	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB1
tcv_RLC_SeqNumDL_RB2	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB2
tcv_RLC_SeqNumDL_RB20	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB20
tcv_RLC_SeqNumDL_RB21	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB21
tcv_RLC_SeqNumDL_RB22	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB22
tcv_RLC_SeqNumDL_RB24	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB24
tcv_RLC_SeqNumDL_RB3	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB3

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_RLC_SeqNumDL_RB4	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB4
tcv_RLC_SeqNumUL_RB3	RLC_SequenceNumber	0	Uplink RLC Sequence Number for RB3
tcv_RRC_EstCauMO	EstablishmentCause	originatingConversationalCall	To hold the establishment cause for MO call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_EstCauMT	EstablishmentCause	terminatingConversationalCall	To hold the establishment cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_MSN_RB0	RRC_SequenceNumber	0	Used to store the MSN of RB0
tcv_RRC_MSN_RB1	RRC_SequenceNumber	0	Used to store the MSN of RB1
tcv_RRC_MSN_RB2	RRC_SequenceNumber	0	Used to store the MSN of RB2
tcv_RRC_MSN_RB2_UL	RRC_SequenceNumber	0	Used to store the UL MSN of RB2
tcv_RRC_MSN_RB3	RRC_SequenceNumber	0	Used to store the MSN of RB3
tcv_RRC_MSN_RB4	RRC_SequenceNumber	0	Used to store the MSN of RB4
tcv_RRC_PagingCau	PagingCause	terminatingConversationalCall	To hold the paging cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_RAB_Type	RB_ConfigType	cell_DCH_64kCS_RAB_SRB	To hold the RAB config type that is supported by the UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_RelStatus	RRC_Rel_Status	cell_Dch	
tcv_RRC_Ti	RRC_TransactionIdentifier	0	To hold the RRC Transaction Identifier.
tcv_ReceivePS_ServiceReq	BOOLEAN	FALSE	This Type tcv by default will be set to False. It will be set to TRUE, when MO Service request has been rejected, and hence Ue can retransmit Service Request which should be handled in Default handlers.
tcv_Res	BOOLEAN	FALSE	to hold the BOOLEAN result of a test suite operation or a test Step
tcv_SB1	SysInfoTypeSB1	c_SB1_Def	the initial value c_SB1_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB1 shall be re-initialized to c_SB1_DefUTRAN.
tcv_SB1_ValueTag	INTEGER	1	To hold current SB1_ValueTag, value range is 1 to 4.

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_SB1_ValueTagChanged	BOOLEAN	FALSE	initial value = FALSE, set to TRUE after SB1ValueTag changed, set to FALSE after SB1 delivered to SS.
tcv_SIB3	SysInfoType3	cb_SIB3_DefUTRAN_GERAN(c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_SB3_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SIB3 shall be re-initialized to c_SB3_DefUTRAN.
tcv_SIB4	SysInfoType4	cb_SIB4_DefUTRAN_GERAN (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_SB4_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SIB4 shall be re-initialized to c_SB4_DefUTRAN.
tcv_Segs	SegmentsOfSysInfoBlock		Variable buffering the result of SIBSegmentation
tcv_Start	START_Value	'00000000000000000000'B	To hold the START value received in the INITIAL DIRECT TRANSFER message
tcv_StartList	STARTList	c_StartListCS	To hold the START list sent by UE
tcv_SubChNum	AvailableSubChannelNumbers	'111111111111'B	Available subchannel numbers for PRACH, this initial value is for ts_SS_CreateCellFACH. (from 34.108 cl. 6.1 (SIB5))
tcv_TGCFN	TGCFN	0	
tcv_TestBody	BOOLEAN	FALSE	to indicate if the test body is currently being executed
tcv_TimeoutInDefault	BOOLEAN	FALSE	Indication of a TimeoutInDefault having occurred
tcv_TimerPoll	TimerPoll	tp400	value for polling timer, this initial value is for ts_SS_CreateCellFACH. (from 34.123-1). used in RB2, RB3, RB4
tcv_TimerPollProhibit	TimerPollProhibit	tpp200	minimum time between polls, this initial value is for ts_SS_CreateCellFACH. (from 34.123-1). used in RB2, RB3, RB4
tcv_TmpAttachReqPDU	ATTACHREQUEST		Temporary variable
tcv_TmpAuthAndCiphRspPDU	AUTHENTICATIONANDCIPHERINGRESPONSE		Temporary variable
tcv_TmpB3	B3	'000'B	Temporary variable

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_TmpCellInfo	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid), px_UL_ScramblingCode)	To temporary store CellInfo data
tcv_TmpRAU_ReqPDU	ROUTINGAREAUPDATEREQUEST		Temporary variable
tcv_UE_OpMode	UE_OperationMode	px_UE_OpModeDef	Indicates the current UE operation mode (either A or C).
tcv_UE_SwitchedOn	BOOLEAN	TRUE	This value is to represent the state of the UE. TRUE means UE is Switched/Powered On, and hence only Switch/Power OFF operation can be done, and no Switch/Power On operation. False Means, UE is off, and only Switch/Power On Operation can be done. This Variable is introduced to help automation of test cases. The default value of ON, is consistent with present Test Sequence, where MMI command to switch/Power off is called before creation of the first cell on SS Side.
tcv_UE_SystemSpecificCap	INTEGER	0	use to represent the integer equivalent of 7 bit UE system specific Capability. The Valid range is 0 to 127
tcv_AssignmentCommand	ASSIGNMENTCOMMAND		To hold the assignment command
tcv_ChRequest	CHANNELREQUEST		To store the received channel request msg. during the RACH access
tcv_Ch_Mode	ChMode		To store the channel mode to be sent in the assignment command
tcv_G_CellConfigInfo	G_CellConfigInfo	c_G_CellConfigInfoGSM900	
tcv_G_CellInfoA	G_CellConfigInfo	c_G_CellConfigInfoGSM900_CellA	To store the Default CellConfigInfo of GSM CELL A c_G_CellConfigInfo(20,tsc_G_DLPrLvl,tsc_G_CellA, tsc_G_MCC_Def, tsc_G_MNC_Def, tsc_G_LAC_Def)

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_G_CellInfoB	G_CellConfigInfo	c_G_CellConfigInfoGSM90_0_CellB	To store the Default CellConfigInfo of GSM CELL B c_G_CellConfigInfo(40,tsc_G_DLPrLvl,tsc_G_CellB,tsc_G_MCC_Def,tsc_G_MNC_Def,tsc_G_LAC_Def)
tcv_G_CellInfoC	G_CellConfigInfo	c_G_CellConfigInfoGSM90_0_CellC	To store the Default CellConfigInfo of GSM CELL C c_G_CellConfigInfo(40,tsc_G_DLPrLvl,tsc_G_CellB,tsc_G_MCC_Def,tsc_G_MNC_Def,tsc_G_LAC_Def)
tcv_RR_ChannelType	G_LogicChType		To store the received channel type
tcv_RR_ChannelType2	G_LogicChType		To store the received channel type
tcv_RR_RA	INTEGER		To store the received Random Access
tcv_RR_RFN	RFN		To store the received RFN
tcv_RR_Subchannel	SubChannelNumber		To store the received subchannel
tcv_RR_Subchannel2	SubChannelNumber		To store the received subchannel
tcv_ISHO_SubtestCounter	INTEGER	0	The TCV will be used as an SubTest Counter
tcv_RAC	O1	'05'O	Default value 5
tcv_oldTLLI	TLLI	tsc_TLLI_Initial	To store the old TLLI
tcv_TLLI	TLLI	tsc_TLLI_Initial	To store the received TLLI
tcv_USFRate	INTEGER	1	Used to slow down data block transmission rate in GPRS
tcv_PacketChRequest	PACKETCHANNELREQUEST		
tcv_PCCCHParams	PCCCH_OrganisationParameters	c_PCCCHParams	
tcv_TmpPktCtrlAckPdu	PACKETCONTROLACKNOWLEDGEMENT		
tcv_GPRS_CipherAlg	GPRS_CipherAlg	'000'B	off
tcv_Gamma	B5	'00100'B	
tcv_M	INTEGER		
tcv_NMO	B2	'00'B	Default GERAN value NMO 1
tcv_ResAndStartValue	ResAndStartValue		Used as the return value for o_CheckUtranClassmark. Contains 2 fields: Res = Boolean and StartValue
tcv_SplitPGCycle	DRXparameter	c_SplitPGCycleInitial	This tcv should be overwritten by what is sent by the UE
tcv_StartingTime	RFN		
tcv_ARFCN	B10	INT_TO_BIT(30, 10)	

Continued on next page

Continued from previous page

Test Case Variable Declarations			
Variable Name	Type	Value	Comments
tcv_PSI2_Instance2	PSI2Info	c_PSI2_Instance2_GSM	Contains details of UTRAN cells used in 8.3.7.13 to handle the SETUP message during the RAU to specify a timeslot normally 3, unless PSI3quater or PSI5 sent
tcv_PSI2_Instance3	PSI2Info		
tcv_PSI3_Instance1	PSI3Info		
tcv_PSI3_Instance2	PSI3Info		
tcv_PSI3_Instance3	PSI3Info		
tcv_PSI3_Instance4	PSI3Info		
tcv_PBCCHFreqInfo	FreqInfo		
tcv_SI2quaterRO	SI2quaterRO		
tcv_SetupExpected	BOOLEAN	FALSE	
tcv_Timeslot	B3		
tcv_PSI_LowRate	B6	'000011'B	
tcv_AddPSIMsgs	BOOLEAN	FALSE	
Detailed Comments :			

PCO Type Declarations		
PCO Type	Role	Comments
DSAP	LT	
CSAP	LT	
Dc_SAP	LT	
MMI	UT	
G_CSAP	LT	
G_DSAP	LT	
Detailed Comments :		

PCO Declarations			
PCO Name	PCO Type	Role	Comments
AM	DSAP	LT	PCO above AM SAP of RLC
CMAC	CSAP	LT	Control and observation point between RRC and MAC
CPHY	CSAP	LT	Control and observation point between RRC and PHY
CRLC	CSAP	LT	Control and observation point between RRC and RLC
Dc	Dc_SAP	LT	Carry transmission and reception of NAS messages
TM	DSAP	LT	PCO above TM SAP of RLC
UM	DSAP	LT	PCO above UM SAP of RLC
Ut	MMI	UT	The PCO used for the upper tester
G_CL1	G_CSAP	LT	Control GERAN Physical Layer (L1)
G_CL2	G_CSAP	LT	Control GERAN L2
G_CLLC	G_CSAP	LT	Control GPRS LLC layer
G_CRLC	G_CSAP	LT	Control GPRS RLC/MAC layer
G_L2	G_DSAP	LT	Control and observation point of GERAN L3 messages and user data
G_LLC	G_DSAP	LT	Control and observation point of GPRS GMM signalling messages
G_RLC	G_DSAP	LT	Control and observation point of GPRS GRR signalling messages
Detailed Comments :			

Timer Declarations			
Timer Name	Duration	Unit	Comments
t_3390	8	s	Timer T3390, 24.008, section 11.2.3
t_3395	30	s	Timer T3395, 24.008, section 11.2.5
t_TimeoutInDefault	300	ms	Used to catch timeouts in the Defaults
t_Dly	5000	ms	general purpose delay timer
t_Guard	300	s	test case guard timer
t_LowerBound	4500	ms	the lower bound timer
t_T312	1	s	Timer to check physical channel establishment criteria
t_UpperBound	5500	ms	the upper bound timer
t_WaitMS	13500	ms	general wait timer
t_WaitS	15	s	general watch timer
t_CampResponseTimer		s	
t_ReceiveMessageTimer	10	s	
t_Release	11	s	Release timer
t_T3101	30	s	
Detailed Comments :			

ASP Type Definition		
ASP Name : AT_CmdCnf		
PCO Type : MMI		
Comments : The ASP is used get the result of a requested AT command previously sent to the UT (UT ->LT).		
Parameter Name	Parameter Type	Comments
result	BOOLEAN	OPTIONAL
resultString	IA5String	OPTIONAL
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS
Detailed Comments :		

ASP Type Definition		
ASP Name : AT_CmdReq		
PCO Type : MMI		
Comments : The ASP is used to request a AT command to the UT (LT ->UT).		
Parameter Name	Parameter Type	Comments
cmd	IA5String	command line
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS
Detailed Comments :		

ASP Type Definition		
ASP Name : MMI_CmdCnf		
PCO Type : MMI		
Comments : The ASP is used get the result of a requested command previously sent to the UT (UT ->LT).		
Parameter Name	Parameter Type	Comments
result	BOOLEAN	
resultString	IA5String	OPTIONAL
Detailed Comments :		

ASP Type Definition		
ASP Name : MMI_CmdReq		
PCO Type : MMI		
Comments : The ASP is used to request an MMI command to the UT (LT ->UT).		
Parameter Name	Parameter Type	Comments
cmd	IA5String	command line
Detailed Comments :		

ASP Type Definition		
ASP Name : RLC_TR_TestDataInd		
PCO Type : DSAP		
Comments : To indicate the reception of unstructured data using transparent mode in the uplink direction		
Parameter Name	Parameter Type	Comments
cellId	INTEGER	RB identity (RB3 or RB4)
rB_Id	SS_RB_Identity	
data	PDU	
Detailed Comments :		

ASP Type Definition		
ASP Name : RRC_DataInd (RRC-DATA-IND)		
PCO Type : Dc_SAP		
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <- RRC).		
Parameter Name	Parameter Type	Comments
cellId	INTEGER	Cell Id
rB_Id	SS_RB_Identity	RB identity (RB3 or RB4)
ch	LogicChGERAN	Logical channel (used for interworking with GERAN)
sapId	SapId	RRC SAP identifier (SAP0)
cN_Domain	SS_CN_DomainIdentity	CN domain identity
start	START_Value	Mandatory in INITIAL DIRECT TRANSFER
msg	PDU	NAS PDU
Detailed Comments :		

ASP Type Definition		
ASP Name : RRC_DataReq		
PCO Type : Dc_SAP		
Comments : The ASP is used to request the transmission of the NAS PDU message using acknowledged operation (NAS -> RRC).		
Parameter Name	Parameter Type	Comments
cellId	INTEGER	RB identity (RB3 or RB4)
rB_Id	SS_RB_Identity	
ch	LogicChGERAN	
sapId	SapId	RRC SAP identifier (SAP0)
cN_Domain	SS_CN_DomainIdentity	CN domain identity
msg	PDU	NAS PDU
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_ChangePowerLevel_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to get confirmation of a G_CL1_ChangePowerLevel_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_ChangePowerLevel_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to change the transmission power level of a physical channel		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
txPower	TX_Power	the new transmission power level. in dBuVemf()
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CipheringControl_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to set the ciphering mode of the physical channel in the receiving direction, the kc and ciphering algorithm were set by the G_CL1CreateBasicPhyCh_REQ for the physical channel before calling the ASP.		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel Identifier
rcvCipherMode	BITSTRING[1]	Ciphering Mode in SS receiving direction: 0 -> not ciphered 1 -> ciphered
Detailed Comments : For GSM dedicated physical channels, the ciphering mode of the SS shall be changed in three steps: (3GPP TS 44.018, clause 3.4.7) Before the SS sends CIPHERING MODE COMMAND the SS is transmitting and receiving in the old ciphering mode (e.g. not ciphered), after the SS sends the CIPHERING MODE COMMAND the SS changes its receiving ciphering mode to the new ciphering mode (e.g. ciphered) and keeps transmitting in the old ciphering mode; then after receiving the CIPHERING MODE COMPLETE, or any correct L2 frame in the new ciphering mode, the SS changes the transmitting ciphering mode to the new mode. The TTCN writer shall use the ASP before sending the CIPHERING MODE COMMAND to ensure the ciphering mode of the physical channel is changed in sufficient time, according to the 3 step procedure outlined above.		

ASP Type Definition		
ASP Name : G_CL1_CipheringControl_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm that the G-CL1_CipheringControl_REQ is executed correctly		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel Identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CipherModeModify_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to get confirmation of a G_CL1_CipherModeModify_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CipherModeModify_REQ PCO Type : G_CSAP Comments : The ASP is used to modify the cipher mode of a dedicated channel		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType subChannel cipherMode	CellId PhysicalChId G_LogicChType SubChannelNumber CipherModeSetting	Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15. the new cipher mode. definition see 3GPP TS 44.018 section 10.5.2.9
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_ComingFN_CNF PCO Type : G_CSAP Comments : The ASP is used to receive the result of G_CL1_ComingFN_REQ.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType subChannel rfn	CellId PhysicalChId G_LogicChType SubChannelNumber RFN	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15 the reduced frame number (FN modulo 42432) which is about 4.5 seconds later than current frame number and is able to carry L3 message on the channel specified by "physicalChId"+"G_LogicChType"+"subChannel"
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_ComingFN_REQ PCO Type : G_CSAP Comments : The ASP is used to request lower layer return the reduced frame number (FN modulo 42432) which is far enough in the future from current frame number and is able to carry L3 message on the specified channel. The requirement of "far enough" is that there is enough time left for TTCN to prepare a L3 message to send before that frame.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType subChannel	CellId PhysicalChId G_LogicChType SubChannelNumber	Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CreateBasicPhyCh_CNF PCO Type : G_CSAP Comments : the ASP is used to get confirmation of G_CL1_CreateBasicPhyCh_REQ		
Parameter Name	Parameter Type	Comments
cellId physicalChId	CellId PhysicalChId	The cell which the created channel belongs to identifier of the physical channel created
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CreateBasicPhyCh_REQ PCO Type : G_CSAP Comments : the ASP is used to create a basic physical channel in GERAN		
Parameter Name	Parameter Type	Comments
cellId	CellId	the cell which the channel to be created belongs to
physicalChId	PhysicalChId	identifier of the physical channel in the SS
channelCombination	ChannelCombination	logical channels combined onto the basic physical channel
freqInfo	FreqInfo	parameters for description of the physical channel in frequency domain
timeSlot	TN	the time slot number of the physical channel
tSC	TSC	training sequence code. for common control and broadcast channels the value of tsc must be equal to BCC (base station colour code)
channelSpecificPara	ChannelSpecificInfo	specific parameters related to individual channel
txPower	TX_Power	transmission power level of the channel
bandIndicator	BITSTRING[1]	Parameter for DCS or PCS frequency band selection. A value 0 for frqInfo.arfcn interpreted as DCS1800. A value 1 for frqInfo.arfcn interpreted as PCS1900. If omitted, the value in frqInfo.arfcn interpreted as DCS1800.
Detailed Comments : The value of channel Combination permitted currently: 1 TCH/F + FACCH/F + SACCH/TF 2 TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1) 3 TCH/H(0,0) + FACCH/H(0,1) + SACCH/TH(0,1) + TCH/H(1,1) 4 FCCH + SCH + BCCH + CCCH 5 FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3) 6 BCCH + CCCH 7 SDCCH/8(0..7) + SACCH/C8(0.. 7) 8 TCH/F + FACCH/F + SACCH/M 9 TCH/F + SACCH/M 10 TCH/FD + SACCH/MD 11 PBCCH+PCCCH+PDTCH/F+PACCH/F+PTCCH/F 12 PCCCH+PDTCH/F+PACCH/F+PTCCH/F 13 PDTCH/F+PACCH/F+PTCCH/F 18 E-TCH/F + E-IACCH/F + E-FACCH/F + SACCH/TF 19 E-TCH/F + E-IACCH/F + E-FACCH/F + SACCH/M 20 E-TCH/F + E-IACCH/F + SACCH/M 21 E-TCH/FD + E-IACCH/F + SACCH/MD		

ASP Type Definition		
ASP Name : G_CL1_CreateCell_CNF PCO Type : G_CSAP Comments : the ASP is used to get confirmation of G_CL1_CreateCell_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CreateCell_REQ PCO Type : G_CSAP Comments : the ASP is used to create a cell in GERAN		
Parameter Name	Parameter Type	Comments
cellId	CellId	Base transceiver station identity code = NCC+BCC 3GPP TS 23.003 clause 4.3.2.
baseId	BITSTRING[6]	
timingAdvance	BITSTRING[8]	The SS sets the timing advance of downlink direction timing by this value
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteCell_CNF PCO Type : G_CSAP Comments : the ASP is used to get confirmation of G_CL1_DeleteCell_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteCell_REQ PCO Type : G_CSAP Comments : the ASP is used to delete a cell in GERAN		
Parameter Name	Parameter Type	Comments
cellId	CellId	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteChannel_CNF PCO Type : G_CSAP Comments : the ASP is used to get confirmation of G_CL1_DeleteChannel_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	The cell which the deleted channel belongs to
physicalChId	PhysicalChId	
identifier of the channel or multi-slot configuration deleted		
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteChannel_REQ		
PCO Type : G_CSAP		
Comments : the ASP is used to delete a basic physical channel or multi-slot configuration		
Parameter Name	Parameter Type	Comments
cellId	CellId	The cell which the channel to be deleted belongs to
physicalChId	PhysicalChId	identifier of the physical channel or the multi-slot configuration to be deleted
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_MeasRptControl_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm that the G_CL2_MeasRptControl_REQ was executed correctly		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_MeasRptControl_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to enable or disable the reporting of received Measurement Reports to the TTCN		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	Valid only for logical channel types: SACCH/TF, SACCH/TH, SACCH/C8 and SACCH/C4
subChannel	SubChannelNumber	For SACCH/TH value is (0..1), for SACCH/C8 value is (0..7) and for SACCH/C4 value is (0..3)
sendMeasRpts	BOOLEAN	Whether or not to report received Measurement Reports to the TTCN
Detailed Comments : Per default, this will be set to FALSE		

ASP Type Definition		
ASP Name : G_CL2_Release_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm that the G_CL2_Release_REQ was executed correctly		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_Release_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to request the SS stop L2 transmission on a channel		
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_Assign_CNF		
PCO Type : G_CSAP		
Comments : the ASP is used to get confirmation of G_CLLC_Assign_REQ		
Parameter Name	Parameter Type	Comments
ILMEId	LLMEId	Logical Layer Management Entity Id
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_Assign_REQ PCO Type : G_CSAP Comments : the ASP is used to assign, change or unassign the TLLI, the cipher key (Kc) and the cipher algorithm of GERAN LLC emulator module.		
Parameter Name	Parameter Type	Comments
cellId oldTLLI newTLLI cipherKey cipherAlgorithm	CellId TLLI TLLI BITSTRING[64] GPRS_CipherAlg	OCTETSTRING[4] BITSTRING[3], 3GPP TS 24.008 section 10.5.5.3
Detailed Comments : This ASP is used to assign, change, or unassign the TLLI, the ciphering key (Kc) and the ciphering algorithm. 1. The oldTLLI and newTLLI parameters shall be interpreted as follows:– If oldTLLI = all 1's and newTLLI = all 1's then newTLLI is assigned and used when (re?)transmitting LLC frames. If an oldTLLI = all 1's was assigned to the LLME, then oldTLLI is unassigned. Only newTLLI is accepted when received from the peer. It shall be treated as a TLLI change. If oldTLLI = all 1's was assigned to the LLME, then this shall be treated as a TLLI assignment, and this ASP shall be the first ASP sent to the SS in order to enable LLC to process requests from layer 3.– If oldTLLI = all 1's and newTLLI = all 1's then oldTLLI and newTLLI are assigned, and newTLLI shall be used when (re?)transmitting LLC frames. Both oldTLLI and newTLLI shall be accepted when received from the peer. It shall be treated as a TLLI change.– If oldTLLI = all 1's and newTLLI = all 1's then oldTLLI shall be unassigned. It shall be treated as a TLLI unassignment, and this ASP shall be the last ASP sent to the SS in order to disable LLC to not process requests from layer 3 any longer.2. Kc and Ciphering Algorithm are associated with newTLLI (and with oldTLLI if assigned):– If Ciphering Algorithm indicates no ciphering, then the ciphering function shall be disabled.– Otherwise, the ciphering function shall be enabled. If a Ciphering Algorithm was already associated with newTLLI or oldTLLI, then the new Kc shall replace the previous Kc, and Ciphering Algorithm shall replace the previous algorithm selection. All I frames, and UI frames with the E bit set to 1, shall use the new Kc and algorithm for ciphering. All unacknowledged I frames shall be ciphered using the new Kc and algorithm before retransmission. As an implementation option, the previous Kc and algorithm may be used to decipher received frames.		

ASP Type Definition		
ASP Name : G_CRLC_DL_TBF_Config_CNF PCO Type : G_CSAP Comments : the ASP is used to get confirmation of G_CRLC_DL_TBF_Config_REQ		
Parameter Name	Parameter Type	Comments
cellId tFI	CellId TFI	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CRLC_DL_TBF_Config_REQ PCO Type : G_CSAP Comments : the ASP is used to configure a TBF used for down link data transfer		
Parameter Name	Parameter Type	Comments
cellId tFI tBF_Mode channelCoding rLC_Mode timeSlotAllocation startingTime dataBlockRate	CellId TFI BITSTRING[1] ChannelCoding BITSTRING[1] TimeSlotAllocation RFN INTEGER	0 – GPRS; 1 – EGPRS 0 – acknowledged mode; 1 – unacknowledged mode Downlink TBF time slot allocation This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B. This parameter controls the speed of the DL TBF transferring data blocks by controlling the USF rate: 1----> implementation dependent. TTCN does not specify the USF generating rate; 2----> 10 data blocks per second; 3----> 5 data blocks per second; 4----> 1 data block per second; 5----> 1 data block 2 seconds; 6----> 1 data block 3 seconds; 7----> 1 data block 4 seconds
Detailed Comments : For GPRS channel coding can be: CS-1, CS-2, CS-3 and CS-4;For EGPRS channel coding can be : MCS-1, MCS-2, MCS-3, MCS-4, MCS-5, MCS-6, MCS-7, MCS-8, MCS-9, MCS-5-7 and MCS-6-9.		

ASP Type Definition		
ASP Name : G_CRLC_UL_TBF_Config_CNF PCO Type : G_CSAP Comments : The ASP is used to get confirmation of G_CRLC_UL_TBF_Config_REQ		
Parameter Name	Parameter Type	Comments
cellId tFI	CellId TFI	
Detailed Comments :		

ASP Type Definition

ASP Name : G_CRLC_UL_TBF_Config_REQ

PCO Type : G_CSAP

Comments : the ASP is used to configure a TBF used for uplink data transfer

Parameter Name	Parameter Type	Comments
cellId	CellId	
tFI	TFI	
tBF_Mode	BITSTRING[1]	0 – GPRS; 1 – EGPRS
channelCoding	ChannelCoding	
tLLI_BlockChannelCoding	BITSTRING[1]	0 – CS-1 or MCS-1(EGPRS); 1 – same as channelCoding
rLC_Mode	BITSTRING[1]	0 – acknowledged mode; 1 – unacknowledged mode
startingTime	RFN	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
uSF_Rate	INTEGER	This parameter controls the speed of the UL TBF transferring data blocks by controlling the USF rate: 1----> implementation dependent. TTCN does not specify the USF generating rate; 2----> 10 USF's per second; 3----> 5 USF's per second; 4----> 1 USF per second; 5----> 1 USF per 2 seconds; 6----> 1 USF per 3 seconds; 7----> 1 USF per 4 seconds
dynamicAllocation	DynamicAllocation	dynamic allocation and other parameters.

Detailed Comments : For GPRS channel coding can be: CS-1, CS-2, CS-3 and CS-4; For EGPRS channel coding can be : MCS-1, MCS-2, MCS-3, MCS-4, MCS-5, MCS-6, MCS-7, MCS-8, MCS-9, MCS-5-7 and MCS-6-9.
Due to one cell currently has only one RLC/MAC emulation module, this ASP does not contain RLC/MAC identity parameter to indicate which RLC/MAC emulation module this TBF is established for, instead, the parameter cellId implicitly indicates the RLC/MAC module, which is created by G_CRLC_CreateRLC_MAC_REQ and has identifier RlcMacEntityId in the cell.
The higher layer (LLC emulation module) uses rLC/MAC_MappingInfo (with type of CellId) to address the RLC/MAC emulation module to which it connects

ASP Type Definition		
ASP Name : G_L2_ACCESS_IND PCO Type : G_DSAP Comments : The ASP is used to receive a random access or handover access burst on the specified channel.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType	CellId PhysicalChId G_LogicChType	Channel identifier RACH, FACCH, SDCCH/8, SDCCH/4. RACH is used for random access burst; others are used for handover access burst
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8, SDCCH/4.
rfr	RFN	The reduced frame number of the frame carrying the burst
burst	PDU	random access burst or handover access burst
Detailed Comments :		

ASP Type Definition		
ASP Name : G_L2_DATA_IND PCO Type : G_DSAP Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber	0 or 3 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). It shall be ignored if this is coded as 15
rfr	RFN	The reduced frame number of the first frame on which this message is received
msg	PDU	Signalling message or user data received
Detailed Comments :		

ASP Type Definition		
ASP Name : G_L2_DATA_REQ PCO Type : G_DSAP Comments : The ASP is used to send L3 signalling message on the signalling channels or user data on the traffic channels to the UE/MS in acknowledged mode.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel rfn msg	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber RFN PDU	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). The reduced frame number of the first frame on which this message is sent. If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field. Signalling message or user data to be sent
Detailed Comments : Parameter rfn is only used in the test cases which requires specific L3 message to be sent on specified frame number		

ASP Type Definition		
ASP Name : G_L2_L2Estab_IND PCO Type : G_DSAP Comments : The ASP is used to receive an indication of that L2 multiple frame operation on the specified channel has been established.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType subChannel sAPI establish_mode rfn msg	CellId PhysicalChId G_LogicChType SubChannelNumber SAPI EstMode RFN PDU	Channel identifier Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field shall be coded as 15 if it is not applicable. 0, 3 Norm The reduced frame number of the first frame carries the L2 SABM frame this field is present only when the establish mode is CoRes (collision resolution)
Detailed Comments : see 3GPP TS 44.006 clause 7.1.1 and 7.1.3		

ASP Type Definition		
ASP Name : G_L2_Paging_REQ PCO Type : G_DSAP Comments : The ASP is used to send a paging message on the specified paging group of the specified paging channel to the UE/MS, when the UE/MS is in idle mode or the UE/MS not supporting SPLIT_PG_CYCLE on CCCH is in GPRS attached mode and PCCCH is absent.		
Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier of the right CCCH_GROUP
g_LogicChType	G_LogicChType	PCH
pAGING_GROUP	PAGING_GROUP	INTEGER
pagingMode	PagingMode	0 -- normal paging; 1-- exteded paging; 3 -- paging reorganization
msg	PDU	paging message to be sent
Detailed Comments : The SS is required to send valid layer 3 messages continuously on all paging subchannels on CCCH where paging can appear. For "normal paging" the SS send the paging message in the specified pagingGroup; For "extended paging" the SS send the paging message in the specified pagingGroup and in the "next but one" position on the PCH, following the block corresponding to pagingGroup; For "paging reorganization" the SS send the paging message in all paging subchannels. The required 51-multiframe occurs when: $\text{pagingGroup div (N div BS_PA_MFRMS)} = (\text{FN div 51}) \text{ mod (BS_PA_MFRMS)}$ The index to the required paging block in the 51-multiframe determined above: $\text{Paging block index} = \text{pagingGroup mod (N div BS_PA_MFRMS)}$ $N = (9 - \text{BS_AG_BLKS_RES}) * \text{BS_PA_MFRMS}$ CCCH not combined or $N = (3 - \text{BS_AG_BLKS_RES}) * \text{BS_PA_MFRMS}$ CCCH + SDCCH combined		

ASP Type Definition		
ASP Name : G_L2_Release_IND PCO Type : G_DSAP Comments : The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt.		
Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
release_Mode	BITSTRING[1]	0 = normal release; 1 = local end release
outstanding_Indicator	BOOLEAN	whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.
Detailed Comments :		

ASP Type Definition

ASP Name : G_L2_SYSINFO_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send system information messages to the lower layer emulator.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	BCCH or SACCH
instanceIndex	INTEGER	To indicate the instance of the system information messages. For SYSTEM INFORMATION Type 2ter, 18, 19, 20 the value is (0..7); for type 14, 15 the value is (0..3); for type 2quater the value is (0..15); for all other type the value is 0.
sysInfoType	SysInfoType	SYSTEM INFORMATION Type 5, 5bis, 5ter, and 6 are sent on SACCH, the other SYSTEM INFORMATION 's are sent on BCCH.
bCCHExt	B1	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	PDU	This field contains SYSTEM INFORMATION message. See 3GPP TS 44.018 section 9.1.31 to section 9.1.43h for SYSTEM INFORMATION message definitions.

Detailed Comments : The lower layer emulator shall store the SYSTEM INFORMATION's, and transmit them periodically according to the rules specified in section 6.3.1.3 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator.
SYSTEM INFORMATION scheduling assumption: all SI's except SI7, SI8, SI16 and SI17 are scheduled on BCCH Norm. Consequently, SI13, SI2bis and SI2quater are scheduled in TC=4 on BCCH norm not on BCCH Ext

ASP Type Definition		
ASP Name : G_L2_UNITDATA_IND PCO Type : G_DSAP Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in unacknowledged mode.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfr	RFN	The reduced frame number of the first frame carrying the message
msg	PDU	Signalling message or user data received
Detailed Comments :		

ASP Type Definition		
ASP Name : G_L2_UNITDATA_REQ PCO Type : G_DSAP Comments : The ASP is used to send L3 signalling message on the signalling channels or send user data on the traffic channels to the UE/MS in unacknowledged mode.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfr	RFN	The reduced frame number of the first frame on which this message is sent. If the field t2 of rfr is coded as '11111'B lower layer shall ignore this field.
msg	PDU	Signalling message or user data to be sent
Detailed Comments : Parameter rfr is only used in the test cases which requires specific L3 message to be sent on specified frame number		

ASP Type Definition		
ASP Name : G_LLC_UNITDATA_IND		
PCO Type : G_DSAP		
Comments : The ASP is used to receive an L3 PDU from the UE/MS in LLC unconfirmed transmission.		
Parameter Name	Parameter Type	Comments
ILMEId tLLI sAPI msg	LLMEID TLLI SAPI PDU	temporary logical link identifier L3 PDU
Detailed Comments : 3GPP TS 44.064 clause 8.4.2		

ASP Type Definition		
ASP Name : G_LLC_UNITDATA_REQ		
PCO Type : G_DSAP		
Comments : The ASP is used to transmit an L3 PDU to the UE/MS in LLC unconfirmed transmission.		
Parameter Name	Parameter Type	Comments
ILMEId tLLI sAPI protectMode cipherMode msg	LLMEID TLLI SAPI BITSTRING[1] BITSTRING[1] PDU	temporary logical link identifier 0 -- unprotected; 1 -- protected 0 --- sent without no encryption;1 --- sent with encryptionencrypted L3 PDU
Detailed Comments : 3GPP TS 44.064 clause 8.4.1 After the ciphering function is started in the SS by G_CLLC_Assign_REQ, the SS shall encrypt the "msg" when cipherMode = '1', and the SS shall not encrypt the "msg" if cipherMode = '0'.		

ASP Type Definition		
ASP Name : G_LLC_XID_IND		
PCO Type : G_DSAP		
Comments : The ASP is used to receive the XID requested by the UE/MS.		
Parameter Name	Parameter Type	Comments
ILMEId tLLI sAPI xID_Info	LLMEID TLLI SAPI XID_Info	temporary logical link identifier the XID parameters requested by the UE/MS
Detailed Comments :		

ASP Type Definition		
ASP Name : G_LLC_XID_RES PCO Type : G_DSAP Comments : The ASP is used to send to the UE/MS the negotiated XID parameters agreed by the SS.		
Parameter Name	Parameter Type	Comments
ILMEId tLLI sAPI xID_Info	LLMEID TLLI SAPI XID_Info	temporary logical link identifier the negotiated XID parameters agreed by the SS
Detailed Comments :		

ASP Type Definition		
ASP Name : G_RLC_ACCESS_IND PCO Type : G_DSAP Comments : The ASP is used to receive an access burst sent by the UE/MS on the specified channel.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType rfn retryBit burst	CellId PhysicalChId G_LogicChType RFN BITSTRING[1] PDU	Channel identifier PRACH or PACCH or PTCCH The reduced frame number of the frame carrying the burst For access bursts on PRACH, RACH. For PACCH, this field is no meaning 8-bit or 11-bit access burst
Detailed Comments : PACKET CHANNEL REQUEST, EGPRS PACKET CHANNEL REQUEST and burst format of PACKET CONTROL ACKNOWLEDGEMENT are access bursts.		

ASP Type Definition		
ASP Name : G_RLC_ControlMsg_IND PCO Type : G_DSAP Comments : The ASP is used to receive an uplink RLC/MAC control block sent by the UE/MS on the specified channel.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType tBF_Direction tFI rfn msg	CellId PhysicalChId G_LogicChType INTEGER TFI RFN PDU	Channel identifier PCCCH or PACCH or PTCCH 0 --- downlink; 1 --- uplink temporary flow identity the reduced frame number of the frame carrying this message uplink RLC/MAC control message
Detailed Comments : Logical channel type PDTCH is valid for PACKET ENHANCED MEASUREMENT REPORT message only. The ASP is not used to receive PACKET CHANNEL REQUEST, EGPRS PACKET CHANNEL REQUEST and burst format of PACKET CONTROL ACKNOWLEDGEMENT which are received by G_RLC_ACCESS_IND.		

ASP Type Definition

ASP Name : G_RLC_ControlMsg_REQ

PCO Type : G_DSAP

Comments : The ASP is used to transmit a down link RLC/MAC control message to the UE/MS on the specified channel.

Parameter Name	Parameter Type	Comments
cellId	CellId	Channel identifier
physicalChId	PhysicalChId	PCCCH or PACCH or PTCCH
g_LogicChType	G_LogicChType	0 -- downlink; 1 -- uplink
tBF_Direction	INTEGER	temporary flow identity
tFI	TFI	relative reserved block period
rRBP	RRBP	supplementary/polling bit
s_P_Bit	S_P_Bit	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
rfn	RFN	
pagingGroup	PAGING_GROUP	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	PagingMode	0 -- normal paging;1-- exteded paging;3 -- paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	PDU	Down link RLC/MAC control message

Detailed Comments : This ASP provides values for "RRBP" and "S/P" fields in MAC header for TTCN controlling the response from the UE, the value for "PayloadType" and "USF" fields in MAC header shall be filled by the SS.If a RLC/MAC control message can not be fitted into one RLC/MAC control block, the SS RLC/MAC entity shall take the responsibility of segmentation of the message, and set the correct "PayloadType" and optional octet1 (and optional octet2).PTCCH is valid for PACKET TIMING ADVANCE/POWER CONTROL message if sending PACKET PAGING REQUEST.The required 52-multiframe occurs when: $\text{pagingGroup div (M div 64) = (FN div 52) mod 64}$ The index to the required paging block in the 51-multiframe determined above: $\text{Paging block index} = \text{pagingGroup mod (M div 64)}$ $M = (12 - \text{BS_PAG_BLKS_RES} - \text{BS_PBCCH_BLKS}) \times 64$

ASP Type Definition		
ASP Name : G_RLC_PSI_REQ PCO Type : G_DSAP Comments : The ASP is used to send packet system information messages to the lower layer emulator.		
Parameter Name	Parameter Type	Comments
cellId physicalChId g_LogicChType packetSysInfoCategory positionInList msg	CellId PhysicalChId G_LogicChType PSI_Category PositionInList PDU	Channel identifier PBCCH or PACCH or PCCCH PSI1 or high repetition rate or low repetition rate Position in the high repetition rate list or the low repetition rate list, for PSI1 this field has no meaning. This field contains PACKET SYSTEM INFORMATION message. See 3GPP TS 44.060 section 11.2.18 to section 11.2.25 for PACKET SYSTEM INFORMATION message definitions.
Detailed Comments : On BCCH, the lower layer emulator shall store the PACKET SYSTEM INFORMATION's, and transmit them according to the rules specified in section 6.3.2.4 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator. Multiple instances of a PSI shall be put in the same list and in ascending order of the message instance number.		

ASP Type Definition		
ASP Name : G_L2_Release_CNF PCO Type : G_DSAP Comments : The ASP from L2, indicates that the multiple frame operation release was successful. This means that the UA message was received in response to L2 DISC command.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel releaseMode	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber BITSTRING[1]	0 or 3 Channel identifier For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15. 0-normal release, 1-local release
Detailed Comments :		

ASP Type Definition		
ASP Name : G_L2_Release_REQ PCO Type : G_DSAP Comments : This ASP requests L2 to send Layer 2 DISC command on the indicated SAPI.		
Parameter Name	Parameter Type	Comments
cellId sAPI physicalChId g_LogicChType subChannel releaseMode	CellId SAPI PhysicalChId G_LogicChType SubChannelNumber BITSTRING[1]	0 or 3 Channel identifier For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15. 0-normal release, 1-local release
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CRLC_DeleteRLC_MAC_REQ PCO Type : G_CSAP Comments : The ASP is used to delete a RLC/MAC entity in GERAN emulation module.		
Parameter Name	Parameter Type	Comments
cellId	CellId	The identifier of the cell
Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.		

ASP Type Definition		
ASP Name : G_CRLC_DeleteRLC_MAC_CNF PCO Type : G_CSAP Comments : The ASP is used to confirm the G_CRLC_DeleteRLC_MAC_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	The identifier of the cell
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CRLC_CreateRLC_MAC_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to create a RLC/MAC entity in GERAN RLC/MAC emulation module.		
Parameter Name	Parameter Type	Comments
cellId	CellId	The identifier of the cell
Detailed Comments : One RLC/MAC entity per cell can exist, cellId will be used for coupling LLC layer module to the RLC/MAC emulation module.. The packet channel description given in the ChannelSpecificInfo of G_CL1_CreateBasicPhyCh_REQ shall be used to configure this layer. This ASP shall be called after the G_CL1_CreateBasicPhyCh_REQ ASP.		

ASP Type Definition		
ASP Name : G_CRLC_CreateRLC_MAC_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ		
Parameter Name	Parameter Type	Comments
cellId	CellId	The identifier of the cell
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_CreateLLE_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to create an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	Parameter Type	Comments
ILMEId	LLMEId	Logical Layer Management Entity Id
rLC_MAC_MappingInfo	CellId	This parameter indicates the RLC/MAC emulation module in the cell, not the cell itself.
Detailed Comments : The RLC/MAC emulation module needs to be created prior to this ASP by G_CRLC_CreateRLC_MAC_REQ ASP.		

ASP Type Definition		
ASP Name : G_CLLC_CreateLLE_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm the G_CLLC_CreateLLE_REQ		
Parameter Name	Parameter Type	Comments
ILMEId	LLMEId	The identifier of the cell Logical Layer Management Entity Id
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_DeleteLLE_REQ		
PCO Type : G_CSAP		
Comments : The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	Parameter Type	Comments
ILMEId	LLMEId	Logical Layer Management Entity Id
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_DeleteLLE_CNF		
PCO Type : G_CSAP		
Comments : The ASP is used to confirm the G_CLLC_DeleteLLE_REQ		
Parameter Name	Parameter Type	Comments
ILMEId	LLMEId	The identifier of the cell Logical Layer Management Entity Id
Detailed Comments :		

ASN.1 ASP Type Definition	
ASP Name : CMAC_Ciphering_Activate_CNF	
PCO Type : CSAP	
Comments : To confirm to activate or inactivate the ciphering	
Type Definition	
SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }	
Detailed Comments :	

ASN.1 ASP Type Definition	
ASP Name : CMAC_Ciphering_Activate_REQ	
PCO Type : CSAP	
Comments : To request to start or, restart or stop downlink ciphering or uplink deciphering. The physicalChannelIdentity of DPCH applies to routingInfo.Do not increment HFN part of COUNT-C if the value of incrementCOUNT_C_Ind is "NotIncr".	
Type Definition	
SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, ratType RatType, cn_DomainIdentity CN_DomainIdentity, cipheringModeInfo CipheringModeInfo, incHFN Increment_Mode }	
Detailed Comments :	

ASN.1 ASP Type Definition
ASP Name : CMAC_Config_CNF PCO Type : CSAP Comments : For MAC emulator to report that a previous attempt to setup, reconfigure or release a logical channel is successful.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_Config_REQ PCO Type : CSAP Comments : To request to configure MAC entity. Setup is used for creation of the MAC instances or the MAC resources. Release is used for free the all MAC resources. The reconfiguration is to change the MAC parameters, it is not the MAC modification.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo, ratType RatType, configMessage CHOICE { setup CmacConfigReq, reconfigure CmacConfigReq, release NULL } }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SYSINFO_Config_CNF PCO Type : CSAP Comments : To confirm to setup the BCCH message to MAC layer
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SYSINFO_Config_REQ PCO Type : CSAP Comments : To request MAC layer to send the BCCH message on the specified configuration.
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo, ratType RatType, configMessage CmacSysinfoConfigReq }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SecurityMode_Config_CNF PCO Type : CSAP Comments : To confirm to configure the MAC security mode
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63) }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SecurityMode_Config_REQ PCO Type : CSAP Comments : To request to configure the MAC security mode If there are several CMAC_Ciphering_Activate_REQ follow this ASP, the SS shall take a serial of specified actions on the same contents in this ASP at the activation time indicated in each CMAC_Ciphering_Activate_REQ.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), macCipheringInfo SecurityInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_Config_CNF PCO Type : CSAP Comments : To confirm to setup the cell parameter
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63) }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_Config_REQ PCO Type : CSAP Comments : To request to setup the cell parameter. The unit of tcell is chip; the unit of sfnOffset is frame number; the primary scrambling code number of the cell is 16*primaryScramblingCode_SS; the unit of dLTxAttenuationLevel is dB.
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), tcell INTEGER(0..38399), sfnOffset INTEGER (0 .. 4095), frequencyInfo FrequencyInfo, primaryScramblingCode_SS INTEGER (0..511), cellTxPowerLevel CellTxPowerLevel, dLTxAttenuationLevel INTEGER(0..30), frequencyBandIndicator FrequencyBandFDD }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_Release_CNF PCO Type : CSAP Comments : The confirmation to the CPHY_Cell_Release_Req
Type Definition
<pre>SEQUENCE { soft_Reset BOOLEAN, cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) -- cell IDs }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_Release_REQ PCO Type : CSAP Comments : 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE. 2. Releases the associated Memory Buffers (if any). 3. Cancels all active timers (if any) With "Soft_Reset" flag OFF: 1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any) 2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List 3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.
Type Definition
SEQUENCE { soft_Reset BOOLEAN, cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) --- cell IDs }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_TxPower_Modify_CNF PCO Type : CSAP Comments : To confirm to change the DL power
Type Definition
SEQUENCE { cellId INTEGER (0..63) }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_TxPower_Modify_REQ PCO Type : CSAP Comments : To request to change the DL power
Type Definition
SEQUENCE { cellId INTEGER (0..63), dLTxAttenuationLevel INTEGER(0..40|123) }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Frame_Number_CNF PCO Type : CSAP Comments : To return the requested connection frame number. The routingInfo indicates a physical channel.
Type Definition
<pre>SEQUENCE{ cellId INTEGER(0..63), routingInfo RoutingInfo, frameNumber INTEGER (0..255) }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Frame_Number_REQ PCO Type : CSAP Comments : To request the physical layer to return a connection frame number on which the next message can be sent at the specified PCO on the specified logical channel. The return frame number shall leave time from current frame number in order to leave some execution time for TTCN preparing next message. The routingInfo indicates a physical channel
Type Definition
<pre>SEQUENCE{ cellId INTEGER(0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Ini_CNF PCO Type : CSAP Comments : Confirm the test initialisation
Type Definition
<pre>SEQUENCE { confirmation NULL }</pre>
Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name : CPHY_Ini_REQ	
PCO Type : CSAP	
Comments : Request to initialise the test	
Type Definition	
ENUMERATED { defaultRadioEnvironment(0), nonDefaultMultiCell(1) }	
Detailed Comments :	

ASN.1 ASP Type Definition	
ASP Name : CPHY_Out_of_Sync_IND	
PCO Type : CSAP	
Comments : To report that the physical channel synchronization (in FDD mode, sync with uplink DPCCH) was lost as detected by the SS receiver.	
Type Definition	
SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }	
Detailed Comments :	

ASN.1 ASP Type Definition	
ASP Name : CPHY_RL_Modify_CNF	
PCO Type : CSAP	
Comments : To confirm to modify the Radio Link	
Type Definition	
SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }	
Detailed Comments :	

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Modify_REQ PCO Type : CSAP Comments : To request to modify the Radio Link HardHandover (PhysicalChannelReconfig) ChannelisationCodeChange FrequencyChange PhysicalChannelModifyForTrCHReconfig CompressedMode(PhysicalChannelReconfig) Re_Synchronized HardHandover SoftHandover
Type Definition
SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo, ratType RatType, modifyMessage CphyRIModifyReq }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Release_CNF PCO Type : CSAP Comments : PHY emulator confirms that a specified physical channel has been released.
Type Definition
SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Release_REQ PCO Type : CSAP Comments : To request to release the Radio Link
Type Definition
SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Setup_CNF PCO Type : CSAP Comments : To confirm to setup the Radio Link
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Setup_REQ PCO Type : CSAP Comments : To request to setup the associated transport channels and the Radio Link itself.
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo, ratType RatType, setupMessage CphyRISetupReq }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Sync_IND PCO Type : CSAP Comments : To indicate that physical channel synchronization (in FDD mode, sync with DPCCH) has been achieved.
Type Definition
<pre>SEQUENCE{ cellId INTEGER (0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Config_CNF PCO Type : CSAP Comments : To confirm to configure the transport channel
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Config_REQ PCO Type : CSAP Comments : To request to configure the transport channel
Type Definition
<pre>SEQUENCE { cellId INTEGER(0..63), routingInfo RoutingInfo, ratType RatType, trchConfigType TrChConfigType, configMessage CphyTrchConfigReq }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Release_CNF PCO Type : CSAP Comments : To confirm to release tthe Radio Link
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Release_REQ PCO Type : CSAP Comments : To request to release tthe Radio Link
Type Definition
<pre>SEQUENCE { cellId INTEGER (0..63), routingInfo RoutingInfo, trchConfigType TrChConfigType }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Ciphering_Activate_CNF PCO Type : CSAP Comments : To confirm to activate or inactivate the ciphering
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63)}</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Ciphering_Activate_REQ PCO Type : CSAP Comments : To request to start, restart or stop downlink ciphering or uplink deciphering. The RB-identity applied to routingInfo indicates the SRB being not suspended during the execution of the ciphering mode command. Each call of the ASP includes one RLC SN in rb_DL_CiphActivationTimeInfo for the corresponding rb-identity.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), ratType RatType, cn_DomainIdentity CN_DomainIdentity, ciphActivationInfo CiphActivationInfo, incHFN RLC_IncMode }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Config_CNF PCO Type : CSAP Comments : For RLC emulator to confirm that a previous attempt to establish, reconfigure or release a radio bearer has been successful
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Config_REQ PCO Type : CSAP Comments : To request to setup, reconfigure or release RLC entity
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo, ratType RatType, configMessage CrlcConfigReq }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Activate_CNF PCO Type : CSAP Comments : To confirm to activate or inactivate the integrity protection
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63) }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Activate_REQ PCO Type : CSAP Comments : To request to start or to modify the downlink or uplink integrity protection. The ASP shall be called before the sending of SECURITY MODE COMMAND. It activates the integrity on all SRBs in DL. The ASP shall not be called if the integrity shall be switched off in the test case.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), cn_DomainIdentity CN_DomainIdentity, integrityActivationInfo IntegrityActivationInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Failure_IND PCO Type : CSAP Comments : RLC emulator reports the occurrences of a failure in integrity protection, i.e. reception of an integrity-protected RLC AM/UM SDU containing a non-matching X-MAC value compared to the desired.
Type Definition
<pre>SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, failureCause ENUMERATED { codeNotMatched(0) } }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_RRC_MessageSN_CNF PCO Type : CSAP Comments : To return the counter I value (HFN and RRC message sequence number) for sending the next DL RRC message or for receiving the next UL RRC message on the concerned SRB. COUNT_I_MSB is the 28 MSB of the COUNT-I (HFN)
Type Definition
SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, count_I_MSB_UL COUNT_I_MSB, count_I_LSB_UL RRC_SequenceNumber, count_I_MSB_DL COUNT_I_MSB, count_I_LSB_DL RRC_SequenceNumber }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_RRC_MessageSN_REQ PCO Type : CSAP Comments : To request the SS to return the values in COUNT-I for sending the next DL RRC message or for receiving the next UL RRC message on the concerned SRB.
Type Definition
SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Resume_CNF PCO Type : CSAP Comments : To confirm the resume request
Type Definition
SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Resume_REQ PCO Type : CSAP Comments : To request to resume data transmission. If the SS implemented the optional suspension of UL data PDUs, then the processing in the UL of data PDUs should be resumed.
Type Definition
SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SecurityMode_Config_CNF PCO Type : CSAP Comments : To confirm to configure the ciphering
Type Definition
SEQUENCE { cellId INTEGER (-1..63) }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SecurityMode_Config_REQ PCO Type : CSAP Comments : To request to configure the RLC security mode If several subsequent CRLC_Integrity_Activate_REQ or CRLC_Ciphering_Activate_REQ follow this ASP, the SS shall take a serial of specified actions on the same contents in this ASP at the activation time indicated in each CRLC_ Integrity (or Ciphering)_Activate_REQ.
Type Definition
SEQUENCE { cellId INTEGER (-1..63), rlcSecurityInfo SecurityInfo }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SequenceNumber_CNF PCO Type : CSAP Comments : To return the requested counter sequence number to which the next DL PDU to be sent or the expected UL PDU to be received.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo, count_C_MSB_UL COUNT_C_MSB , count_C_LSB_UL RLC_SequenceNumber, count_C_MSB_DL COUNT_C_MSB , count_C_LSB_DL RLC_SequenceNumber }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SequenceNumber_REQ PCO Type : CSAP Comments : To request the RLC layer to return current counter sequence numbers to which the next DL PDU to be sent or the expected UL PDU to be received.
Type Definition
<pre>SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SetRRC_MessageSN_CNF PCO Type : CSAP Comments : To confirm the RRC message sequence number setting request
Type Definition
<pre>SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SetRRC_MessageSN_REQ PCO Type : CSAP Comments : To request the SS to set the RRC message sequence number in COUNT-I to the value specified in this ASP. The ASP is used to initialise SS RRC
Type Definition
SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, count_I_LSB_UL RRC_SequenceNumber OPTIONAL, count_I_LSB_DL RRC_SequenceNumber OPTIONAL }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Suspend_CNF PCO Type : CSAP Comments : To confirm the suspension of data transmission. The parameter vt indicates either the value of the Send State Variable VT(S) for AM, or the value of Data State Variable VT(US) for UM.
Type Definition
SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo, vt RLC_SequenceNumber }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Suspend_REQ PCO Type : CSAP Comments : To request the suspension of data transmission. The parameter n indicates that an RLC entity will not send a PDU with "Sequence Number" VT(S)+N for AM and "Sequence Number" VT(US)+N for UM, where N is a non-negative integer.
Type Definition
SEQUENCE { cellId INTEGER (-1..63), routingInfo RoutingInfo, n RLC_SequenceNumber }
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_AM_DATA_CNF PCO Type : DSAP Comments :
Type Definition
<pre>SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, mui Mui }</pre>
Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_AM_DATA_IND PCO Type : DSAP Comments : To indicate to receive DATA using acknowledged mode
Type Definition
<pre>SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, integrityResult IntegrityResult , aM_message CHOICE { uL_DCCH_Message UL_DCCH_Message, uL_CCCH_Message UL_CCCH_Message, uL_SHCCH_Message UL_SHCCH_Message } }</pre>
Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_AM_DATA_REQ

PCO Type : DSAP

Comments : To request to transmit DATA using acknowledged mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  confirmationRequest AmConfirmationRequest,
  aM_message CHOICE {
    dL_DCCH_Message DL_DCCH_Message,
    dL_CCCH_Message DL_CCCH_Message,
    pCCH_Message PCCH_Message,
    dL_SHCCH_Message DL_SHCCH_Message,
    bCCH_FACH_Message BCCH_FACH_Message,
    bCCH_BCH_Message BCCH_BCH_Message,
    invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
    invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
    invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  }
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_TR_DATA_IND

PCO Type : DSAP

Comments : To indicate to receive DATA using transparent mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  tM_message CHOICE {
    uL_DCCH_Message UL_DCCH_Message,
    uL_CCCH_Message UL_CCCH_Message,
    uL_SHCCH_Message UL_SHCCH_Message
  }
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_TR_DATA_REQ

PCO Type : DSAP

Comments : To request to transmit DATA using transparent mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  tM_message CHOICE {
    dL_DCCH_Message DL_DCCH_Message,
    dL_CCCH_Message DL_CCCH_Message,
    pCCH_Message PCCH_Message,
    dL_SHCCH_Message DL_SHCCH_Message,
    bCCH_FACH_Message BCCH_FACH_Message,
    bCCH_BCH_Message BCCH_BCH_Message,
    invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
    invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
    invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  }
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_UM_DATA_IND

PCO Type : DSAP

Comments : To indicate to receive DATA using unacknowledged mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  integrityResult IntegrityResult,
  uM_message CHOICE {
    uL_DCCH_Message UL_DCCH_Message,
    uL_CCCH_Message UL_CCCH_Message,
    uL_SHCCH_Message UL_SHCCH_Message
  }
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_UM_DATA_REQ

PCO Type : DSAP

Comments : To request to transmit DATA using unacknowledged mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  uM_message CHOICE {
    dL_DCCH_Message DL_DCCH_Message,
    dL_CCCH_Message DL_CCCH_Message,
    pCCH_Message PCCH_Message,
    dL_SHCCH_Message DL_SHCCH_Message,
    bCCH_FACH_Message BCCH_FACH_Message,
    bCCH_BCH_Message BCCH_BCH_Message,
    invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
    invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
    invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  },
  specialLI BOOLEAN
}
```

Detailed Comments :

PDU Type Definition			
PDU Name : DTMREQUEST			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : DTM INFORMATION ue/ms -> ntw 3GPP TS 44.018 clause 9.1.12i			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
tLLI	TLLI		
chReqDescr	ChReqDescr2		channel request description M LV OCTETSTRING [5-n]
Detailed Comments :			

PDU Type Definition			
PDU Name : INTERSYSTEMTOUTRANHANDOVERCOMMAND			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR INTER SYSTEM TO UTRAN HANDOVER COMMAND ntw -> ue/ms 3GPP TS 44.018 clause 9.1.15a			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
handoverToUTRANCommand	HandoverToUTRANCmd		
Detailed Comments :			

PDU Type Definition

PDU Name : MEASUREMENTINFORMATION
PCO Type : G_DSAP
Encoding Rule Name : MeasInfoSparePadding_Rule5
Encoding Variation :
Comments : RR MEASUREMENT INFORMATION ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.54

Field Name	Field Type	Field Encoding	Comments
rR_ShortPD	B1		see 3GPP TS 24.007
msgType	B5		message type.
shortL2Header	B2		short layer 2 header
bA_IND	B1		BCCH allocation sequence number indication
bA_IND3G	B1		3G sequence number
mP_CHANGE_MARK	B1		measurement parameters change mark
mI_INDEX	B4		MEASUREMENT INFORMATION index
mI_COUNT	B4		MEASUREMENT INFORMATION count
pWRC	B1		power control indicator
rEPORT_TYPE	B1		
rEPORT_RATE	B1		
iINVALID_BSIC_REPORTING	B1		
maskBit1	B1		
realTimeDiff	RealTimeDiffDescr_MI		not present if maskBit1 = 0
maskBit2	B1		
bSIC_Descr	BSIC_Descr		not present if maskBit2 = 0
maskBit3	B1		
reportPriorityDescr	ReportPriorityDescr		not present if maskBit3 = 0
maskBit4	B1		
measParamDescr	MeasParamDescrMI		not present if maskBit4 = 0
maskBit5	B1		
extensionLength	ExtLengthDescr		not present if maskBit5 = 0
maskBit6	B1		
neighCellDescr3G	NeighCellDescr3G_MI		not present if maskBit6 = 0
MaskBit7	B1		
measParamDescr3G	MeasParamDescr3GMI		not present if maskBit7 = 0
maskR5	B1		
maskBit8	B1		not present if maskR5 = 0
maskBit9	B1		not present if maskR5 = 0 and maskBit8 = 0
fDDRepThreshold2	B6		not present if maskR5 = 0, maskBit8 = 0 and maskBit9 = 0

Detailed Comments :

PDU Type Definition

PDU Name : PACKETMEASUREMENTORDER
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9b

SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	B6		Message type
pAGE_MODE	B2		Normal paging
globalTFImask	B1		
gLOBAL_TFI	GlobalTFI		not present if globalTFImask=1
mask2	B1		not present if globalTFImask=0
tLLI	OCTETSTRING[4]		not present if globalTFImask=0 and mask2=1
pMOIndex	B3		
pMOCOUNT	B3		
ncMask	B1		
ncMeasParams	NC_MeasParams		not present if ncMask = 0
ncFreqMask	B1		not present if ncMask = 0
ncFreqList	NC_FreqList		not present if ncMask = 0 or ncFreqMask = 0
spareBit	B1		set to '0'
r98Mask	B1		
IsaMask	B1		not present if r98Mask = 0
ISAParams	LSA_Param		not present if r98Mask = 0 or IsaMask = 0
r99Mask	B1		not present if r98Mask = 0
enhMask	B1		not present if r98Mask = 0 or r99Mask = 0
eNHMeasParams	ENH_MeasParam		not present if r98Mask = 0 or r99Mask=0 or enhMask = 0
r4Mask	B1		not present if r98Mask = 0 or r99Mask = 0
cCNActive	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0
ccnMask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0
cCNSupportDescr	CCN_SupportDescr		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or ccnMask = 0
r5Mask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0
grntiXMask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
gRNTIExtension	B4		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or grntiXMask = 0
iuMask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
iuModeNeighCellParams	IuModeNeighCellParams		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or iuMask = 0
ncluMask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
nCluModeCapCellList	NCluModeCapCellList		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or ncluMask = 0
gprs3GAddMeasParam2Mask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
rptThresMask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or gprs3GAddMeasParam2Mask = 0
fddReportThreshold	B6		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or gprs3GAddMeasParam2Mask = 0 or rptThresMask = 0
r6Mask	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
cCN3GActive	B1		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or r6Mask = 0
Detailed Comments :			

PDU Type Definition			
PDU Name : PacketData			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : To send/receive user data for PAccket Cell Change Order Tests			
Field Name	Field Type	Field Encoding	Comments
data	OCTETSTRING		
Detailed Comments :			

PDU Type Definition

PDU Name : MODIFYPDPCONTEXTACCEPT_ul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Modify PDP Context Accept
ue -> n
3GPP 24.008 clause, 9.5.11

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]

Detailed Comments :

PDU Type Definition

PDU Name : MODIFYPDPCONTEXTREQUEST_dl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Modify PDP Context Request
n -> ue
24.008 , 9.5.9

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
spare	B4		Spare M V BITSTRING [4]
radioPriority	RadioPriority_v		Radio priority M V BITSTRING [4]
requestedLLC_SAPI	LLC_SAPI_v		LLC service access point identifier M V BITSTRING [8]
newQoS	QualityOfService_lv		Quality of service M LV OCTETSTRING [13-15]
pDP_Addr	PktDataProtoAddr		Packet data protocol address O TLV OCTETSTRING [4-20]
pKT_FlowIdentifier	PktFlowIdentifier		Packet Flow Identifier O TLV OCTETSTRING [3]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3-253]

Detailed Comments :

PDU Type Definition

PDU Name : ACTIVATEPDPCONTEXTACCEPTdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Activate PDP Context Accept
n -> ue
Reference 3G PP 24.008 clause, 9.5.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
negotiatedLLC_SAPI	LLC_SAPI_v		LLC service access point identifier M V BITSTRING [8]
negotiatedQoS	QualityOfService_lv		Quality of service M LV OCTETSTRING [13-15]
spare	B4		Spare M V BITSTRING [4]
radioPriority	RadioPriority_v		Radio priority M V BITSTRING [4]
pDP_Address	PktDataProtoAddr		Packet data protocol address O TLV OCTETSTRING [4-20]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3-253]
pktFlowID	PktFlowIdentifier		Packet Flow Identifier O TLV OCTETSTRING [3]

Detailed Comments :

PDU Type Definition

PDU Name : ALERTINGul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC ALERTING uplink ue -> n
 3G TS 24.008 cl. 9.3.1.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : CALLCONFIRMED
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC CALL CONFIRMED ue -> n
 3G TS 24.008 cl. 9.3.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability O OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
cau	Cau		cause O OCTETSTRING [4..32]
cC_Capabilities	CC_Capabilities		cc capabilities O OCTETSTRING[3]
streamId	StreamId		stream identifier O OCTETSTRING[3]
supportedCodecs	CodecList		supported codecs O OCTETSTRING[5-n]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition			
PDU Name : CONNECTACKNOWLEDGE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : CC CONNECT ACKNOWLEDGE ue <-> n 3G TS 24.008 cl. 9.3.6			
Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition			
PDU Name : CONNECTul			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : CC CONNECT n <- ue 3G TS 24.008 cl. 9.3.5.2			
Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
connectedSubAdrs	ConnectedSubAdrs		connected subaddress O OCTETSTRING [2..23]
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]
streamId	StreamId		stream identifier O OCTETSTRING[3]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition

PDU Name : DISCONNECTul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC DISCONNECT ue -> n
 3G TS 24.008 cl. 9.3.7.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_iv		cause M OCTETSTRING [3..31]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASECOMPLETEul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC or SS RELEASE COMPLETE n <- ue
 3G TS 24.008 cl. 9.3.19.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASEdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC RELEASE n -> ue
 3G TS 24.008 cl. 9.3.18.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
cau2	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : SETUPdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n -> ue
 3G TS 24.008 cl. 9.3.23.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability O OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
facility	Facility		facility O
proglnd	Proglnd		progress indicator O OCTETSTRING [4]
signal	Signal		signal O OCTETSTRING[2]
cgpn	CGPN		calling party subaddr. O OCTETSTRING [2..14]
cgps	CGPS		calling party subaddr. O OCTETSTRING [2..23]
cdpn	CDPN		called party number O OCTETSTRING[2..43]
cdps	CDPS		called party subaddr. O OCTETSTRING [2..23]
redirectingPN	RedirectingPN		redirecting party BCD number O OCTETSTRING[3..19]
redirectingPSubadrs	RedirectingPS		redirecting party subaddress O OCTETSTRING[2..23]
llcRepeatInd	RepeatInd		LLC repeat indicator O OCTETSTRING [1]
llc1	LLC		low layer compatib.1 O OCTETSTRING [2..18]
llc2	LLC		low layer compatib.2 C OCTETSTRING [2..18]
hlcRepeatInd	RepeatInd		HLC repeat indicator O OCTETSTRING [1]

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
hlc1	HLC		high layer compat.1 O OCTETSTRING [2..5]
hlc2	HLC		high layer compat. 2 C OCTETSTRING [2..5]
userUser	UserUser		user-user O OCTETSTRING [3..131]
priority	PriorityLvl		priority O OCTETSTRING[1]
alert	AlertPattern		alerting pattern O OCTETSTRING[3]
ntwCCCapabilities	NtwCCCapabilities		Network call control capabilities O OCTETSTRING[3]
cauNoCLI	CauNoCLI		Cause of no CLI O OCTETSTRING[3]
buBcap	BuBcap		Backup Bearer Capability O TLV OCTETSTRING[3-15]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition

PDU Name : ACTIVATEPDPCONTEXTREQUESTul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Activate PDP Context Request
ue -> n
3GPP 24.008 clause, 9.5.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
requestedNSAPI	NSAPI_v		Network service access point identifier M V BITSTRING [8]
requestedLLC_SAPI	LLC_SAPI_v		LLC service access point identifier M V BITSTRING [8]
requestedQoS	QualityOfService_lv		Quality of service M LV OCTETSTRING [13-15]
pDP_Address	PktDataProtoAddr_lv		Packet data protocol address M LV OCTETSTRING [3-19]
accessPtName	AccessPtName		Access point name O TLV OCTETSTRING [3-102]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3-253]

Detailed Comments :

PDU Type Definition

PDU Name : ATTACHACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 clause 9.4.2 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
forceToStandby	ForceToStandby		M 1/2 octet
attachResult	AttachResult		M 1/2 octet
periodicRAupdateTimer	GPRS_Timer_v		M 1 octet
radioPrioTOM8	RadioPriority2_v		M 1/2 octet
radioPrioSMS	RadioPriority_v		M 1/2 octet
rai	RAI_v		Routing Area Identification M 6 octets
ptmsiSignature	PTMSI_Signature		O 4 octets
negReadyTimer	GPRS_Timer		O 2 octets
allocatedPTMSI	GMM_MS_IdentityPTMSI		O 7 octets
msIdentity	GMM_MS_Identity		O 7–10 octets
gmmCause	GMM_Cause		O 2 octets
t3302Value	GPRS_Timer2		O TLV 3 octets
cellNotification	CellNotification		O 1 octet
equivalentPLMN	PLMN_List		O 5–17 octets
ntwFeatureSupport	NtwFeatureSupport_tv		O TV 1 octet
emergNumList	EmergNumList		O TLV 5–50 octets
requestedMS_Info	RequestedMS_Info_tv		O TV 1 octet

Detailed Comments :

PDU Type Definition			
PDU Name : ATTACHCOMPLETE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 clause 9.4.3 (GMM message)			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0000 0011'B M BITSTRING [8]
interRAT_HO_Info	InterRAT_HO_Info		O TLV 3-40 octets
Detailed Comments :			

PDU Type Definition			
PDU Name : ATTACHREJECT			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 V3.6.0 clause 9.4.4 (GMM message)			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0100' M BITSTRING [8]
gmmCause	RejCau		M 1 octet
t3302Value	GPRS_Timer2		O, TLV 3 octets
Detailed Comments :			

PDU Type Definition

PDU Name : ATTACHREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.1 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0001' M BITSTRING [8]
msNetworkCap	MS_NetworkCap_lv		MS network capability M 3-9 octets
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
attachType	AttachType		Attach Type M BITSTRING [4]
drxParameter	DRXparamter		M 2 octets
ptmsiORimsi	MS_Identity_lv		Mobile Identity M 6-9 octets
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6-52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
tmsiStatus	TMSI_Status		O 1 octet
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONANDCIPHERINGREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.9 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 0010'B M BITSTRING [8]
imeisvReq	IMEISVRequest		M BITSTRING[4]
ciphAlgorithm	CiphAlgorithm		Ciphering algorithm M BITSTRING[4]
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
forceToStandby	ForceToStandby		M BITSTRING [4]
authRand	AuthenticationParamterRAN D		O, TV 17 octets
gprsCiphKeySeqNo	CiphKeySeqNum_tv		Ciphering key sequence number O, TV, 1
aUTN	GMM_AUTN		Auth. parameter AUTN O, TLV, 18 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONANDCIPHERINGRESPONSE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.10 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 0011'B M BITSTRING [8]
spare4	B4		
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
authRsp	AuthRsp_tv		O, TV 5 octets
imeisv	GMM_MS_Identity		O TLV, 11 octets
authRspExt	AuthRspExt		O TLV, 3-14 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONFAILURE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM AUTHENTICATION FAILURE ue -> n
 3G TS 24.008 V3.4.0 cl. 9.2.3a

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
rejCau	RejCau		Reject Cause M BITSTRING [8]
authFailParam	AuthenticationFailureParameter		Authentication Failure Parameter O AuthFail (128 bits)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,
 for core network nodes earlier than R99:
 bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
 for core network nodes of R99 or later:
 bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : AUTHENTICATIONREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM AUTHENTICATION REQUEST n -> ms
 3G TS 24.008 V3.4.0 cl. 9.2.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
rAND	MM_RAND		Auth. parameter RAND M BITSTRING [128]
aUTN	AUTN		Auth. parameter AUTN O AUTN

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition			
PDU Name : AUTHENTICATIONRESPONSE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : MM AUTHENTICATION RESPONSE ue -> n 3G TS 24.008 V3.4.0 cl. 9.2.2			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
authRsp	AuthRsp		Authentication Response M OCTETSTRING [4]
authRspExt	AuthRspExt		Authentication Response Extension O AuthRspExt (3-14 octets)
Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS, for core network nodes earlier than R99: bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number; for core network nodes of R99 or later: bits 7 and 8 are reserved for the send sequence number.			

PDU Type Definition			
PDU Name : AUTHENTICATION_AND_CIPHERING_FAILURE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 V3.6.0 clause 9.4.10a (GMM message)			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMPProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 1100'B M BITSTRING [8]
gmmCause	RejCau		M 1 octet
authFailurePar	AuthenticationFailureParameter		O TLV, 16 octets
Detailed Comments :			

PDU Type Definition

PDU Name : CMSERVICEACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CM SERVICE ACCEPT n -> ue
 3G TS 24.008 V3.4.0 cl. 9.2.5

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition

PDU Name : CMSERVICEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CM SERVICE REQUEST ue -> n
 3G TS 24.008 V3.4.0 cl. 9.2.9

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
cMServType	CMServType		CM Service Type M BITSTRING [4]
mSClsmk2	MS_Clsmk2_Iv		Mobile Station Classmark 2 LV M MS_Clsmk2 (4 octets)
mobileId	MS_Identity_Iv		Mobile Identity LV M MobileId (2-9 octets)
priorityLvl	PriorityLvl		Priority Level TV O PriorityLvl (1 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,
 for core network nodes earlier than R99:
 bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber;
 for core network nodes of R99 or later:
 bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : DEACTIVATEPDPCONTEXTACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Deactivate PDP Context Accept
 n <=> ue
 3GPP 24.008 , 9.5.15

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]
mBMS_ProtocolConfOpts	MBMS_ProtoCfgOpt		MBMS Protocol configuration options O TLV OCTETSTRING [3–253]

Detailed Comments :

PDU Type Definition

PDU Name : DEACTIVATEPDPCONTEXTREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Deactivate PDP Context Request
 n <=> ue
 24.008, 9.5.14

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
sM_Cause	SM_Cause_v		SM cause M V OCTETSTRING [1]
tearDwnInd	TearDwnInd_tv		Tear down indicator O TV BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]
mBMS_ProtocolConfOpts	MBMS_ProtoCfgOpt		MBMS Protocol configuration options O TLV OCTETSTRING [3–253]

Detailed Comments :

PDU Type Definition			
PDU Name : DETACHACCEPTMO			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 clause 9.4.6.2 (DETACH ACCEPT mobile originated detach)			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type '000 0110' M BITSTRING [8]
spare	B4		M 1/2 octet
forceToStandby	ForceToStandby		M 1/2 octet
Detailed Comments :			

PDU Type Definition			
PDU Name : DETACHREQUESTMO			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		M 1/2 octet
detachType	DetachType		M 1/2 octet
ptmsi	GMM_MS_IdentityPTMSI		O TLV
ptmsiSignature	PTMSI_Signature_tlv		O
Detailed Comments :			

PDU Type Definition

PDU Name : DISCONNECTdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC DISCONNECT ue <- n
 3G TS 24.008 cl. 9.3.7.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [3..31]
facility	Facility		facility O
progInd	ProgInd		progress indicator O OCTETSTRING [4]
userUser	UserUser		user-user O OCTETSTRING [3..131]
allowedAction	AllowedAction		Allowed actions (for CCBS) O OCTETSTRING[3]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition

PDU Name : IMSIDETACHINDICATION
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM IMSI DETACH INDICATION ue -> n
 3G TS 24.008 V3.4.0 cl. 9.2.12

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
mSClsmk1	MS_Clsmk1		Mobile Station Classmark 1 M MSClsmk1 (1 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2-10 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
 for core network nodes earlier than R99:
 bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
 for core network nodes of R99 or later:
 bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : LOCATIONUPDATINGACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM LOCATION UPDATING ACCEPT n -> ms
 3G TS 24.008 V3.4.0 cl. 9.2.13

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
locAreald	LocAreald_v		Location Area Id. V M LocAreald_v (5 octets)
mobileId	MM_MS_Identity		Mobile Identity O MobileId (3–11 octets)
followOnProceed	FollowOnProceed		Follow on proceed O BITSTRING [8]
cTSPerm	CTSPerm		CTS Permission O BITSTRING [8]
equivalentPLMN	PLMN_List		O 5–47 octets
emergNumList	EmergNumList		O TLV 5–50 octets

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition

PDU Name : LOCATIONUPDATINGREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM LOCATION UPDATING REQUEST ue -> n
 3G TS 24.008 V3.4.0 cl. 9.2.15

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
locUpdType	LocUpdType		Location Updating Type M BITSTRING [4]
locAreald	LocAreald_v		Location Area Id. V M LocAreald (5 octets)
mSClsmk1	MS_Clsmk1		Mobile Station Classmark 1 M MSClsmk1 (1 octets)
mobileId	MS_Identity_Iv		Mobile Identity LV M MobileId (2-9 octets)
mSClsmk2	MS_Clsmk2		Mobile Station Classmark 2 TLV O MSClsmk2 (5 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
 for core network nodes earlier than R99:
 bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
 for core network nodes of R99 or later:
 bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : PAGINGRESPONSE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : PAGINGRESPONSE ue -> n
 GSM 04.18 cl. 9.1.25

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
rRProtocolDiscriminator	ProtocolDiscriminator		RR Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
mSClsmk2	MS_Clsmk2_lv		Mobile Station Classmark 2 M MSClsmk2 (4 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2-10 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE, for core network nodes earlier than R99: bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber; for core network nodes of R99 or later: bits 7 and 8 are reserved for the send sequence number.
 (2) (see 3G TS 24.008 cl. 4.5.1.3.3) The UE shall respond with the PAGING RESPONSE message defined in GSM 04.18, chapter 9.1.25. For reasons of backward compatibility the paging response shall use the RR protocol discriminator.

PDU Type Definition

PDU Name : RELEASECOMPLETED
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC or SS RELEASE COMPLETE n -> ue
 3G TS 24.008 cl. 9.3.19.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASEul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC RELEASE n <- ue
 3G TS 24.008 cl. 9.3.18.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
cau2	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
 a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : ROUTINGAREAUPDATEACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 clause 9.4.15 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 1001' M BITSTRING [8]
updateResult	UpdateResult_v		Update result M, 1/2 octet
forceToStandby	ForceToStandby		M 1/2 octet
periodicRAupdateTimer	GPRS_Timer_v		M 1 octet
rai	RAI_v		Routing Area Identification M 6 octets
ptmsiSignature	PTMSI_Signature		O 4 octets
allocatedPTMSI	GMM_MS_IdentityPTMSI		O 7 octets
msIdentity	GMM_MS_Identity		O 7-10 octets
listNPDUnumbers	ReceiveN_PDU_Numbers_tv		O, TLV 4-19 octets
readyTimer	GPRS_Timer		O 2 octets
gmmCause	GMM_Cause		O 2 octets
t3302Value	GPRS_Timer2		O TLV 3 octets
cellNotification equivalentPLMN	CellNotification PLMN_List		O, T, 1 octets O 5-17 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
ntwFeatureSupport	NtwFeatureSupport_tv		O TV 1 octet
emergNumList	EmergNumList		O TLV 5-50 octets
mBMS_ContextStatus	MBMS_ContextStatus		O TLV 2-18 octets
requestedMS_Info	RequestedMS_Info_tv		O TV 1 octet

Detailed Comments :

PDU Type Definition

PDU Name : ROUTINGAREAUPDATEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 clause 9.4.14 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 1000' M BITSTRING [8]
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
updateType	UpdateType_v		Update Type M BITSTRING [4]
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6-52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
drxParameter	DRXparamter_tv		O, TV 3 octets
tmsiStatus	TMSI_Status		O 1 octet
ptmsi	GMM_MS_IdentityPTMSI		O, TLV 7 octets
msnetworkcap	MS_NetworkCap_tlv		MS network capability O, TLV 4-10 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets
mBMS_ContextStatus	MBMS_ContextStatus		O TLV 2-18 octets

Detailed Comments :

PDU Type Definition

PDU Name : ROUTING_AREA_UPDATE_COMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 clause 9.4.16 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 1010' M BITSTRING [8]
listNPDUnumbers	ReceiveN_PDU_Numbers_tlv		O, TLV 4-19 octets
interRAT_HO_Info	InterRAT_HO_Info		O TLV 3-40 octets

Detailed Comments :

PDU Type Definition

PDU Name : SERVICEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.20 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
serviceType	ServiceType_v		Service type M BITSTRING[4]
ciphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
ptmsi	MS_Identity_lv		Mobile Identity M 6 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
mBMS_ContextStatus	MBMS_ContextStatus		O TLV 2–18 octets

Detailed Comments :

PDU Type Definition

PDU Name : SETUPul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n <- ue
3G TS 24.008 cl. 9.3.23.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability M OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
facility	Facility		facility O
cgps	CGPS		calling party subaddr. O OCTETSTRING [2..23]
cdpn	CDPN		called party number M OCTETSTRING[3..43]
cdps	CDPS		called party subaddr. O OCTETSTRING [2..23]
llcRepeatInd	RepeatInd		LLC repeat indicator O OCTETSTRING [1]
llc1	LLC		low layer compatib.1 O OCTETSTRING [2..18]
llc2	LLC		low layer compatib.2 O OCTETSTRING [2..18]
hlcRepeatInd	RepeatInd		HLC repeat indicator O OCTETSTRING [1]
hlc1	HLC		high layer compat.1 O OCTETSTRING [2..5]
hlc2	HLC		high layer compat. 2 O OCTETSTRING [2..5]

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
userUser	UserUser		user-user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator ue -> n O OCTETSTRING [2..3]
cLIR_Suppression	CLIR_Suppression		CLIR suppression C OCTETSTRING[1]
cLIR_Invocation	CLIR_Invocation		CLIR invocation O OCTETSTRING[1]
cC_Capabilities	CC_Capabilities		cc capabilities O OCTETSTRING[3]
facilityCCBS_AdvRecall	Facility		facility for CCBS (advanced recall alignemet)O
facilityCCBS_RecallAlign	Facility		facility for CCBS (recall alignment not essential) O
streamId	StreamId		stream identifier O OCTETSTRING[3]
supportedCodecs	CodecList		supported codecs O OCTETSTRING[5-n]
redial	Redial		Redial O OCTETSTRING[1]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition			
PDU Name : STATUS_PDU			
PCO Type : DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : An AMD STATUS PDU. Ref 3G TS 25.322 clause 9.2.1.5			
Field Name	Field Type	Field Encoding	Comments
dC_Field	DC_Field		1
type	CtrlPDU_Type		2
superFieldsTx	SuperFields		3
superFieldsAndPadRx	HEXSTRING		4
paddingTx	Padding		5
Detailed Comments : 1. Always tsc_DC_ControlPDU for a STATUS PDU. 2. Always tsc_PDU_TypeStatus for a STATUS PDU. 3. The superfields transmitted in the STATUS PDU. 4. The superfields and padding to be received in the STATUS PDU. 5. The padding transmitted must be present to ensure that the total size of this PDU is exactly equal to the current PDU size. It is the callers responsibility to ensure that the superfields are either terminated with a NO_MORE SUFI, or an ACK SUFI.			

PDU Type Definition			
PDU Name : TMSIREALLOCATIONCOMPLETE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : MM TMSI REALLOCATION COMPLETE ue -> n 3G TS 24.008 V3.4.0 cl. 9.2.18			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE, for core network nodes earlier than R99: bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number; for core network nodes of R99 or later: bits 7 and 8 are reserved for the send sequence number.			

PDU Type Definition

PDU Name : ASSIGNMENTCOMMAND
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMMAND ntw -> ue/ms
 3GPP TS 44.018 claus 9.1.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
ch1Descr_at	ChannelDescr2		description of the 1st channel, after time M OCTETSTRING [3]
powerCmd	PowerCommand		power command M OCTETSTRING [1] without IEI
freqList_at	FreqList		frequency list, after time C OCTETSTRING [4..132]
cellChDescr	CellChDescr		cell channel description O OCTETSTRING [17]
multiSlotConfig	MultislotAlloc		multislot allocation C OCTETSTRING [3..12]
ch1Mode	ChMode		mode of the 1st channel (channel set 1) O OCTETSTRING [2]
channelSet2Mode	ChMode		mode of channel set 2 O OCTETSTRING [2]
channelSet3Mode	ChMode		mode of channel set 3 O OCTETSTRING [2]
channelSet4mode	ChMode		mode of channel set 4 O OCTETSTRING [2]
channelSet5mode	ChMode		mode of channel set 5 O OCTETSTRING [2]
channelSet6mode	ChMode		mode of channel set 6 O OCTETSTRING [2]
channelSet7mode	ChMode		mode of channel set 7 O OCTETSTRING [2]
channelSet8mode	ChMode		mode of channel set 8 O OCTETSTRING [2]
ch2Descr_at	ChannelDescr		description of the 2nd channel, after time O OCTETSTRING [4]

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
ch2Mode	ChMode2		mode 2 of the 2nd channel O OCTETSTRING [2]
mobileAlloc_at	MobileAlloc		mobile allocation after time C OCTETSTRING [3..10]
startingTime	StartingTime		starting time O OCTETSTRING [3]
freqList_bt	FreqList		frequency list, before time C OCTETSTRING [4..132]
ch1Descr_bt	ChannelDescr2		description of the 1st channel, before time O OCTETSTRING [4]
ch2Descr_bt	ChannelDescr		description of the 2nd channel, before time O OCTETSTRING [4]
frqchs_bt	FreqChannelSeq		frequency channel sequence before time C OCTETSTRING [10]
mobileAlloc_bt	MobileAlloc		mobile allocation before time C OCTETSTRING [3..10]
cphms	CipherModeSetting		cipher mode setting O OCTETSTRING [1]
vGCS_TargetMode	VGCS_TargetMode		VGCS target mode Indication O OCTETSTRING [3]
mltiRateConfig	MultiRateConfig		multiRate configuration O OCTETSTRING [4..8]
Detailed Comments :			

PDU Type Definition

PDU Name : ASSIGNMENTCOMPLETE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMPLETE ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.3

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cuase M BITSTRING [8] without IEI

Detailed Comments :

PDU Type Definition

PDU Name : CHANNELRELEASE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR CHANNEL RELEASE ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.7

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cause M BITSTRING [8]
bA_Range	BA_Range		BA range O OCTETSTRING minimum 6 octets no up limit
groupChannelDescr	GroupChannelDescr		group channel description O OCTETSTRING[4..13]
groupCipherKey	GroupCipherKey		group cipher key number C OCTETSTRING[1]
gPRS_Resumption	GPRS_Resumption		GPRS resumption O OCTETSTRING[1]
bA_ListPref	BA_ListPref		BA list pref O OCTETSTRING at least 3 octets no up limit
uTRAN_FreqList	UTRAN_FreqList		UTRAN frequency list O OCTETSTRING[3..
cellChannelDescr	CellChDescr		Cell Channel Descr O OCTETSTRING [17]
cellSelInd	CellSelInd		CellSelection indicator after release of all TCH and SDCCH O OCTETSTRING [4..]
enhDTMCSRelInd	EnhDTMCSRelInd		Enhanced DTM CS Release Indication O OCTETSTRING [1]
vGCSCiphParam	VGCS CiphParam		VGCS Ciphering Params O OCTETSTRING [3-15]
grpChDescr2	GroupChannelDescr2		Group Channel Descr 2 O OCTETSTRING [13]

Detailed Comments :

PDU Type Definition			
PDU Name : CHANNELREQUEST			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CHANNEL REQUEST ue/ms -> ntw 3GPP TS 44.08 clause 9.1.8			
Field Name	Field Type	Field Encoding	Comments
estCauRandomRef	B8		establishment cause / random reference M
Detailed Comments :			

PDU Type Definition			
PDU Name : CIPHERINGMODECOMMAND			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CIPHERING MODE COMMAND ntw -> ue/ms 3GPP TS 44.018 clause 9.1.9			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
cipherResponse	CipherResponse		cipher response M BITSTRING [4]
cipherModeSetting	CipherModeSetting		cipher mode setting M BITSTRING [4]
Detailed Comments :			

PDU Type Definition			
PDU Name : CIPHERINGMODECOMPLETE PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : RR CIPHERING MODE COMPLETE ue/ms -> ntw/ue 3GPP TS 44.018 clause 9.1.10			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
mobileEquipId	MM_MS_Identity		mobile equipment identity O OCTETSTRING [10], 15 digits, BCD
Detailed Comments :			

PDU Type Definition			
PDU Name : CLASSMARKCHANGE PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : RR CLASSMARK CHANGE ue/ms -> ntw 3GPP TS 44.018 clause 9.1.11			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
msclsmk	MS_Clsmk2_Iv		mobile station classmark M OCTETSTRING [4]
additionalMsclsmk	MSCLSMK3		additional mobile station classmark information C OCTETSTRING [14]
Detailed Comments :			

PDU Type Definition			
PDU Name : CLASSMARKENQUIRY			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CLASSMARK ENQUIRY ntw -> ue/ms 3GPP TS 44.018 clause 9.1.12			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
mask	ClassmarkEnquiryMask		Classmark Enquiry Mask
Detailed Comments :			

PDU Type Definition			
PDU Name : GPRS_SUSPENSIONREQ			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR GPRS Suspension Request ue/ms -> ntw 3GPP TS 44.018 clause 9.1.13b			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
tlli	TLLI		Temporary Logical Link Identity M OCTETSTRING [4]
raldentification	RAI_v		Routeing Area Identification M OCTETSTRING [6]
cause	O1		SuspensionCause M OctetString [1]
serviceSupport	ServiceSupport		Service support O OTSTETSTRING [2]
Detailed Comments :			

PDU Type Definition

PDU Name : HANOVERFAILURE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR HANOVER FAILURE ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.17

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cause M OCTETSTRING [1] without IEI

Detailed Comments :

PDU Type Definition

PDU Name : IMMEDIATEASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR IMMEDIATE ASSIGNMENT ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.18

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
dedicatedModeOrTBF	DedicatedModeOrTBF		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	ChannelDescr		channel description C OCTETSTRING [3]
packetChDescr	PacketChDescr		packet channel description C OCTETSTRING [3]
reqRef	ReqRef		request reference M OCTETSTRING [3]
ta	TA		timing advance M OCTETSTRING [1]
mobileAlloc	MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	StartingTime		starting time O OCTETSTRING [3]
iaroct	IARO		IA rest octets / frequency parameter, before time M

Detailed Comments : The message has a fixed length of 23 octets.

PDU Type Definition			
PDU Name : MEASUREMENTREPORT PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : RR MEASUREMENT REPORT ue/ms -> ntw 3GPP TS 44.018 clause 9.1.21			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
measResults	MeasResults		measurement results M OCTETSTRING [16]
Detailed Comments :			

PDU Type Definition			
PDU Name : PACKETCHANNELREQUEST PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : PACKET CHANNEL REQUEST 3GPP TS 44.046 clause 11.2.5			
Field Name	Field Type	Field Encoding	Comments
estCauRandomRef	BITSTRING[8..11]		establishment cause / random reference M BITSTRING
Detailed Comments :			

PDU Type Definition

PDU Name : PACKETCONTROLACKNOWLEDGEMENT
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RLC/MAC Control Block format

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
tLLI	OCTETSTRING[4]		
ctrlAck	B2		
mask	B1		
rBPMask	B1		not present if mask=0
tn_RRBP	B3		not present if mask=0 or if rBPMask=0
gRNTIMask	B1		not present if mask=0
gRNTIExt	B4		not present if mask=0 or if gRNTIMask=0
rel6mask	B1		
extMask	B1		not present if rel6mask = 0
ctrlAckExt	B9		not present if rel6mask or extMask = 0
paddingBits	BITSTRING		

Detailed Comments :

PDU Type Definition

PDU Name : PACKETDOWNLINKASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign downlink resources. TS 3GPP 44.060 clause 11.2.7
SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	B6		Message type
pAGE_MODE	B2		Normal paging
persistenceLevelMask	B1		
persistenceLevel1	B4		not Present if persistenceLevelMask=0
persistenceLevel2	B4		not Present if persistenceLevelMask=0
persistenceLevel3	B4		not Present if persistenceLevelMask=0
persistenceLevel4	B4		not Present if persistenceLevelMask=0
globalTFImask	B1		
gLOBAL_TFI	GlobalTFI		not present if globalTFImask=1
mask2	B1		not present if globalTFImask=0
tLLI	OCTETSTRING[4]		not present if globalTFImask=0 and mask2=1
spareBit1	B1		set to '0'B
mACMode	B2		
rLCMode	B1		
controlAck	B1		
timeslotAllocation	B8		
pktTimingAdvance	PacketTimingAdvance		
mask1	B1		
p0	B4		not present if mask1 = 0
spareBit2	B1		not present if mask1 = 0. set to '0'B if present
pRMode	B1		not present if mask1 = 0
freqParamMask	B1		
freqParams	FreqParam		not present if freqParamMask = 0
tfiMask	B1		
dITFIAssignment	B5		not present if tfiMask = 0
pcMask	B1		
powerCtrlParams	PowerControlParam		not present if pcMask = 0
startTimeMask	B1		
tbfStartTime	StartingFrameNumberDscr		not present if startTimeMask = 0
spareBit3	B1		set to '0'B
r99Mask	B1		
egprsMask	B1		not present if r99mask = 0

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
egprsWindowSize	EGPRSWindowSize		not present if r99mask = 0 or if egprsMask=0
linkQualMeasMode	B2		not present if r99mask = 0 or if egprsMask=0
bepMask	B1		not present if r99mask = 0 or if egprsMask=0
bepPeriod2	B4		not present if r99mask = 0 or if egprsMask=0 or if bepMask=0
pktXTAMask	B1		not present if r99mask = 0
pktExtendedTA	B2		not present if r99mask = 0 or if pktXTAMask=0
compactMask	B1		not present if r99mask = 0
compactReducedMA	CompactReducedMA		not present if r99mask = 0 or if compactMask=0
r5Mask	B1		not present if r99mask = 0
rBIdMask	B1		not present if r99mask = 0 or if r5Mask=0
rBId	B5		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
grntiXMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
gRNTIExtension	B4		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if grntiXMask=0
ulCtrlMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
ulCtrlTimeslot	B3		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if ulCtrlMask=0
hfnMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
hfnLSB	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if hfnMask=0
r6Mask	B1		not present if r99mask = 0
pfiMask	B1		not present if r99mask = 0 or if r6Mask = 0
pFI	B7		not present if r99mask = 0 or if r6Mask = 0 or if pfiMask = 0
Detailed Comments :			

PDU Type Definition			
PDU Name : PACKETENHANCEDMEASUREMENTREPORT			
PCO Type : G_DSAP			
Encoding Rule Name : GPRSPadding_Rule1			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9d			
Field Name	Field Type	Field Encoding	Comments
msgType	B6		Message type
tLLI	O4		
nCMeasRep	NC_MeasRpt		
r5Mask	B1		
grntiXMask	B1		not present if r5Mask = 0
gRNTIExtension	B4		not present if r5Mask = 0 or grntiXMask = 0
Detailed Comments :			

PDU Type Definition			
PDU Name : PACKETSISTATUS			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : uplink message 44.060 clause 11.2.17b			
Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
globalTFI	GlobalTFI		
bCCHChangeMark	B3		
rcvdSIList	SIMessageList		
rcvdUnknownSIList	UnknownSIList		
rel6Mask	B1		
pSCSI_Support	B1		not present if rel6Mask = 0
ps_RelReq	B1		not present if rel6Mask = 0
paddingBits	BITSTRING		
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.17b			

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE1
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pageMode	B2		
pBCCH_CHANGE_MARK	B3		
pSI_CHANGE_FIELD	B4		
pSI1_REPEAT_PERIOD	B4		
pSI_COUNT_LR	B6		
pSI_COUNT_HR_Mask	B1		
pSI_COUNT_HR	B4		not present if pSI_COUNT_HR_Mask = 0
MEASUREMENT_ODER	B1		
gPRS_CellOptions	GPRS_CellOptions		
pRACH_ControlParameters	PRACH_ControlParameters		
pCCCH_OrganisationParameters	PCCCH_OrganisationParameters		
globalPowerControlParameters	GlobalPowerControlParameters		
pSI_STATUS_IND	B1		
spareMask	B1		fields below are added in R99
mSCR	B1		present if spareMask = 1
sGSNR	B1		present if spareMask = 1
bandIndicator	B1		present if spareMask = 1
r6Mask	B1		not present if spareMask = 0
txPwrMask	B1		not present if spareMask = 0 or r6Mask = 0
lbMSTxPwrMaxCCH	B5		not present if spareMask = 0 or r6Mask = 0 or txPwrMask = 0

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.18

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE2
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI2_CHANGE_MARK	B2		
pSI2_INDEX	B3		
pSI2_COUNT	B3		
cellIdentificationMask	B1		
cellIdentification	CellIdentification		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	B1		
nonGPRSCellOptions	NonGPRSCellOptions		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	ReferenceFreqLists		
cellAllocation	CellAllocLists		
gPRS_MobileAllocations	GPRS_MobileAllocationLists		
pCCCH_Description	PCCCH_DescriptionList		
spareMask	B1		fields below are added in R99
compactControlMask	B1		not present if spareMask = 0
compactControlInfo	CompactControlInfo		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	B1		not present if spareMask = 0
additionalPSI_Msg	AdditionalPSIMessages		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE3
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI3_CHANGE_MARK	B2		
pSI3_BIS_COUNT	B4		
servingCellParameters	ServingCellParams		
generalCellSelectionParameter	GenCellSel		
neighCellParameters	NeighCellParamsList		
spareMask1	B1		fields below are add in R98
servingCell_LSA_Id_Info	LSA_ID_Info		not present if spareMask1 = 0
ISA_ParameterMask	B1		not present if spareMask1 = 0
ISA_Parameter	LSA_Param		not present if spareMask1 = 0 or ISA_ParameterMask = 0
spareMask2	B1		fields below are added in R99
spareBits	B2		not present if spareMask1 = 0 or spareMask2 = 0. Set these to 00. Earlier definitions allocated these, but not now
compactInfoMask	B1		not present if spareMask1 = 0 or spareMask2 = 0
compactInfo	CompactInfo		not present if spareMask1 = 0 or spareMask2 = 0 or compactInfoMask = 0
spareBit	B1		not present if spareMask1 = 0 or spareMask2 = 0. Set this to 0. Was allocated in earlier definition, but not now
spareMask3	B1		fields below are added in R4
cCN_SupportDescriptionMask	B1		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	CCN_SupportDescr		not present if cCN_SupportDescriptionMask = 0
spareMask4	B1		fields below are added in Release 5
cellBarQualify3	B2		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeNeighCellParams	IuModeNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
iuModeOnlyNeighCellParams	IuModeOnlyNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE3bis
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI3_CHANGE_MARK	B2		
pSI3_BIS_INDEX	B4		
pSI3_BIS_COUNT	B4		
neighCellParameters	NeighCellParamsList		
neighCellParameters2	NeighCellParams2List		
spareMask1	B1		fields below are add in R98
ISA_ParameterMask	B1		not present if spareMask1 = 0
ISA_Parameter	LSA_Param		not present if spareMask1 = 0 or ISA_ParameterMask = 0
spareMask2	B1		fields below are added in R99
compactNeighCellParams	CompactNeighCellParams2List		not present if spareMask1 = 0 or spareMask2 = 0
spareBit	B1		not present if spareMask1 = 0 or spareMask2 = 0. Set this to 0. Was allocated in earlier definition, but not now
spareMask3	B1		fields below are added in R4
cCN_SupportDescriptionMask	B1		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	CCN_SupportDescr		not present if cCN_SupportDescriptionMask = 0
spareMask4	B1		fields below are added in R5
iuModeNeighCellParams	IuModeNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	IuModeOnlyNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE5
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI5_CHANGE_MARK	B2		
pSI5_INDEX	B3		
pSI5_COUNT	B3		
nC_MeasMask	B1		
pSI5_NC_MeasParameter	NC_MeasParams		not present if nC_MeasMask = 0
spareBit	B1		set to '0'
spareMask	B1		following fields are added in R99
eNH_ReportingParamMask	B1		not present if spareMask = 0
eNH_ReportingParam	ENH_ReportingParam		not present if eNH_ReportingParamMask = 0 or spareMask = 0
r5Mask	B1		not present if spareMask = 0
gprs3GAddMeasParam2Mask	B1		not present if spareMask = 0 or if r5Mask = 0
rptThresMask	B1		not present if spareMask = 0 or if r5Mask = 0 or if gprs3GAddMeasParam2Mask = 0
fddRptThres2	B6		not present if spareMask = 0 or if r5Mask = 0 or if gprs3GAddMeasParam2Mask = 0 or if rptThresMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Table 71: PSI5 information element details

The optional PSI5 message contains broadcast measurement parameters for either Network Control (NC) measurements containing the NC Measurement Parameters, or for Extended measurements containing the EXT Measurement Parameters, or for both.

PAGE_MODE (2 bit field)

This field is defined in clause 12.20.

PSI5_CHANGE_MARK (2 bit field)

The PSI5_CHANGE_MARK field is changed each time information has been updated in any of the individual instances of the PSI5 message. A new value indicates that the mobile station shall re-read the information from all PSI5 messages. The coding of this field is network dependent.

Range: 0 to 3.

PSI5_INDEX (3 bit field) and PSI5_COUNT (3 bit field)

The purpose of the PSI5_INDEX field and the PSI5_COUNT field is to indicate the number of individual messages within the sequence of PSI5 messages and to assign an index to identify each one of them. The PSI5_INDEX field is binary coded, range: 0 to 7, and provides an index to identify the individual PSI5 message. The PSI5_COUNT field is binary coded, range: 0 to 7, and provides the PSI5_INDEX value for the last (highest indexed) message in the sequence of PSI5

Continued on next page

PDU Type Definition

Detailed Comments : ...

messages.

NETWORK_CONTROL_ORDER (2 bit field)

The NETWORK_CONTROL_ORDER field is coded according to the following table (for definition of NCx see GSM 05.08):

bit

2 1

0 0 NC0

0 1 NC1

1 0 NC2

1 1 Reserved

If the NETWORK_CONTROL_ORDER parameter = NC0, then the other parameters in the NC Measurement parameters struct may be omitted. If the NETWORK_CONTROL_ORDER parameter indicates NC1 or NC2 and the other parameters are omitted, the default value for these parameters shall be assumed.

NC_NON_DRX_PERIOD (3 bit field)

This field indicates the minimum time the mobile station shall stay in non-DRX mode after an NC-measurement report has been sent. The field is coded according to the following table:

bit

3 2 1

0 0 0 No non-DRX mode after a measurement report has been sent (default value).

0 0 1 0,24 sec

0 1 0 0,48 sec

0 1 1 0,72 sec

1 0 0 0,96 sec

1 0 1 1,20 sec

1 1 0 1,44 sec

1 1 1 1,92 sec

NC_REPORTING_PERIOD_I (3 bit field)
NC_REPORTING_PERIOD_T (3 bit field)

These fields indicate the time period for cell reselection measurement reporting for packet idle mode (I) and packet transfer mode (T), respectively. The field is coded according to the following table:

bit

3 2 1

0 0 0 0.48 sec

0 0 1 0.96 sec

0 1 0 1.92 sec

0 1 1 3.84 sec (default value for NC_REPORTING_PERIOD_T)

1 0 0 7.68 sec

1 0 1 15.36 sec

1 1 0 30.72 sec

1 1 1 61.44 sec (default value for NC_REPORTING_PERIOD_I)

EXT_MEASUREMENT_ORDER (2 bit field)

The EXT_MEASUREMENT_ORDER field indicates to the mobile station how to interpret the rest of the extended measurement parameters. This field is coded according to the following table (for definition of EMx see 05.08):

bit

2 1

0 0 EM0

PDU Type Definition

Detailed Comments : ...

0 1 EM1

1 0 Reserved.

1 1 Reserved and shall be interpreted as EM0 by the receiver.

If the EXT_MEASUREMENT_ORDER parameter = EM0 the other parameters in the EXT Measurement parameters struct may be omitted.

NCC_PERMITTED (8 bit field)

This field is a bitmap of NCCs for which the mobile station is permitted to report measurement; this bitmap relates to NCC part of BSIC (see coding field in 04.08).

EXT_REPORTING_TYPE (2 bit field)

This field indicates the type of extended measurement reporting to which the frequencies on the list are subject. This field is coded according to the following table (see GSM 05.08):

bit

2 1

0 0 Type 1 measurement reporting

0 1 Type 2 measurement reporting

1 0 Type 3 measurement reporting

1 1 Reserved. In this version of the protocol the mobile station shall ignore the entire list containing this field.

EXT_REPORTING_PERIOD (3 bit field)

The EXT_REPORTING_PERIOD field indicates the time interval between extended measurement reports. This field is coded according to the following table:

bit

3 2 1

0 0 0 60 sec

0 0 1 120 sec

0 1 0 240 sec

0 1 1 480 sec

1 0 0 960 sec

1 0 1 1920 sec

1 1 0 3840 sec

1 1 1 7680 sec

INT_FREQUENCY (5 bit field)

This optional field indicates the frequency upon which the interference measurement shall be made.

This field is an index into the EXT Frequency List. If the field is not included, no interference measurements shall be done

Range 0 to 31

EXT_FREQUENCY_LIST

Contains the EXT Frequency List description struct. The EXT Frequency Lists description struct may contain multiple

EXT frequency list struct.

START_FREQUENCY (10 bit field)

The START_FREQUENCY defines the ARFCN for the first carrier in the list (F(0)).

FREQ_DIFF_LENGTH (3 bit field)

The FREQ_DIFF_LENGTH field specifies the number of bits to be used for the Frequency diff field in the current frequency group. The field is coded according to the following table

bit

3 2 1

0 0 0 1 bit

0 0 1 2 bits

...

1 1 1 8 bits

FREQUENCY_DIFF ('Freq Diff length' bit field)

Each FREQUENCY_DIFF parameter field specifies the difference in frequency to the next carrier

PDU Type Definition

Detailed Comments : ...

to be defined. The Frequency Diff parameter encodes a non negative integer in binary format (W). The length of the field is defined by the Freq Diff length parameter. Each frequency following the start frequency (ARFCN(0)) and belonging to the Frequency List struct is then calculated by the formula $ARFCN(n) = ARFCN(n-1) + W(n)$, $n=1, \dots, \text{'Nr of Frequencies'}$)

PDU Type Definition

PDU Name : PACKETUPLINKASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign uplink resources. TS 3GPP 44.046 clause 11.2.29
SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
persistenceLevelMask	B1		
persistenceLevel1	B4		not Present if persistenceLevelMask=0
persistenceLevel2	B4		not Present if persistenceLevelMask=0
persistenceLevel3	B4		not Present if persistenceLevelMask=0
persistenceLevel4	B4		not Present if persistenceLevelMask=0
referenceAddress	ReferenceAddress		
eGPRPSmask	B1		
channelCodingCommand	B2		not present if EGPRPSmask=1
tLLIBlockChannelCoding	B1		
packetTimingAdvance	PacketTimingAdvance		
freqParamMask	B1		
freqParam	FreqParam		not present if freqParamMask=0
allocationMask	B2		
dynamicAllocation	DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	SingleBlockAllocationPacket		present if allocationMask=10
r99Mask	B1		
packetExtTAMask	B1		not present if r99Mask=0
packetExtendedTA	B2		not present if r99Mask=0 and packetExtTAMask=0
r5Mask	B1		
gRNTIMask	B1		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	B4		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBIdMask	B1		not present if r99Mask=0 and r5Mask=0
rBId	B5		not present if r99Mask=0, r5Mask=0 and rBIdMask=0
r6Mask	B1		not present if r99Mask=0, r5Mask=0
pfiMask	B1		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
pFI	B7		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and pfiMask = 0

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
rlcModeMask	B1		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
rlcMode	B1		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and rlcModeMask = 0
eGPRSmessage	EGPRSPktUplinkAssignment		not present of EGPRPSmask=0
Detailed Comments :			

PDU Type Definition			
PDU Name : PAGINGREQUESTTYPE1			
PCO Type : G_DSAP			
Encoding Rule Name : GSMSParePadding_Rule2			
Encoding Variation :			
Comments : RR PAGING REQUEST_TYPE1 ntw -> ue/ms 3GPP TS 44.018 clause 9.1.22			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
chNeeded_m1_2	ChNeeded		channels needed for mobiles 1 and 2 M BITSTRING [4] without IEI
pageMode	PageModeIE		page mode M BITSTRING [4] without IEI
mobileId1	MS_Identity_Iv		mobility identity 1 M
mobileId2	MM_MS_Identity		OCTETSTRING [2..9] mobility identity 2 O
p1RO	P1RO		OCTETSTRING [3..10] P1 rest octets
Detailed Comments : The message has a fixed length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE1 PCO Type : G_DSAP Encoding Rule Name : GSMSparePadding_Rule2 Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE1 ntw -> ue/ms 3 GPP TS 44.018 clause 9.1.31			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
cellChDescr	CellChDescr		cell channel description M OCTETSTRING [16]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
si1RO	SI1RO		SI1 rest octets M
Detailed Comments : The message has an L2 pseudo length of 21 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE13 PCO Type : G_DSAP Encoding Rule Name : GSMSparePadding_Rule2 Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE13 ntw -> ue/ms 3GPP TS 44.018 clause 9.1.43a			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
si13roct	SI13RO		SI3 rest octets M OCTETSTRING [20]
Detailed Comments : The message has an L2 pseudo length of 0 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE15 PCO Type : G_DSAP Encoding Rule Name : GSMSParePadding_Rule2 Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE15 ntw -> ue/ms 3GPP TS 44.018 clause 9.1.43j			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
si15roct	SI15RO		SI15 rest octets M OCTETSTRING [20]
Detailed Comments : The message has an L2 pseudo length of 0 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2 PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE2 ntw -> ue/ms 3GPP TS 44.018 clause 9.1.32			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
neighBCCHFreqList	NeighCellDescr		bcch frequency list of neighbour cells M OCTETSTRING [16]
nCCPermitted	NCCPermitted		ncc permitted M OCTETSTRING [1]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
Detailed Comments : The message has an L2 pseudo length of 22 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2bis PCO Type : G_DSAP Encoding Rule Name : GSMSParePadding_Rule2 Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE2bis ntw -> ue/ms 3GPP TS 44.018 clause 9.1.33			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
extNeighBCCHFReqList	NeighCellDescr		extended bcch frequency list of neighbour cells M OCTETSTRING [16]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
Detailed Comments : This PDU type is used both for SYSINFO2bis. The 2bis message has an L2 pseudo length of 21 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2quarter PCO Type : G_DSAP Encoding Rule Name : GSMSParePadding_Rule2 Encoding Variation : Comments : RR SYSTEM INFORMATION 2quarter ntw -> ue/ms 3GPP TS 44.018 clause 9.1.34a			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
sl2quarterRO	Sl2quarterRO		Sl2quarter rest octets OCTETSTRING [20]
Detailed Comments : The 2ter message has an L2 pseudo length of 1 octet and a total length of 23 octets.			

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE3
PCO Type : G_DSAP
Encoding Rule Name : GSM SparePadding_Rule2
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE3 ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.35

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
cellId	O2		cell identity M OCTETSTRING [2]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
controlChDescr	ControlChDescr		control channel description M OCTETSTRING [3]
cellOption	CellOptionBCCH		cell options/BCCH M OCTETSTRING[1]
cellSelParam	CellSelParam		cell selection parameters M OCTETSTRING [2]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
sI3RO	SI3RO		SI3 rest octets M OCTETSTRING [4]

Detailed Comments : The message has an L2 pseudo length of 18 octets and a total length of 23 octets.

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE4
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE4 ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.36

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
cellSelParam	CellSelParam		cell selection parameters M OCTETSTRING [2]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
cbchd	ChannelDescr		cbch channel description O OCTETSTRING [4]
cbchmobileAlloc	MobileAlloc		mobile allocation C OCTETSTRING [3..6]
si4roct	SI4RO		SI4 rest octets M OCTETSTRING [0..10]

Detailed Comments : The message has a total length of 23 octets. the L2 pseudo length is the sum of all information elements except SI 4 Rest Octets and L2 pseudo length

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE5			
PCO Type : G_DSAP			
Encoding Rule Name : SACCHSysInfoSparePadding_Rule4			
Encoding Variation :			
Comments : RR SYSTEM INFORMATION TYPE5 ntw -> ue/ms 3GPP TS 44.018 clause 9.1.37			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
bCCHFreqList	NeighCellDescr		bcch frequency list M OCTETSTRING [16]
Detailed Comments : The message has an L2 pseudo length of 18 octets			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE5bis			
PCO Type : G_DSAP			
Encoding Rule Name : SACCHSysInfoSparePadding_Rule4			
Encoding Variation :			
Comments : RR SYSTEM INFORMATION TYPE5bis ntw -> ue/ms 3GPP TS 44.018 clause 9.1.38			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
extNeighBCCHFreqList	NeighCellDescr		extended bcch frequency list of neighbour cells M OCTETSTRING [16]
Detailed Comments :			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE6 PCO Type : G_DSAP Encoding Rule Name : SACCHSysInfoSparePadding_Rule4 Encoding Variation : Comments : RR SYSTEM INFORMATION TYPE6 ntw -> ue/ms 3GPP TS 44.018, 9.1.40			
Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
ci	O2		cell identity M OCTETSTRING [2]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
co	CellOptionSACCH		cell options /SACCH M , OCTETSTRING [1]
nCCPermitted	NCCPermitted		ncc permitted M OCTETSTRING [1]
si6roct	SI6RO		SI6 Rest Octets OCTETSTRING [7]
Detailed Comments : The message has an L2 pseudo length of 11 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : UTRANCLASSMARKCHANGE PCO Type : G_DSAP Encoding Rule Name : Encoding Variation : Comments : RR UTRAN CLASSMARK CHANGE ue/ms -> ntw 3GPP TS 44.018 clause 9.1.11a			
Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
uTRANPreConfigInfo	UTRANPreConfigInfo		UTRAN predefined configuration status information M OCTETSTRING [2..n]
Detailed Comments :			

ASN.1 PDU Type Definition	
PDU Name	: Invalid_DL_CCCH_Message
PCO Type	: DSAP
Encoding Rule Name	: PER_Unaligned
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { integrityCheckInfo IntegrityCheckInfo OPTIONAL, message Invalid_DL_CCCH_MsgType }</pre>	
Detailed Comments	:

ASN.1 PDU Type Definition	
PDU Name	: Invalid_DL_DCCH_Message
PCO Type	: DSAP
Encoding Rule Name	: PER_Unaligned
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { integrityCheckInfo [0] IntegrityCheckInfo OPTIONAL, message [1] Invalid_DL_DCCH_MsgType }</pre>	
Detailed Comments	:

ASN.1 PDU Type Definition	
PDU Name	: Invalid_DL_SHCCH_Message
PCO Type	: DSAP
Encoding Rule Name	: PER_Unaligned
Encoding Variation	:
Comments	:
Type Definition	
<pre>SEQUENCE { message Invalid_DL_SHCCH_MsgType }</pre>	
Detailed Comments	:

ASN.1 PDU Type Definitions By Reference						
PDU Name	PCO Type	Type Reference	Module Identifie	Enc Rule	Enc Variation	Comments
BCCH_BCH_Message	DSAP	BCCH-BCH-Message	Class-definitio ns	PER_Unaligne d		
BCCH_FACH_Message	DSAP	BCCH-FACH-Message	Class-definitio ns	PER_Unaligne d		
DL_CCCH_Message	DSAP	DL-CCCH-Message	Class-definitio ns	PER_Unaligne d		
DL_DCCH_Message	DSAP	DL-DCCH-Message	Class-definitio ns	PER_Unaligne d		
DL_SHCCH_Message	DSAP	DL-SHCCH-Message	Class-definitio ns	PER_Unaligne d		
PCCH_Message	DSAP	PCCH-Messa ge	Class-definitio ns	PER_Unaligne d		
UL_CCCH_Message	DSAP	UL-CCCH-Message	Class-definitio ns	PER_Unaligne d		
UL_DCCH_Message	DSAP	UL-DCCH-Message	Class-definitio ns	PER_Unaligne d		
UL_SHCCH_Message	DSAP	UL-SHCCH-Message	Class-definitio ns	PER_Unaligne d		
Detailed Comments :						

Alias Definitions		
Alias Name	Expansion	Comments
RxStatus	RLC_TR_TestDataInd	This alias is used to receive an AM STATUS PDU. Note that AM PDUs are received using the Tr PCO, so that the RLC PDU can be specified within the TTCN. This is described in detail in 34.123-3, clause 6.5 (RLC test method).
Detailed Comments :		

III

Constraints Part

Structured Type Constraint Declaration			
Constraint Name : c_ClassmarkEnquiryMask(p_Value : O1)			
Group :			
Structured Type : ClassmarkEnquiryMask			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 04.08 / 3GPP TS 44.018 Section 10.5.2.7c			
Element Name	Element Value	Element Encoding	Comments
iei	'00010000'B		OCTETSTRING [1]
length	'01'O		OCTETSTRING [1]
value	p_Value		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ENH_MeasParamCS(p_QsearchP : B4)			
Group :			
Structured Type : ENH_MeasParam			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
mask	'0'B		
bAInd	'0'B		not present if mask = 1
bAInd3G	'0'B		not present if mask = 1
psi3ChangeMark	-		not present if mask = 0
pmoInd	'0'B		
reportType	'1'B		
rEPORTING_RATE	'0'B		
iNVALID_BSIC_REPORTIN G	'0'B		
neighCellMask	'0'B		
neighCellDescr3G	-		not present if neighCellMask = 0
gPRS_RepPriorityMask	'0'B		
gPRS_RepPriority	-		not present if gPRS_RepPriorityMask = 0
gPRS_MeasParamDesMask	'0'B		
gPRS_MeasureParamDescr	-		not present if gPRS_MeasParamDescrMask = 0
gPRS_3G_MeasParamDescr Mmask	'1'B		
gPRS_3G_MeasParamDescr	c_GPRS3GMeasParam(p_Q searchP)		not present if gPRS_3G_MeasParamDescrMask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_GPRS3GMeasParam(p_QsearchP : B4)
Group :
Structured Type : GPRS_3G_MeasParamDescr_PMO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearchP	p_QsearchP		
searchPrio3G	'1'B		
fDD_REP_QUANT_Mask	'0'B		
fDD_REP_QUANT	-		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTI NG	-		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	'0'B		
fDD_REPORTING_OFFSET	-		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRES HOLD	-		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	'0'B		
tDD_MULTIRAT_REPORTI NG	-		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	'0'B		
tDD_REPORTING_OFFSET	-		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRES HOLD	-		not present if tDD_ReportingMask = 0
cdma_MultiratReportingMas k	'0'B		
cdma_MULTIRAT_REPORTI NG	-		not present if cdma_MultiratReportingMas k = 0
cdma_ReportingMask	'0'B		
cdma_REPORTING_OFFSE T	-		not present if cdma_ReportingMask = 0
cdma_REPORTING_THRES HOLD	-		not present if cdma_ReportingMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCmd (p_Len : O1 ; p_HOCmd : HandoverToUTRANCommand)
Group :
Structured Type : HandoverToUTRANCmd
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei lengthOfContents valuePart	OMIT p_Len o_GSM_ToUTRANHO_PER _Encoding (p_HOCmd , p_Len)		basic production of Handover to UTRAN command defined in 3GPP TS 25.331 it is 8-bit aligned bitstring resulted from PER encoding

Detailed Comments : used in INTER SYSTEM TO UTRAN HANDOVER COMMAND
 3GPP TS 44.018 clause 9.1.15a and 10.5.2.51

Structured Type Constraint Declaration

Constraint Name : c_G_MeasParamDescr3G
Group :
Structured Type : MeasParamDescr3GMI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearchsh_C	'0111'B		
sEARSCH_Prio_3G	'1'B		
fDD_REP_QUANT	'1'B		
multiRatFddMask	'1'B		
fDD_MULTIRAT_REPORTING	'01'B		not present if multiRatFddMask = 0
fDDMask	'0'B		
fDD_REPORTING_OFFSET	-		not present if fDDMask = 0
fDD_REPORTING_THRESHOLD	-		not present if fDDMask = 0
multiRatTddMask	'0'B		
tDD_MULTIRAT_REPORTING	-		not present if multiRatTddMask = 0
tDDMask	'0'B		
tDD_REPORTING_OFFSET	-		not present if tDDMask = 0
tDD_REPORTING_THRESHOLD	-		not present if tDDMask = 0
multiRat2000Mask	'0'B		
cDMA2000MULTIRAT_REPORTING	-		not present if multiRat2000Mask = 0
cdma2000Mask	'0'B		
cDMA2000REPORTING_OFFSET	-		not present if cdma2000Mask = 0
cDMA2000REPORTING_THRESHOLD	-		not present if cdma2000Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MeasResults_1UTRAN
Group :
Structured Type : MeasResults
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	-		information element identifier
ba_used	?		bcch allocation used
dtx_used	?		dtx was used
rxlev_fsc	?		received signal strength on the full serving cell
ba3G_used	?		3G bcch allocation used
meas_valid	'0'B		measurement results are valid
rxlev_ssc	?		received signal strength on a subset of the serving cell
spareBit1	?		spare bit
rxqual_fsc	?		received signal quality on the full serving cell
rxqual_ssc	?		received signal quality on a subset of the serving cell
no_neighCells	?		number of neighbouring cells (nc)
rxlev_nc1	?		received signal strength on nc1
bcchfrq_nc1	'11111'B		indicates a 3G cell
bsic_nc1	'000000'B		base station identity code of first UTRAN cell
rxlev_nc2	?		received signal strength on nc2
bcchfrq_nc2	?		bcch frequency position of nc2
bsic_nc2	?		base station identity code of nc2
rxlev_nc3	?		received signal strength on nc3
bcchfrq_nc3	?		bcch frequency position of nc3
bsic_nc3	?		base station identity code of nc3
rxlev_nc4	?		received signal strength on nc4
bcchfrq_nc4	?		bcch frequency position of nc4
bsic_nc4	?		base station identity code of nc4
rxlev_nc5	?		received signal strength on nc5
bcchfrq_nc5	?		bcch frequency position of nc5
bsic_nc5	?		base station identity code nc5

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
rxlev_nc6	?		received signal strength on nc6
bcchfrq_nc6	?		bcch frequency position of nc6
bsic_nc6	?		base station identity code of nc6
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_NeighbourCellDescr3GFDD(p_FDD_Descr : UTRAN_FDD_Descr)			
Group :			
Structured Type : NeighCellDescr3G_MI			
Derivation Path :			
Encoding Variation :			
Comments : 3G neighbour cell description in MEASUREMENT INFORMATION message			
Element Name	Element Value	Element Encoding	Comments
waitMask	'0'B		
wait3G	-		not present if waitMask = 0
indexMask	'0'B		
indexStart3G	-		not present if indexMask = 0
absoluteIndexMask	'0'B		
absoluteIndexStartEMR	-		not present if absoluteIndexMask = 0
fDDMask	'1'B		
uTRAN_FDD_Description	p_FDD_Descr		not present if fDDMask = 0
tDDMask	'0'B		
uTRAN_TDD_Description	-		not present if tDDMask = 0
cdma2000Mask	'0'B		
cDMA2000Descr	-		not present if cdma2000Mask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_IARO_PDA_StartingTime(p_TLLI :O4; p_Gamma : B5; p_StartingTime : B16)
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
constructMask	'11'B		
compressInterRATHO	-		present if constructMask = LL
reservMask1	-		present if constructMask = LH
reservMask2	-		present if reservMask1 = 0
eGPRS_UplinkAssign	-		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
multiBlocksPDA	-		not present if reservMask2 = 0 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	-		present if constructMask = HL
freqParam_bt	-		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	OMIT		present if constructMask = HL
mask1	'0'B		present if constructMask = HH
mask2	'1'B		
packetUplinkAssign	OMIT		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	c_PktDownlinkAss_IARO_StartingTime(p_TLLI, p_Gamma, p_StartingTime)		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NC_FreqList(p_AddFreq : AddFreqList)
Group :
Structured Type : NC_FreqList
Derivation Path :
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9b. All repeated structures are only repeated twice. If more repetitions are required, definition must be modified

Element Name	Element Value	Element Encoding	Comments
remFreqMask	'0'B		
nrOfRemFreq	-		not present if remFreqMask = 0
RemFreqIndex1	-		not present if remFreqMask = 0
RemFreqIndex2	-		not present if remFreqMask = 0
addFreqMask1	'1'B		
addFreq1	p_AddFreq		present if addFreqMask1 = 1
addFreqMask2	-		
addFreq2	-		present if addFreqMask2 = 1
endingRepetition	'0'B		always = '0'B indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_NC_AddFreqs(p_ARFCN : B10; p_BSIC : B6; p_CellSel1 : PMO_CellSel)			
Group :			
Structured Type : AddFreqList			
Derivation Path :			
Encoding Variation :			
Comments : ref: 44.060 v5a0 clause 11.2.9b. All repeated structures are only repeated twice. If more repetitions are required, definition must be modified			
Element Name	Element Value	Element Encoding	Comments
startFreq	p_ARFCN		
bSIC	p_BSIC		
cellSelMask1	'1'B		
cellSel1	p_CellSel1		not present if cellSelMask1 = 0
nrOfFreqs	'00010'B		
freqDiffLen	'000'B		
freqDiff2	'1'B		
bSIC2	p_BSIC		
cellSelMask2	'0'B		
cellSel2	–		not present if cellSelMask2 = 0
freqDiff3	'1'B		
bSIC3	p_BSIC		
cellSelMask3	'0'B		
cellSel3	–		not present if cellSelMask3 = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NC_MeasParamsCS			
Group :			
Structured Type : NC_MeasParams			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
nETWORK_CONTROL_OR DER	'00'B		
mask	'1'B		
nC_NON_DRX_PERIOD	'000'B		not present if mask = 0
nC_REPORTING_PERIOD_1	'111'B		not present if mask = 0
nC_Reporting_PERIOD_T	'011'B		not present if mask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_PMO_CellSel1
Group :
Structured Type : PMO_CellSel
Derivation Path :
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9b

Element Name	Element Value	Element Encoding	Comments
cELL_BAR_ACCESS_2	'0'B		
eXC_ACC	'1'B		
sAME_RA_AS_SERVING_CELL	'1'B		
gPRS_PwrMask	'1'B		
gPRS_RXLEV_ACCESS_MIN	'011111'B		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	'01010'B		not present if gPRS_PwrMask = 0
gPRS_SelectMask	'1'B		
gPRS_TEMPORARY_OFFSET	'000'B		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	'00000'B		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'1'B		
hCS_Params	c_HCS('001'B, '10100'B)		not present if hCS_Mask = 0
sl13_Mask	'0'B		
sl13_PBCCH_LOCATION	-		not present if sl13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PktDownlinkAss_IARO_StartingTime(p_TLLI :O4; p_Gamma : B5; p_StartingTime : B16)
Group :
Structured Type : PacketDownlinkAssign
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tLLI	p_TLLI		TLLI
mask	'1'B		
tFI_Assignment	tsc_downlinkTFI		temporary flow identifier
rLC_Mode	'0'B		not present if mask = 0 RLC mode
alphaMask	'1'B		not present if mask = 0.
aLPHA	'0101'B		not present if mask = 0 or alphaMask = 0
gAMMA	p_Gamma		not present if mask = 0
pOLLING	'1'B		not present if mask = 0
tA_VALID	'1'B		not present if mask = 0
taIndexMask	'0'B		
tIMING_ADVANCE_INDEX	-		not present if mask = 0 or taIndexMask = 0
startingTimeMask	'1'B		not present if mask = 0
tBF_STARTING_TIME	p_StartingTime		not present if mask = 0 or startingTimeMask = 0
pwrCtrlMask	'0'B		not present if mask = 0
p0	-		not present if mask = 0 or pwrCtrlMask = 0
spareBit	-		not present if mask = 0 or pwrCtrlMask = 0
pR_MODE	-		not present if mask = 0 or pwrCtrlMask = 0
egprsMask	'0'B		L
eGPRSWindowSize	-		not present if egprsMask = L
linkQualityMeasMode	-		not present if egprsMask = L
bepPriod2Mask	-		not present if egprsMask = L
BepPeriod2	-		not present if egprsMask = L or bepPriod2Mask = 0
r6Mask	-		not present if egprsMask = L
pfiMask	-		not present if egprsMask = L or r6Mask = L
pFI	-		not present if egprsMask = L, r6Mask = L or pfiMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_SI2changed(p_RAC : O1; p_NMO : B2)
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : ref: 51.010 clause 40.2.1

Element Name	Element Value	Element Encoding	Comments
mask	'1'B		the rest fields except spareBits are all not present if mask = L
bCCH_CHANGE_MARK	'001'B		
sl_CHANGE_FIELD	'0010'B		
sl3ChangeMask	'0'B		
sl13_CHANGE_MARK	OMIT		not present if sl3ChangeMask = 0
gPRS_MobileAllocation	OMIT		not present if sl3ChangeMask = 0
pbccchMask	'0'B		'0' -> no PBCCH
rAC	p_RAC		present if pbccchMask = 0
sPGC_CCCH_SUP	'1'B		present if pbccchMask = 0
pPRIORITY_ACCESS_THR	'110'B		present if pbccchMask = 0
nETWORK_CONTROLI_OR DER	'00'B		present if pbccchMask = 0
gPRS_CellOptions	c_GPRS_CellOptionsSI13(p_NMO)		present if pbccchMask = 0
gPRS_PowerControlParameters	c_GPRS_PowerControlParameter		present if pbccchMask = 0
pSI1_REPEAT_PERIOD	OMIT		present if pbccchMask = 1
pBCCH_Description	OMIT		present if pbccchMask = 1
r99Mask	'1'B		
sGSNR	'1'B		present if r99Mask = H
r4Mask	OMIT		
sl_STATUS_IND	OMIT		present if r4Mask = H
r6Mask	OMIT		
txPwrMaxCCHMask	OMIT		not present if r6Mask = L
lbMSTxPwrMaxCCH	OMIT		not present if r6Mask = L or txPwrMaxCCHMask = 0
sl2nSupport	OMIT		not present if r6Mask = L

Detailed Comments : The info element has a fixed length of 20 octets.

Structured Type Constraint Declaration

Constraint Name : c_SI2quarterMeasParams3G_None
Group :
Structured Type : SI2quarterRO_MeasParamDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearch_I	'0110'B		
qsearch_C_Initial	'0'B		
fDDMask	'0'B		
fDD_Qoffset	-		not present if fDDMask = 0
fDD_REP_QUANT	-		not present if fDDMask = 0
fDD_MULTIRAT_REPORTI NG	-		not present if fDDMask = 0
fDD_Qmin	-		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	-		not present if tDDMask = 0
tDD_MULTIRAT_REPORTI NG	-		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_Classmark (p_EarlyClassMarkSendingControl, p_EarlyClassMarksendingRestriction3G : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 51.010 clause 26.6.14.

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sl2terIndicator	'0'B		no SI 2ter
earlyClassMarkSendingControl	p_EarlyClassMarkSendingControl		Low
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sl13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	p_EarlyClassMarksendingRestriction3G		
mask5	'0'B		mask bit for SI2quaterPosition
sl2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_ChReqDescr2			
Group :			
Structured Type : ChReqDescr2			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	?		
pktEstCause	?		Packet Establishment Cause
chReqDescr	c_ChReqDescrAny		
mask	?		
pFI	*		not present if mask=0
multiTBFCap	?		
sparepadding	*		uplink message
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ChReqDescrAny			
Group :			
Structured Type : ChannelRequestDescription			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
peakThroughputClass	?		
radioPriority	?		
rlcMode	?		0 – RLC acknowledged mode 1 – RLC unacknowledged mode
llcType	?		0 – LLC PDU is SACK or ACK 1 – LLC PDU is not SACK or ACK
rlcOctetCount	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRS_Timer_tlv(p_unit : B3; p_value : B5)			
Group :			
Structured Type : GPRS_Timer			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	p_unit		Unit
value	p_value		Timer value
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ProtoCfgOpt_PDP2			
Group :			
Structured Type : ProtoCfgOpt			
Derivation Path :			
Encoding Variation :			
Comments : 51.010 v5.8.0, table 40.5 specifies PPP Protocol Configuration Option for PDP Context Type 2			
Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		
length	'09'O		
ext	'1'B		
spare	'0000'B		
configprotocol	'000'B		PPP
protocollidContents	'C021080A01060A0B'O		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_QoS_PDP2
Group :
Structured Type : QualityOfService_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	'0C'O		
spare	'00'B		
dlyClass	'100'B		
reliabilityClass	'011'B		
peakThroughput	'0101'B		
spare1	'0'B		
precedenceClass	'010'B		
spare2	'000'B		
meanThroughput	'10000'B		
trafficClass	'100'B		background
deliveryOrder	'10'B		
deliveryErrorSDU	'011'B		no
maxSDUSize	'96'O		1500 octets
maxBitRateUplink	'48'O		128 kbps
maxBitRateDnlink	'48'O		128 kbps
residualBER	'0111'B		10(-5)
sduErrRatio	'0100'B		10(-4)
transDly	'000000'B		
trafficHandpro	'00'B		
bitRateUplink	'00'O		
bitRateDnlink	'00'O		
spare3	'000'B		
signallingInd	'0'B		Signalling Indication
srcStatsDescr	'0000'B		Source Statistics Descriptor
maxBitRateDnlinkExt	-		Maximum bit rate for downlink (extended)
bitRateDnlinkExt	-		Guaranteed bit rate for downlink (extended)

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_RadioPriorityLow_v			
Group :			
Structured Type : RadioPriority_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	'100'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS710			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 700 cell. ARFCN = 441, 446, 452, 455, 461, 462, 466, 470, 477, 485, 493, 511. Values are taken from 51.010 Table 20.1a			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'DC99D4BE8CF0A7F8000 00000000000'O		ARFCN: 441, 446, 452, 455, 461, 462, 466, 470, 477, 485, 493, 511
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdTMSILoc (p_tmsi : OCTETSTRING)			
Group :			
Structured Type : MM_MS_Identity			
Derivation Path :			
Encoding Variation :			
Comments : Default TMSI			
Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		TMSI consists of 4 octets special coding for TMSI even TMSI
iel	'05'O		
iDigit1	'1111'B		
oddEvenInd	'0'B		
typeOfId	'100'B		
otherDigits	p_tmsi		
Detailed Comments :			

Structured Type Constraint Declaration				
Constraint Name : c_MS_Clsmk2_Def_lv				
Group :				
Structured Type : MS_Clsmk2_lv				
Derivation Path :				
Encoding Variation :				
Comments : Default as per PIXIT.				
Element Name	Element Value	Element Encoding	Comments	
iel	'03'O			
spare1_1	'0'B			
revLvl	px_MS_ClsmkRevLvl			
eSIND	px_MS_ClsmkESIND			
a5_1	pc_MS_ClsmkA5_1			
rFPwrCap	?			
spare1_2	'0'B			
pSCap	pc_MS_ClsmkPS_Cap			
sSSI	o_BitstringConcat ('0'B, pc_SS_Phase2Supp,1 ,1)			
sMCap	pc_MS_ClsmkSM_Cap			
vBS	pc_MS_ClsmkVBS			
vGCS	pc_MS_ClsmkVGCS			
fC	pc_MS_ClsmkFreqCap			
cM3	pc_MS_ClsmkCM3			
spare1_3	'0'B			
ICSVA	pc_MS_ClsmkLCSVA_Cap			
uCS2	pc_MS_ClsmkUCS2			
soLSA	pc_MS_ClsmkSoLSA			
cMSP	pc_MS_ClsmkCMSP			
a5_3	pc_MS_ClsmkA5_3			
a5_2	pc_MS_ClsmkA5_2			
Detailed Comments :				

Structured Type Constraint Declaration			
Constraint Name : c_RepeatInd1			
Group :			
Structured Type : RepeatInd			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		
repeatInd	'0001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cbs_SM_Cause_v(cause: CauseValue)			
Group :			
Structured Type : SM_Cause_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
causeValue	cause		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cds_BcapMT_5a_SyncT (p_Itc : B3 ; p_Ra : B2; p_Sacp : B3; p_OtherItc, p_OtherRa : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3 ; p_OtherModemType : B2)			
Group :			
Structured Type : Bcap			
Derivation Path : cs_BcapMT_5a_AsyncNT.			
Encoding Variation :			
Comments : Base Bearer capability with a Synchronous mode and transparent connection element and containing octets 3, 4, 5, 5a, 6, 6a, 6b, 6c and 6d .			
The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.			
Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cds_BcapMT_7_SyncNT (p_ltc : B3 ; p_RA : B2 ; p_Sacp : B3 ; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3; p_ModemType : B5; p_OtherModemType : B2; p_UserInfoLayer2 : B5) Group : Structured Type : Bcap Derivation Path : cs_BcapMT_7_AsyncNT . Encoding Variation : Comments : Base Bearer capability with a Synchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, 6d and 7. The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.			
Element Name	Element Value	Element Encoding	Comments
syncAsync	'0'B		Synchronous
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cds_BcapMT_AsyncT (p_ltc:B3; p_RA : B2 ; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2) Group : Structured Type : Bcap Derivation Path : cs_BcapMT_AsyncNT. Encoding Variation : Comments : Base Bearer capability with an Asynchronous mode and a transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, and 6d. The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.			
Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
connectElem	'00'B		Transparent
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cds_BcapMT_SyncT (p_ltc:B3; p_RA : B2 ; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2)			
Group :			
Structured Type : Bcap			
Derivation Path : cs_BcapMT_AsyncNT.			
Encoding Variation :			
Comments : Base Bearer capability with a Synchronous mode and a transparent connection element and containing octets 3, 4, 5, 6, 6a, 6b, 6c, and 6d. The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.			
Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CauAny			
Group :			
Structured Type : Cau			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00001000'B		
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CauAny_Iv			
Group :			
Structured Type : Cau_Iv			
Derivation Path :			
Encoding Variation :			
Comments : Cause – Any value – Octets 3 and 4 are mandatory			
Element Name	Element Value	Element Encoding	Comments
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_ConnectedSubAdrs_Any			
Group :			
Structured Type : ConnectedSubAdrs			
Derivation Path :			
Encoding Variation :			
Comments : Connected subaddress 3G TS 24.008 cl. 10.5.4.14			
Element Name	Element Value	Element Encoding	Comments
iei	'01001101'B		4Didentifier '01001101'B
iel	?		length
subadrs	cr_SubadrsAny		Subaddress
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_FacAny			
Group :			
Structured Type : Facility			
Derivation Path :			
Encoding Variation :			
Comments : Facility IE with AnyOrOmit values			
Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		
iel	?		
comps	*		component: any
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_FacilityRecallAlign			
Group :			
Structured Type : Facility			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011011'B		information element identifier
iel	?		length
comps	*		Component
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5a_AsyncNT (p_ltc : B3 ; p_Ra : B2; p_Sacp : B3; p_Otherltc, p_OtherRa : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 5a, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'09'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		transfer mode octet 3
itc	p_ltc		
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU Integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meanoing
establish	'0'B		demand
extBit5	'0'B		extension
accessId	'00'B		
rateAdapt	p_Ra		
sacp	p_Sacp		
extBit5a	'1'B		no extension
Oherltc	p_Otherltc		
OtherRateAdapt	p_OtherRa		
spare3	'000'B		
extBit5b	-		
rateAdaptHeader	-		
multiFrame	-		
mode	-		
logLinkId	-		
assignorAssignee	-		
inBandOutBand	-		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
spare1	–		
extBit6	'0'B		extension
layer1Id	'01'B		Default
userInfoLayer1	'0000'B		
syncAsync	'1'B		Asynchronous
extBit6a	'0'B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	'0'B		Not possible
numDataBits	p_NumDataBits		
userRate	'0101'B		9.6 kbps
extBit6b	'0'B		extension
intermRate	'11'B		spare
nicTx	'0'B		spare
nicRx	'0'B		spare
parity	p_Parity		
extBit6c	'0'B		extension
connectElem	'01'B		Non Transparent
modemType	'00000'B		none
extBit6d	'1'B		no extension
OtherModemType	p_OtherModemType		
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
ulMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5ab7_V120 (p_ltc:B3; p_Sacp : B3; p_Otherltc : B2; p_Sync,p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_UserInfoLayer2 : B5)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability for V.120 and containing octets 3, 4, 5 , 5a, 5b, 6, 6a, 6b, 6c , 6d and 7 .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'0B'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		
itc	p_ltc		
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meaning
establish	'0'B		demand
extBit5	'0'B		extension
accessId	'00'B		
rateAdapt	'11'B		rate Adaptation: Other rate adaptation
sacp	p_Sacp		
extBit5a	'0'B		extension
Oherltc	p_Otherltc		
OtherRateAdapt	'00'B		Other rate adaptation: V120
spare3	'000'B		
extBit5b	'1'B		no extension
rateAdaptHeader	'1'B		Rate adaptation header : included
multiFrame	'1'B		MultiFrame establish: supported
mode	'1'B		mode: protocol sensitive
logLinkId	'0'B		spare
assignorAssignee	'0'B		spare

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
inBandOutBand	'0'B		spare
spare1	'0'B		spare
extBit6	'0'B		extension
layer1Id	'01'B		Default
userInfoLayer1	'0000'B		
syncAsync	p_Sync		
extBit6a	'0'B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	'0'B		Not possible
numDataBits	p_NumDataBits		
userRate	'0101'B		9.6 kbps
extBit6b	'0'B		extension
intermRate	'11'B		spare
nicTx	'0'B		spare
nicRx	'0'B		spare
parity	p_Parity		
extBit6c	'0'B		extension
connectElem	'01'B		Non transparent
modemType	'0000'B		none
extBit6d	'1'B		no extension
OtherModemType	'00'B		no other modem type
FixedNtwUserRate	px_BcapFNUR		
extBit6e	-		
acceptChCoding	-		
maxNumTrafficCh	-		
extBit6f	-		
ulMI	-		
wAIUR	-		
extBit6g	-		
acceptChCodingExt	-		
asymIInd	-		
spare2	-		
extBit7	'1'B		extension
layer2Id	'10'B		
userInfoLayer2	p_UserInfoLayer2		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5ab_AsyncNT (p_itc: B3; p_RA : B2; p_Sacp: B3; p_OtherItc, p_OtherRA : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent connection element and containing octets 3, 4, 5, 5a, 5b, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'0A'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		
itc	p_itc		Other ITC
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meaning
establish	'0'B		demand
extBit5	'0'B		extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	'0'B		extension
OherItc	p_OtherItc		spare
OtherRateAdapt	p_OtherRA		
spare3	'000'B		
extBit5b	'1'B		no extension
rateAdaptHeader	'1'B		Rate adaptation header : included
multiFrame	'1'B		MultiFrame establish: supported
mode	'1'B		mode: protocol sensitive
logLinkId	'0'B		spare
assignorAssignee	'0'B		spare

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
inBandOutBand	'0'B		spare
spare1	'0'B		spare
extBit6	'0'B		extension
layer1Id	'01'B		Default
userInfoLayer1	'0000'B		
syncAsync	'1'B		Asynchronous
extBit6a	'0'B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	'0'B		Not possible
numDataBits	p_NumDataBits		
userRate	'0101'B		9.6 kbps
extBit6b	'0'B		extension
intermRate	'11'B		spare
nicTx	'0'B		spare
nicRx	'0'B		spare
parity	p_Parity		
extBit6c	'0'B		extension
connectElem	'01'B		Non Transparent
modemType	'0000'B		none
extBit6d	'1'B		no extension
OtherModemType	'00'B		no other modem type
FixedNtwUserRate	px_BcapFNUR		
extBit6e	-		
acceptChCoding	-		
maxNumTrafficCh	-		
extBit6f	-		
ulMI	-		
wAIUR	-		
extBit6g	-		
acceptChCodingExt	-		
asymIId	-		
spare2	-		
extBit7	-		extension
layer2Id	-		
userInfoLayer2	-		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_7_AsyncNT (p_ltc : B3 ; p_RA: B2 ; p_Sacp : B3 ; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3; p_ModemType : B5; p_OtherModemType : B2; p_UserInfoLayer2 : B5)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent connection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, 6d and 7.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'09'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		transfer mode octet 3
itc	p_ltc		information transfer capability, octet 3
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		PIXIT compression
structure	'00'B		SDU Integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		nirr: no meaning
establish	'0'B		demand
extBit5	'1'B		no extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	-		
Oherltc	-		
OtherRateAdapt	-		
spare3	-		
extBit5b	-		
rateAdaptHeader	-		
multiFrame	-		
mode	-		
logLinkId	-		
assignorAssignee	-		
inBandOutBand	-		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
spare1	–		
extBit6	'0'B		extension
layer1Id	'01'B		Default
userInfoLayer1	'0000'B		
syncAsync	'1'B		Asynchronous
extBit6a	'0'B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	'0'B		Not possible
numDataBits	p_NumDataBits		
userRate	'0101'B		9.6 kBPS
extBit6b	'0'B		extension
intermRate	'11'B		spare
nicTx	'0'B		spare
nicRx	'0'B		spare
parity	p_Parity		
extBit6c	'0'B		extension
connectElem	'01'B		Non Transparent
modemType	p_ModemType		
extBit6d	'1'B		no extension
OtherModemType	p_OtherModemType		
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
ulMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	'1'B		no extension
layer2Id	'10'B		layer 2 Id
userInfoLayer2	p_UserInfoLayer2		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_AsyncNT
 (p_ltc: B3; p_RA : B2 ; p_Sacp : B3; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ;
 p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent connection element and containing octets 3, 4, 5, 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'08'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		transfer mode octet 3
itc	p_ltc		
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU Integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meaning
establish	'0'B		demand
extBit5	'1'B		no extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		1.440/1.450
extBit5a	-		
Otherltc	-		
OtherRateAdapt	-		
spare3	-		
extBit5b	-		
rateAdaptHeader	-		
multiFrame	-		
mode	-		
logLinkId	-		
assignorAssignee	-		
inBandOutBand	-		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
spare1	–		
extBit6	'0'B		extension
layer1Id	'01'B		Default
userInfoLayer1	'0000'B		
syncAsync	'1'B		Asynchronous
extBit6a	'0'B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	'0'B		Not possible
numDataBits	p_NumDataBits		
userRate	'0101'B		9.6 kBPS
extBit6b	'0'B		extension
intermRate	'11'B		spare
nicTx	'0'B		spare
nicRx	'0'B		spare
parity	p_Parity		
extBit6c	'0'B		extension
connectElem	'01'B		Non Transparent
modemType	p_ModemType		
extBit6d	'1'B		no extension
OtherModemType	p_OtherModemType		
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
ulMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapSpeechMT
Group :
Structured Type : Bcap
Derivation Path :
Encoding Variation :
Comments : speech bearer capability for direction n->ue

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'01'O		
extBit3	'1'B		extension bit
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		coding standard : GSM
transferMode	'0'B		circuit mode
itc	'000'B		speech
bcap3aEtc1	-		
bcap3aEtc2	-		
bcap3aEtc3	-		
bcap3aEtc4	-		
bcap3aEtc5	-		
bcap3aEtc6	-		
extBit4	-		
compress	-		
structure	-		
duplexMode	-		
cfg	-		
nirr	-		
establish	-		
extBit5	-		
accessId	-		
rateAdapt	-		
sacp	-		
extBit5a	-		
OherItc	-		
OtherRateAdapt	-		
spare3	-		
extBit5b	-		
rateAdaptHeader	-		
multiFrame	-		
mode	-		
logLinkId	-		
assignorAssignee	-		
inBandOutBand	-		
spare1	-		
extBit6	-		
layer1Id	-		
userInfoLayer1	-		
syncAsync	-		
extBit6a	-		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
numStopBits	-		
nego	-		
numDataBits	-		
userRate	-		
extBit6b	-		
intermRate	-		
nicTx	-		
nicRx	-		
parity	-		
extBit6c	-		
connectElem	-		
modemType	-		
extBit6d	-		
OtherModemType	-		
FixedNtwUserRate	-		
extBit6e	-		
acceptChCoding	-		
maxNumTrafficCh	-		
extBit6f	-		
uIMI	-		
wAIUR	-		
extBit6g	-		
acceptChCodingExt	-		
asymInd	-		
spare2	-		
extBit7	-		
layer2id	-		
userInfoLayer2	-		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_PktDataProtoAddrMT(p_len: Length; p_addr : IA5String; p_PDP_TypeNo : PDP_TypeNo;
 p_IP_V4_Flag : BOOLEAN)
Group :
Structured Type : PktDataProtoAddr
Derivation Path :
Encoding Variation :
Comments : PDP Address sent to the UE

Element Name	Element Value	Element Encoding	Comments
iei	'00101011'B		
length	p_len		
spare	'0000'B		
pDP_TypeOrg	tsc_PDP_TypeOrg		
pDP_TypeNo	p_PDP_TypeNo		
addrInfo	o_IA5_IP_ToOct (p_addr , p_IP_V4_Flag)		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_QoS_InteractiveOrBackgroundMT_lv (p_DlyClass, p_trafficClass : B3)
Group :
Structured Type : QualityOfService_lv
Derivation Path :
Encoding Variation :
Comments : The QoS for interactive RAB at 64kbps uplink as well as down link, sent to the UE.
This is set same as the one received by the nw

Element Name	Element Value	Element Encoding	Comments
length	'0B'O		
spare	'00'B		
dlyClass	p_DlyClass		
reliabilityClass	'011'B		Unacknowledged GTP, LLC, and acknowledged RLC; Protected Data
peakThroughput	'0100'B		64 kbps
spare1	'0'B		
precedenceClass	'011'B		class 3
spare2	'000'B		
meanThroughput	'11111'B		best effort
trafficClass	p_trafficClass		
deliveryOrder	'10'B		Without delivery order
deliveryErrorSDU	'010'B		
maxSDUSize	'20'O		
maxBitRateUplink	'40'O		64 kbps
maxBitRateDnlink	'40'O		64 kbps
residualBER	'0111'B		1 x 10E (-5)
sduErrRatio	'0100'B		1 X 10 E(-4)
transDly	'111111'B		Transfer delay will be neglected in case of interactive or background. Hence the value is set to spare
trafficHandpro	'11'B		This is set to 3, but has to be neglected by the UE as the traffic class is interactive.
bitRateUplink	'10'O		The guaranteed bit rate is set equal to 16 kbps
bitRateDnlink	'10'O		The guaranteed bit rate is set equal to 16 kbps
spare3	-		
signallingInd	-		
srcStatsDescr	-		
maxBitRateDnlinkExt	-		
bitRateDnlinkExt	-		

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : cs_RadioPriorityHigh_v			
Group :			
Structured Type : RadioPriority_v			
Derivation Path :			
Encoding Variation :			
Comments : This is a constraint for Radio Priority, indicating the RB Priority has to be high. Direction: nw -> ue in message ACTIVATE PDP CONTEXT ACCEPT			
Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	'001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AC_RefNum3			
Group :			
Structured Type : AC_ReferenceNumber			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
value	'0011'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AUTN(p_AUTN: BITSTRING)			
Group :			
Structured Type : AUTN			
Derivation Path :			
Encoding Variation :			
Comments : Authentication Parameter AUTN 3G TS 24.008 cl. 10.5.3.1.1			
Element Name	Element Value	Element Encoding	Comments
iei	'00100000'B		Length of 16 octets value of Authentication Parameter AUTN
iel	'10'O		
aUTN	p_AUTN		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AttachTypeAny			
Group :			
Structured Type : AttachType			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
for	?		Follow-on request
type	?		Type of attach
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthCiphRspExtAny			
Group :			
Structured Type : AuthRspExt			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00101001'B		IEI is 0x29 (see 24.008 / 9.4.10)
iel	?		
rES	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthFailParamAny			
Group :			
Structured Type : AuthenticationFailureParameter			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		
iel	'0E'O		
auts	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthFailParamGmmAny			
Group :			
Structured Type : AuthenticationFailureParameter			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00110000'B		
iel	'0E'O		
auts	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthRspAny_tv			
Group :			
Structured Type : AuthRsp_tv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		'00100010'B (22 hex)
value	?		Authentication Parameter RES
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthRspExtAny			
Group :			
Structured Type : AuthRspExt			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00100001'B		'00100001'B
iel	?		
rES	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_CellIndInfoDef
Group :
Structured Type : CellIndependantInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments	
cs_cipheringStarted	FALSE		the domain on which security was recently started, and hence the SRB are ciphered and Integrity protected with this domain.	
ps_cipheringStarted	FALSE			
recentSecureDomain	cs_domain			
dL_CipherMode	cs_Null_CipheringModeCommand			
uL_CipherMode	-			
cipheringAlgorithmCapability	'000000000000000011'B			
integrityStarted	FALSE			
dL_Integrity	cs_IntegrityProtectStart (px_FRESH)			
uL_Integrity	-			
dL_IntegrityCheckInfo	-			
start_CS	'00000000000000000000'B			Default new key
start_PS	'00000000000000000000'B			Default new key

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellInfoDef (p_CellId : INTEGER; p_priScrmCode : PrimaryScramblingCode; p_URA_Id : BITSTRING; p_tCell : Tcell; p_sfnOffset : INTEGER; p_FreqInfo : FrequencyInfo; p_UL_ScramblingCode : UL_ScramblingCode)

Group :

Structured Type : CellInfoCfg

Derivation Path :

Encoding Variation :

Comments :

Element Name	Element Value	Element Encoding	Comments
cellId	p_CellId		
frequencyInfo	p_FreqInfo		
attenuationLevel	tsc_AttenuationServingCell		
priScrmCode	p_priScrmCode		
powerpCPICH	tsc_PowerpCPICH		
powerpSCH	tsc_PowerpSCH		
powersSCH	tsc_PowersSCH		
powerpCCPCH	tsc_PowerpCCPCH		
powersCCPCH	tsc_PowersCCPCH1		
powersCCPCH1	tsc_PowersCCPCH1		
timingsCCPCH1	tsc_TimingsCCPCH1		
powerAICH	tsc_PowerAICH		
powerPICH	tsc_PowerPICH		
cellTxPowerLevel	defaultCellTxPowerLvl : NULL		
tCell	p_tCell		
sfnOffset	p_sfnOffset		
puncLimit	tsc_PuncLimit		
sf_PRACH	tsc_PRACH1_SF		
slotFormatsCCPCH1	tsc_SlotFormatsCCPCH1		
mcc	tsc_MCC_Def		
mnc	tsc_MNC_Def		
lac	tsc_LAC_Def		
rac	tsc_RAC_Def		
attFlag	tsc_AttOn		
nmo	tsc_NMO_I		
ura_Identity	p_URA_Id		
t3212	tsc_T3212_Def		
cRNTI	tsc_CRNTI		
uRNTI	c_U_RNTI_Def		
cellConfig	cell_NotConfigured		
dRX_CycleLength	c_DRX_CycleLengthStrucDef		
uL_ScramblingCode	p_UL_ScramblingCode		
DL_DPCH_SHO	FALSE		
UL_DPCH_SHO	FALSE		
dl_DPCH_2ndScrCode	tsc_DL_DPCH1_2ndScrC		
operationBand	c_RadioFrequencyBandFDD_1		

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_CiphAlgorithm (p_alg : B3)			
Group :			
Structured Type : CiphAlgorithm			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
algorithm	p_alg		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CiphKeySeqNum(p_KeySeq: KeySeq)			
Group :			
Structured Type : CiphKeySeqNum			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
keySeq	p_KeySeq		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DRX_CycleLengthStrucDef			
Group :			
Structured Type : DRX_CycleLengthStructure			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
cN_CS_DRX_CycleLength	7		
cN_PS_DRX_CycleLength	7		
uTRAN_DRX_CycleLength	9		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DRX_ParamterAny			
Group :			
Structured Type : DRXparamter			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non-DRX timer
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DetachType(p_pow : B1; p_type : B3)			
Group :			
Structured Type : DetachType			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
powOff	p_pow		
type	p_type		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DetachTypeReAttNotRequiredGPRS			
Group :			
Structured Type : DetachType			
Derivation Path :			
Encoding Variation :			
Comments : 'normal detach, re-attach not required'			
Element Name	Element Value	Element Encoding	Comments
powOff	'0'B		
type	'001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ForceToStandby(p_val : B3)			
Group :			
Structured Type : ForceToStandby			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare value	'0'B p_val		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_AttachResult(p_result : B3)			
Group :			
Structured Type : AttachResult			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
fOP result	'0'B p_result		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_AuthAUTN (p_autn : B128)			
Group :			
Structured Type : GMM_AUTN			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei iel aUTN	'00101000'B '10'O p_autn		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_AuthRAND (p_rand : BITSTRING)			
Group :			
Structured Type : AuthenticationParamterRAND			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei randValue	'00100001'B p_rand		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_KeySeq_tv (p_key : KeySeq)			
Group :			
Structured Type : CiphKeySeqNum_tv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei spare1 keySeq	'1000'B '0'B p_key		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_MobileIdTMSI (p_tmsi : OCTETSTRING)			
Group :			
Structured Type : GMM_MS_Identity			
Derivation Path :			
Encoding Variation :			
Comments : Default TMSI			
Element Name	Element Value	Element Encoding	Comments
iei iel iDigit1 oddEvenInd typeOfId otherDigits	'00100011'B '05'O '1111'B '0'B '100'B p_tmsi		TMSI consists of 4 octets special coding for TMSI even TMSI
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_UpdateResult_v(p_result : B3)			
Group :			
Structured Type : UpdateResult_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
fOP value	'0'B p_result		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_UpdateType_v(p_for : B1; p_type : B3)			
Group :			
Structured Type : UpdateType_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
for value	p_for p_type		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRS_TimerAny			
Group :			
Structured Type : GPRS_Timer			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei unit value	'00010111'B ? ?		00010111'B (17 hex) Unit Timer value
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRS_Timer_v(p_unit : B3; p_value : B5)			
Group :			
Structured Type : GPRS_Timer_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
unit	p_unit		
value	p_value		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_LocArealdAny_v			
Group :			
Structured Type : LocAreald_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
plmn	?		
lac	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_LocAreald_v(p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)			
Group :			
Structured Type : LocAreald_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_MCC, p_MNC)		
lac	p_LAC		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_LocUpdTypeAny			
Group :			
Structured Type : LocUpdType			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
fOR	?		
spare1	'0'B		
IUT	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MS_Clsmk1_Any			
Group :			
Structured Type : MS_Clsmk1			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MS_Clsmk1_Def			
Group :			
Structured Type : MS_Clsmk1			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
revLvl	px_MS_ClsmkRevLvl		
eSIND	px_MS_ClsmkESIND		
a5_1	pc_MS_ClsmkA5_1		
rFPwrCap	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk2_Any
Group :
Structured Type : MS_Clsmk2
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		
iel	'03'O		
spare1_1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
ICSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_MS_Clsmk2_Any_lv			
Group :			
Structured Type : MS_Clsmk2_lv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iel	'03'O		
spare1_1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
ICSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MS_RadioAccessCapAny_lv			
Group :			
Structured Type : MSRadioAccessCap_lv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iel	?		
value	?		MS radio access capability value (CSN.1 coding)
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdAny_Iv			
Group :			
Structured Type : MS_Identity_Iv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iel	?		
iDigit1	?		
oddEvenInd	?		
typeOfId	?		
otherDigits	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdIMSI_Iv			
Group :			
Structured Type : MS_Identity_Iv			
Derivation Path :			
Encoding Variation :			
Comments : Default IMSI			
Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct(((LENGTH_OF(px_IMSI_Def))/2 + 1), 1)		
iDigit1	o_FirstDigit(px_IMSI_Def)		
oddEvenInd	o_OeBit(px_IMSI_Def)		
typeOfId	'001'B		IMSI
otherDigits	o_OtherDigits(px_IMSI_Def)		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdPTMSI (p_ptmsi : 00_8)			
Group :			
Structured Type : GMM_MS_IdentityPTMSI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		TMSI consists of 4 octets special coding for TMSI even TMSI / P-TMSI
iel	'05'O		
iDigit1	'1111'B		
oddEvenInd	'0'B		
typeOfId	'100'B		
otherDigits	p_ptmsi		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdPTMSI_Any			
Group :			
Structured Type : GMM_MS_IdentityPTMSI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		TMSI consists of 4 octets special coding for TMSI even TMSI / P-TMSI Any value
iel	'05'O		
iDigit1	'1111'B		
oddEvenInd	'0'B		
typeOfId	'100'B		
otherDigits	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MobileIdTMSI_Iv			
Group :			
Structured Type : MS_Identity_Iv			
Derivation Path :			
Encoding Variation :			
Comments : Default TMSI			
Element Name	Element Value	Element Encoding	Comments
iei	'05'O		TMSI consists of 4 octets special coding for TMSI even TMSI
iDigit1	'1111'B		
oddEvenInd	'0'B		
typeOfId	'100'B		
otherDigits	px_TMSI_Def		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PTMSI_Signature (p_ptmsi : OCTETSTRING)			
Group :			
Structured Type : PTMSI_Signature			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
value	p_ptmsi		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PTMSI_SignatureAny			
Group :			
Structured Type : PTMSI_Signature			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		'00011001'B (19 hex) P-TMSI signature value
value	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PTMSI_Signature_tlv (p_ptmsi : OCTETSTRING)			
Group :			
Structured Type : PTMSI_Signature_tlv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
iel	'03'O		
value	p_ptmsi		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PriorityLvlAny			
Group :			
Structured Type : PriorityLvl			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'1000'B		
spare1	'0'B		
callPrio	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RAI_Any_v			
Group :			
Structured Type : RAI_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
plmn	?		MCC + MNC 3 digits each
lac	?		LAC
rac	?		RAC
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RAI_v (p_mcc : HEXSTRING; p_mnc : HEXSTRING; p_lac : OCTETSTRING; p_rac : OCTETSTRING)			
Group :			
Structured Type : RAI_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_mcc, p_mnc)		
lac	p_lac		
rac	p_rac		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RadioPriority(p_val : B3)			
Group :			
Structured Type : RadioPriority_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RadioPriority2(p_val : B3)			
Group :			
Structured Type : RadioPriority2_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RepeatIndAny			
Group :			
Structured Type : RepeatInd			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		'D'H
repeatInd	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ServiceType_v(p_type : B3)			
Group :			
Structured Type : ServiceType_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
type	p_type		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TMSI_StatusAny			
Group :			
Structured Type : TMSI_Status			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
spare3	'000'B		
flag	?		Flag
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cb_IMEISV_Request(p_value: B3)			
Group :			
Structured Type : IMEISVRequest			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare1 value	'0'B p_value		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_AccessPtNameAny			
Group :			
Structured Type : AccessPtName			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei length accessPtName	'00101000'B ? ?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_Bcap3aEtcAny			
Group :			
Structured Type : Bcap3aEtc			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
extBit coding spare2 speechVersion	? ? ? ?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_BcapAnyMO
Group :
Structured Type : Bcap
Derivation Path :
Encoding Variation :
Comments : Any bearer capability for direction n <- ue

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	?		
extBit3	*		
radioChRequi	*		
codingStd	*		
transferMode	*		
itc	*		
bcap3aEtc1	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc2	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc3	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc4	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc5	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc6	cr_Bcap3aEtcAny IF_PRESENT		
extBit4	*		
compress	*		
structure	*		
duplexMode	*		
cfg	*		
nirr	*		
establish	*		
extBit5	*		
accessId	*		
rateAdapt	*		
sacp	*		
extBit5a	*		
OherItc	*		
OtherRateAdapt	*		
spare3	*		
extBit5b	*		
rateAdaptHeader	*		
multiFrame	*		
mode	*		
logLinkId	*		
assignorAssignee	*		
inBandOutBand	*		
spare1	*		
extBit6	*		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
layer1Id	*		
userInfoLayer1	*		
syncAsync	*		
extBit6a	*		
numStopBits	*		
nego	*		
numDataBits	*		
userRate	*		
extBit6b	*		
intermRate	*		
nicTx	*		
nicRx	*		
parity	*		
extBit6c	*		
connectElem	*		
modemType	*		
extBit6d	*		
OtherModemType	*		
FixedNtwUserRate	*		
extBit6e	*		
acceptChCoding	*		
maxNumTrafficCh	*		
extBit6f	*		
ulMI	*		
wAIUR	*		
extBit6g	*		
acceptChCodingExt	*		
asymInd	*		
spare2	*		
extBit7	*		
layer2Id	*		
userInfoLayer2	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CC_CapabilitiesAny			
Group :			
Structured Type : CC_Capabilities			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00010101'B		
iel	?		
maxNumBearer	?		
spare	?		
enicm	?		
pcp	?		
dtmf	?		
spare4	?		
maxNumSpeechBearer	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CDPN_Any			
Group :			
Structured Type : CDPN			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01011110'B		information element identifier
iel	?		length
typeOfNumPlan	cr_TypeOfNumPlanAny		type of number and numbering plan identification
digits	*		BCD numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CDPS_Any			
Group :			
Structured Type : CDPS			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01101101'B		
iel	?		
subadrs	cr_SubadrsAny		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CGPS_Any			
Group :			
Structured Type : CGPS			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01011101'B		information element identifier
iel	?		length
subadrs	cr_SubadrsAny		Subaddress
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CodecAny			
Group :			
Structured Type : Codec			
Derivation Path :			
Encoding Variation :			
Comments : Codec 3G TS 24.008 cl. 10.5.4.32			
Element Name	Element Value	Element Encoding	Comments
sysId	?		system identification
len	?		length
bitMap1to8	?		codec bitmap bits 1–8
bitMap9to16	*		codec bitmap bits 9–16
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CodecListAny			
Group :			
Structured Type : CodecList			
Derivation Path :			
Encoding Variation :			
Comments : Supported Codec List 3G TS 24.008 cl. 10.5.3.32			
Element Name	Element Value	Element Encoding	Comments
iei	'01000000'B		'01000000'B (40 hex)
iel	?		length
codec1	cr_CodecAny IF_PRESENT		Codec
codec2	cr_CodecAny IF_PRESENT		Codec
codec3	cr_CodecAny IF_PRESENT		Codec
codec4	cr_CodecAny IF_PRESENT		Codec
codec5	cr_CodecAny IF_PRESENT		Codec
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_DRXparamter_tv_Any			
Group :			
Structured Type : DRXparamter_tv			
Derivation Path :			
Encoding Variation :			
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints			
Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		'00100111'B (hex 27)
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non-DRX timer
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_FacilityAdvRecall			
Group :			
Structured Type : Facility			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00011101'B		information element identifier
iel	?		length
comps	*		Component
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_Facility_Any			
Group :			
Structured Type : Facility			
Derivation Path :			
Encoding Variation :			
Comments : Facility information element 3G TS 24.008 cl. 10.5.4.15			
Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		information element identifier '00011100'B
iel	?		length
comps	*		Component
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_GPRS_TimerAny			
Group :			
Structured Type : GPRS_Timer			
Derivation Path :			
Encoding Variation :			
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints			
Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	?		Unit
value	?		Timer value
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_HLC_Any			
Group :			
Structured Type : HLC			
Derivation Path :			
Encoding Variation :			
Comments : High layer compatibility			
Element Name	Element Value	Element Encoding	Comments
iei	'01111101'B		information element identifier
iel	?		
extBit3	*		
codingStd	*		
interpretation	*		
presentModeProtocolProfile	*		
extBit4	*		
hlcd	*		
extBit4a	*		
exteHlcd	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_InterRAT_HO_InfoAny			
Group :			
Structured Type : InterRAT_HO_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		
length	?		
value	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_LLC_Any
Group :
Structured Type : LLC
Derivation Path :
Encoding Variation :
Comments : Low layer compatibility (CC information element)

Element Name	Element Value	Element Encoding	Comments
iei	'01111100'B		
iel	?		
extBit3	*		
codingStd	*		
itc	*		
extBit3a	*		
negoInd	*		
spare6	*		
extBit4	*		
transferMode	*		
infoTransferRate	*		
extBit4_1	*		
rateMultiplier	*		
extBit5	*		
layer1Id	*		
userInfoLayer1	*		
extBit5a	*		
syncAsync	*		
nego	*		
userRate	*		
extBit5b1	*		
intermRate	*		
nicTx	*		
nicRx	*		
flowCtrlTx	*		
flowCtrlRx	*		
spare1	*		
extBit5b2	*		
rateAdaptHeader	*		
multiFrame	*		
mode	*		
logLinkId	*		
assignorAssignee	*		
inBandOutBand	*		
spare1_5b2	*		
extBit5c	*		
numStopBits	*		
numDataBits	*		
parity	*		
extBit5d	*		
duplexMode	*		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
modemType	*		
extBit6	*		
layer2id	*		
userInfoLayer2	*		
extBit6a1	*		
modeLayer2	*		
spare3	*		
q933	*		
extBit6a2	*		
userSpecifLayer2	*		
extBit6b	*		
windowSize	*		
extBit7	*		
layer3id	*		
userInfoLayer3	*		
extBit7a1	*		
OptionUserSpecifLayer3	*		
extBit7a2	*		
modeLayer3	*		
spare5	*		
extb7b	*		
spare3_7b	*		
defaultPacketSize	*		
extBit7c	*		
packetWindowSize	*		
extBit7a3	*		
spare3_7a3	*		
addLayer3ProtocolInfo	*		
extBit7a4	*		
spare3_7a4	*		
addLayer3ProtocolInfoL	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_LLC_SAPI_v			
Group :			
Structured Type : LLC_SAPI_v			
Derivation Path :			
Encoding Variation :			
Comments : LLC SAPI value assigned as SAPI 3 in order to ensure that there are no problems at the time of handover from UMTS to GSM			
Element Name	Element Value	Element Encoding	Comments
spare ILC_SAPI_Value	'0000'B ('0000'B, '0011'B, '0101'B, '1001'B, '1011'B)		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_MBMS_ContextStatusAny			
Group :			
Structured Type : MBMS_ContextStatus			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei iel nSAPI	'00110101'B ? *		'00110101'B (35 hex) NSAPI(x), for x = 128 to 255
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_MBMS_ProtoCfgOptAny			
Group :			
Structured Type : MBMS_ProtoCfgOpt			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei length protocollDContents	'00110101'B ? *		'00110101'B (35hex)
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_MS_NetworkCapAss_lv			
Group :			
Structured Type : MS_NetworkCap_lv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iel	?		MS network capability value (CSN.1 coding)
value	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_MS_NetworkCap_tlv_Any			
Group :			
Structured Type : MS_NetworkCap_tlv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00110001'B		'00110001'B (hex 31)
iel	?		MS network capability value (CSN.1 coding)
value	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_NSAPI_v			
Group :			
Structured Type : NSAPI_v			
Derivation Path :			
Encoding Variation :			
Comments : Received value of NSAPI			
Element Name	Element Value	Element Encoding	Comments
spare	'0000'B		
nSAPI_Value	('0101'B, '0110'B, '0111'B, '1000'B, '1001'B, '1010'B, '1011'B, '1100'B, '1101'B, '1110'B, '1111'B)		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_PDP_ContextStatusAny			
Group :			
Structured Type : PDP_ContextStatus			
Derivation Path :			
Encoding Variation :			
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints			
Element Name	Element Value	Element Encoding	Comments
iei	'00110010'B		'00110010'B
iel	?		
nSAPI	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_PS_LCS_CapabilityAny			
Group :			
Structured Type : PS_LCS_Capability			
Derivation Path :			
Encoding Variation :			
Comments : PS LCS Capability 3GPP 24.008 / 10.5.5.22			
Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		'00110011'B (33 hex)
iel	'01'O		
spare	'000'B		
oTD_A	?		
oTD_B	?		
gPS_A	?		
gPS_B	?		
gPS_C	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_ProtoCfgOptAny
Group :
Structured Type : ProtoCfgOpt
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		270
length	?		
ext	?		
spare	?		
configprotocol	?		
protocollContents	*		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_QualityOfService_lv_Any
Group :
Structured Type : QualityOfService_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	?		
spare	?		
dlyClass	?		
reliabilityClass	?		
peakThroughput	?		
spare1	?		
precedenceClass	?		
spare2	?		
meanThroughput	?		
trafficClass	?		
deliveryOrder	?		
deliveryErrorSDU	?		
maxSDUSize	?		
maxBitRateUplink	?		
maxBitRateDnlink	?		
residualBER	?		
sduErrRatio	?		
transDly	?		
trafficHandpro	?		
bitRateUplink	?		
bitRateDnlink	?		
spare3	*		
signallingInd	*		
srcStatsDescr	*		
maxBitRateDnlinkExt	*		
bitRateDnlinkExt	*		

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : cr_ReceiveN_PDU_NumbersAny_tlv			
Group :			
Structured Type : ReceiveN_PDU_Numbers_tlv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00100110'B		'00100110'B (hex 26)
iel	?		
value	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_SS_VersionIndAny			
Group :			
Structured Type : SS_VersionInd			
Derivation Path :			
Encoding Variation :			
Comments : SS version indicator IE with AnyOrOmit values			
Element Name	Element Value	Element Encoding	Comments
iei	'01111111'B		
iel	?		
sS_VersionInfo	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_StaticPDP_AddressAny			
Group :			
Structured Type : PktDataProtoAddr_lv			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	?		
spare	'0000'B		
pDP_TypeOrg	?		
pDP_TypeNo	?		
addrInfo	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_StreamIdAny			
Group :			
Structured Type : StreamId			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00101101'B		
iel	?		
val	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_SubadrsAny			
Group :			
Structured Type : Subadrs			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typrOfSubadrs	?		Type of subaddress
oddEven	?		odd/even indicator
spare3	?		3 spare bits
subadrsInfo	*		subaddress information
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_TI_Any			
Group :			
Structured Type : TI			
Derivation Path :			
Encoding Variation :			
Comments : Transaction identifier – used for MO calls			
Element Name	Element Value	Element Encoding	Comments
tiFlag	?		from network to MS
tiVal	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_TI_MO			
Group :			
Structured Type : TI			
Derivation Path :			
Encoding Variation :			
Comments : Transaction identifier – used for MO calls			
Element Name	Element Value	Element Encoding	Comments
tiFlag	'0'B		from network to MS
tiVal	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_TearDwnInd_tv			
Group :			
Structured Type : TearDwnInd_tv			
Derivation Path :			
Encoding Variation :			
Comments : Tear down indicator used for the direction ue -> n			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		TDI Flag = 0, Tear down of all PDP Context not requested. TDI Flag = 1, Tear down of all PDP Context requested.
spare	'000'B		
tdiflag	'?'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_TypeOfNumPlanAny			
Group :			
Structured Type : TypeOfNumPlan			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typeOfNum	?		Type of number
numbPlanId	?		Numbering plan id.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_UserUserAny			
Group :			
Structured Type : UserUser			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01111110'B		information element identifier
iel	?		length
userUserProtocolDiscr	?		user-user protocol discriminator
userUserInfo	*		user user information
Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE messages the userUserInfo length is of 0 – 32 bytes. In USER INFORMATION messages the userUserInfo length is of 1 – 128.			

Structured Type Constraint Declaration			
Constraint Name : cs_CauNormCallClear_lv			
Group :			
Structured Type : Cau_lv			
Derivation Path :			
Encoding Variation :			
Comments : Cause – Normal call clearing			
Element Name	Element Value	Element Encoding	Comments
iel	'02'O		
extBit3	'1'B		no extension
codingStd	'11'B		coding standard – GSM
spare1	'0'B		bit
loc	'0000'B		location – user
extBit3a	–		
recommend	–		
extBit4	'1'B		no extension
cauValue	INT_TO_BIT (16, 7)		Normal call clearing
diagnostic	–		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cs_TI_MT			
Group :			
Structured Type : TI			
Derivation Path :			
Encoding Variation :			
Comments : Transaction identifier – used for MT calls			
Element Name	Element Value	Element Encoding	Comments
tiFlag	'0'B		from network to MS
tiVal	'000'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cs_TearDwnInd_tv			
Group :			
Structured Type : TearDwnInd_tv			
Derivation Path :			
Encoding Variation :			
Comments : Tear down indicator used for the direction n -> ue, indicating all the PDP Context must be released.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		Tear down all PDP Context
spare	'000'B		
tdiflag	'1'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAlloc(p_rFL_NUMBER:B4)			
Group :			
Structured Type : CellAlloc			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
rFL_NUMBER	p_rFL_NUMBER		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS700_CellA			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for DCS 700 – GPRS cell A . Values are taken from 51.010 Table 40.1.1			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8CE88AEC000000000000 000000000000'O		bit map o format, ARFCN = 457,467,462
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS850_CellA			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for DCS 850 – GPRS cell A . Values are taken from 51.010 Table 40.1.1			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'858994D8000000000000 000000000000'O		bit map o format, ARFCN = 147, 157, 167
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM1800A			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for cell A in RR testing of DCS1800 with the ARFCN list = {590, 650, 750, 850}..			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'89272827190000000000 000000000000'O		ARFCNs : 590, 650, 750, 850 512 range
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM1800HO_256F			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : Cell Channel Description for cell A in RR testing of DCS1800 HO cases with the ARFCN_list={734,741,747,754,759,762,766,767,773,775,779,782,791,798,829,832,844} using 256 format.			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8B6F14F32FC602C59EFF A54999400000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM1900A			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for cell A in RR testing of GSM 1900 with the ARFCN list = {590, 650, 750, 850}..			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8927282719000000000000 000000000000'O		ARFCNs : 590, 650, 750, 850 512 range
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM1900HO_256F			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : Cell Channel Description for cell A in RR testing frequency list, after time using Range 256 format. Complete Cell Allocation { 634, 641, 647, 654, 659, 662, 666, 667, 673, 675, 679, 682, 691, 698, 729, 732, 744 }			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8B3D14F32FC602C59EFF A54999400000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM450A			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for cell A in RR testing of GSM 450 with the ARFCN list = 263, 267, 275 and 279			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8C838CE0400000000000 000000000000'O		ARFCNs : 263, 267, 275 and 279 128 range
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM450HO_128F			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : Cell Channel Description for cell A in RR testing of GSM 450 HO cases with the Complete Cell Allocation of Cell A in HO cases using 128 format. ARFCN_list={259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281,283, 285, 287, 289, 291}			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8C8192E08E7084EEEE22 22C000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM480A			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for cell A in RR testing of GSM 480 with the ARFCN list = {310, 315, 322 and 326}..			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8C9B0CE4400000000000 000000000000'O		ARFCNs : 310, 315, 322 and 326 128 range
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM480HO_128F Group : Structured Type : CellChDescr Derivation Path : Encoding Variation : Comments : Cell Channel Description for cell A in RR testing of GSM 480 HO cases with the ARFCN_list={306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338} using 128 format.			
Element Name	Element Value	Element Encoding	Comments
iei refFreqList	- '8C9912E08E7084EEEE22 22C000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM850HO_128F Group : Structured Type : CellChDescr Derivation Path : Encoding Variation : Comments : Cell Channel Description for cell A in RR testing of GSM 850 HO cases with the ARFCN_list={137, 144, 147, 153, 161, 169, 172, 173, 179, 186, 193, 200, 201, 202, 203, 235, 241} using 128 format.			
Element Name	Element Value	Element Encoding	Comments
iei refFreqList	- '8C44B1BCE86482A1FF8A 61A000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900HO Group : Structured Type : CellChDescr Derivation Path : Encoding Variation : Comments : Cell Channel Description for any cell in RR testing of GSM 900 HO cases with the ARFCN_list={10,17,20,26,34,42,45,46,52,59,66,73,74,75,76,108,114}.			
Element Name	Element Value	Element Encoding	Comments
iei refFreqList	- '0002080000000F0204083 20202090200'O		bit map 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM700HO_128F Group : Structured Type : CellChDescr Derivation Path : Encoding Variation : Comments : Cell Channel Description with the Complete Cell Allocation of Cell A in 26.6.5.2 M=2 of 51.010 using 128 format. ARFCN_list={447, 454, 457, 463, 471, 479, 482 ,483 ,489, 496, 498, 500, 501, 502, 503, 506, 508}			
Element Name	Element Value	Element Encoding	Comments
iei	-		'01100010'B
refFreqList	'8CDFB1BC687884AEFD8 162A000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocLists(p_rFL_NUMBER:B4) Group : Structured Type : CellAllocLists Derivation Path : Encoding Variation : Comments : The definition in CSN.1 is {1 < Cell Allocation struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more CellAllocation if more than 2 CellAllocation are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.19			
Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		not present if prefix1 = 0
cellAlloc1	c_CellAlloc(p_rFL_NUMBE R)		
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900_CellA			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell A			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'00000000000000000000 00000000421'O		bit map o format, ARFCN = 1, 6, 11
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900_CellB			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell B			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'00000000000000000000 00000010840'O		bit map o format, ARFCN = 7, 12, 17
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900_CellC			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell C			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'0000000000000000000010 84000000000'O		bit map o format, ARFCN = 39, 44, 49
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS900			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {10, 20, 40, 50, 60, 80} bitmap 0			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'0000000000000800008020 08000080200'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS1800_1900			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {520, 530, 540, 550} range 512			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8904053D828000000000 00000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS700			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {447, 457, 477, 487, 497, 509} range 128			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8CDFA8D9665000000000 00000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS850			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {137, 147, 167, 177, 187, 207}			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	'8C44A8D9E63000000000 000000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocListNone			
Group :			
Structured Type : CellAllocLists			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
prefix1	-		
cellAlloc1	-		not present if prefix1 = 0
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellA
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000000001'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM900_CellA		Serving cell: 1 frequency parameters for traffic channel. no hopping ARFCN = 6, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_CellA		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 11, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (decimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indication in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indication in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indication in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combined with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
callReestab	'1'B		Call re-establishment not allowed
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellA		cell allocation, ARFCNs : 1, 6, 11 0 range
neighBCCHFReqList	c_NeighBCCH_FreqListGSM900_CellA		neighbour cell BCCH/CCCH ARFCN's = 7, 39
extNeighBCCHFReqList	c_ExtNeighBCCH_FreqList2bis		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis
extNeighBCCHFReqList2ter	c_ExtNeighBCCH_FreqList2terDCS		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter.
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
CELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using the asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrc	'0'B		power control not set.

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellB
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000000111'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM900_CellB		Serving cell: 7 frequency parameters for traffic channel. no hopping ARFCN = 12, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_CellB		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 17, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0002'O		cell identity = '0002'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (decimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indication in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indication in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indication in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combined with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
callReestab	'1'B		Call re-establishment not allowed
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellB		cell allocation, ARFCNs : 7, 12, 17 0 range
neighBCCHFReqList	c_NeighBCCH_FreqListGSM900_CellB		neighbour cell BCCH/CCCH ARFCN's = 1, 39
extNeighBCCHFReqList	c_ExtNeighBCCH_FreqList2bis		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis
extNeighBCCHFReqList2ter	c_ExtNeighBCCH_FreqList2terDCS		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter.
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
CELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using the asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrc	'0'B		power control not set.

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellC
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 900. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000100111'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM900_CellC		Serving cell: 39 frequency parameters for traffic channel. no hopping ARFCN = 44, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_CellC		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 49, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0003'O		cell identity = '0003'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (decimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indication in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indication in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indication in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combined with SDCCH
bS_AG_BLKRES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
callReestab	'1'B		Call re-establishment not allowed
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellC		cell allocation, ARFCNs : 39, 44, 49 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGSM900_CellC		neighbour cell BCCH/CCCH ARFCN's = 1, 7
extNeighBCCHFreqList	c_ExtNeighBCCH_FreqList2bis		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis
extNeighBCCHFreqList2ter	c_ExtNeighBCCH_FreqList2terDCS		extended neighbour cell BCCH/CCCH ARFCN's in sysinfo2ter.
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
CELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using the asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrc	'0'B		power control not set.

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGPRS700_CellA(p_cCCH_CONF:B3)
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 700 – GPRS cell. Values are taken from 3GPP TS 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0111001001'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping Serving cell: 457
tCH_Freq	OMIT		
sDCCH8_Freq	OMIT		
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	p_cCCH_CONF		1 basic physical channel for CCCH combinaed with SDCCH 0 basic physical channel for CCCH not combinaed with SDCCH
bS_AG_BLKS_RES	'010'B		2 blocks reserved
bS_PA_MFRMS	'100'B		6 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGPRS700_CellA		cell allocation, ARFCNs : 20,40,60 0 range
neighBCCHFReqList	c_NeighBCCH_FreqListGPRS700_CellA		neighbour cell BCCH/CCCH ARFCN's = 515,600,700,780,810,870,875,885
extNeighBCCHFReqList	-		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis To be changed while using
extNeighBCCHFReqList2ter	-		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'0000'B		Access control class 11..15 allowed
accessControlClass1	'000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	'01010'B		MS_TXPWR_MAX_CCH px_MS_TXPWR_MAX_CCH H Default value : 10
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
pwrC cellConfiguration	'0'B cell_AMR		power control not set. current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGPRS850_CellA(p_cCCH_CONF:B3)
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 850 – GPRS cell. Values are taken from 3GPP TS 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0010010011'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping Serving cell: 147
tCH_Freq	OMIT		
sDCCH8_Freq	OMIT		
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	p_cCCH_CONF		1 basic physical channel for CCCH combinaed with SDCCH 0 basic physical channel for CCCH not combinaed with SDCCH
bS_AG_BLKES_RES	'010'B		2 blocks reserved
bS_PA_MFRMS	'100'B		6 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGPRS850_CellA		cell allocation, ARFCNs : 20,40,60 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGPRS850_CellA		neighbour cell BCCH/CCCH ARFCN's = 515,600,700,780,810,870,875,885
extNeighBCCHFreqList	–		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis
extNeighBCCHFreqList2ter	–		To be changed while using extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'0000'B		Access control class 11..15 allowed
accessControlClass1	'000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	'01010'B		MS_TXPWR_MAX_CCH px_MS_TXPWR_MAX_CCH H Default value : 10
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
pwrc cellConfiguration	'0'B cell_AMR		power control not set. current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM1800
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 1800. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.15, if there is a discrepancy between these two clause the value in clause 26.6.15 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'1001001110'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM1800		Serving cell: 590 frequency parameters for traffic channel. no hopping ARFCN =650
sDCCH8_Freq	c_SDCCH8_FreqGSM1800		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 750
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKRES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM1800A		cell allocation, 590, 650, 750, 850 512 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM1800A		neighbour cell BCCH/CCCH for GSM 1800 cell A. ARFCN = 520, 590, 600, 700, 747, 764, 780, 810, 870
extNeighBCCHFreqList	-		To Be filled?
extNeighBCCHFreqList2ter	-		To Be filled?
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM1800A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrC	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM1900
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 00. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.14, if there is a discrepancy between these two clause the value in clause 26.6.14 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'1001001110'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM1900		Serving cell: 590 frequency parameters for traffic channel. no hopping ARFCN =650
sDCCH8_Freq	c_SDCCH8_FreqGSM1900		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 750
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKES_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM1900A		ARFCNs : 590, 650, 750, 850 512 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM1900A		neighbour cell BCCH/CCCH ARFCN: 520, 590, 600, 647, 664, 700, 720, 760, 780.
extNeighBCCHFreqList	-		
extNeighBCCHFreqList2ter	-		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'1'B		ARFCN band = 1900 band
bandIndicatorAsn1	pcs1900BandUsed		DCS1800 band
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrC	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM450
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.16, if there is a discrepancy between these two clause the value in clause 26.6.16 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0100000111'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM450		Serving cell: 263 frequency parameters for traffic channel. no hopping ARFCN =267
sDCCH8_Freq	c_SDCCH8_FreqGSM450		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 275
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKES_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM450A		cell allocation, ARFCNs : 263, 267, 275 and 279
neighBCCHFreqList	c_NeighBCCHFreqListGSM450A		128 range neighbour cell BCCH/CCCH ARFCN's = 262, 263, 274, 282, 284, 287, 290 and 293
extNeighBCCHFreqList	-		
extNeighBCCHFreqList2ter	-		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM450A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrC	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM480
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 480. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.17, if there is a discrepancy between these two clause the value in clause 26.6.17 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0100110110'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM480		Serving cell: 310 frequency parameters for traffic channel. no hopping ARFCN =314
sDCCH8_Freq	c_SDCCH8_FreqGSM480		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 322
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKRES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS question?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM480A		cell allocation, ARFCN 310, 315, 322 and 326
neighBCCHFreqList	c_NeighBCCHFreqListGSM480A		128 range neighbour cell BCCH/CCCH ARFCN's = 308, 310, 321, 329, 331, 334, 337 and 340.
extNeighBCCHFreqList	-		
extNeighBCCHFreqList2ter	-		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM480A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerelect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrC	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 900. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.14, if there is a discrepancy between these two clause the value in clause 26.6.14 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000010100'B		BCCH/CCCH carrier frequency (ARFCN) for current cell. None hopping
tCH_Freq	c_TCH_FreqGSM900		Serving cell: 20 frequency parameters for traffic channel. no hopping ARFCN =30
sDCCH8_Freq	c_SDCCH8_FreqGSM900		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 50
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re-establishment not allowed

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
timingAdvance	'1F'O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900A		cell allocation, bit map 0, ARFCN = 20, 30, 50, 70.
neighBCCHFReqList	c_NeighBCCH_FreqListGSM900A		neighbour cell BCCH/CCCH ARFCN's = 10, 20, 40, 80, 90, 100, 110, 120
extNeighBCCHFReqList	c_ExtNeighBCCH_FreqList2bis		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis, ARFCN = 985, 989, 995, 1010, 1014
extNeighBCCHFReqList2ter	c_ExtNeighBCCH_FreqList2terDCS		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter, ARFCN = 520, 590, 600, 700, 780, 810, 870
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO-LINK-TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 never expire
maxRetrans	'00'B		Maximum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmission = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used
pwrC	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder

Continued on next page

Continued from previous page

Structured Type Constraint Declaration
Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_1800_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence with the List_ARFCN=Use Range 256 to encode the following 9 frequencies: (747, 775, 779, 782, 791, 798, 829, 832, 844).			
Element Name	Element Value	Element Encoding	Comments
length	'09'O		OCTETSTRING [1]
fl	'8B7599F045EFA499C'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_1900_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Use Range 256 to encode the following 9 frequencies: (647, 675, 679, 682, 691, 698, 729, 732, 744).			
Element Name	Element Value	Element Encoding	Comments
length	'09'O		OCTETSTRING [1]
fl	'8B4399F045EFA499C'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_450_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Use Range 128 to encode the following 12 frequencies (259, 261, 263, 265, 277, 279, 281, 283, 285, 287, 289, 291).			
Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8C8196C06F79C4EEEE00'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_480_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Use Range 128 to encode the following 12 frequencies (306, 308, 310, 312, 324, 326, 328, 330, 332, 334, 336, 338).			
Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8C9916C06F79C4EEEE00'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_700_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Use Range 256 to encode the following 12 frequencies (447, 454, 457, 463, 496, 498, 500, 501, 502, 503, 506, 508).			
Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8ADF9ADB07D7F18BDFFBC000'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_850_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Use Range 128 to encode the following 12 frequencies (137, 144, 147, 153, 186, 193, 200, 201, 202, 203, 235, 241).			
Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8C44BF201925229AAF0000'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_900_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Allocates the following 12 frequencies (10, 17, 20, 26, 59, 66, 73, 74, 75, 76,108, 114). BITMAP0 IS ASSUMED			
Element Name	Element Value	Element Encoding	Comments
length	'10'O		OCTETSTRING [1]
fl	'0002080000000F02040000002090200'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqListOmit			
Group :			
Structured Type : FreqList			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	-		
iel	-		
frequencyList	-		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ExtNeighBCCH_FreqList2terDCS			
Group :			
Structured Type : NeighCellDescr2			
Derivation Path :			
Encoding Variation :			
Comments : range 512, ARFCN = 520, 590, 600, 700, 780, 810, 870			
Element Name	Element Value	Element Encoding	Comments
b128	'1'B		Bit 128, format-ID
mbrpt	'00'B		Multiband reporting
baind	'0'B		bcch allocation sequence number indication
b121_124	'1001'B		Bit 124 – 121, format ID next
rfl	'04411316BB44C80000000000000000'O		remaining reference frequency list
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ExtNeighBCCH_FreqList2bis			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : range 256, ARFCN = 985, 989, 995, 1010, 1014			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		bits 128–127
extind	'1'B		extension indication
baind	'0'B		bcch allocation sequence number indication
rfl4	'1011'B		bits 124–121
rfl	'EC8CF109D00000000000000000000000'O		bits 120–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGSM900_CellA			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell A. ARFCN = 7, 39			
Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124–121
rfl	'00000000000000000000040000000040'O		bits 120–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGSM900_CellB			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell B. ARFCN = 1, 39			
Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124–121
rfl	'000000000000000000000004000000001'O		bits 120–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGSM900_CellC			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell C. ARFCN = 1,7			
Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124–121
rfl	'0041'O		bits 120–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS700_CellA			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 700 cell A. ARFCN =437,447,477,487,497,502,507 Values are taken from 51.010 Table 40.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'DABC38A4E5A000000000000000000000000000000'O		ARFCN: 437,447,477,487,497,502,507
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS850_CellA Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for GSM 850 cell A. ARFCN =137,177,197,207,217,227,237 Values are taken from 51.010 Table 40.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'44C6394B5A8A30000000 0000000000'O		ARFCN: 137,147, 157, 177,197, 207, 217,227, 237
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCHFreqListGSM1800A Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for GSM 1800 cell A. ARFCN = 520, 590, 600, 700, 747, 764, 780, 810, 870			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'043D170B8A62C8F23000 0000000000'O		ARFCN: 520, 590, 600, 700, 747, 764, 780, 810, 870
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCHFreqListGSM1900A			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 1900 cell A. ARFCN = 520, 590, 600, 647, 664, 700, 720, 760, 780.			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format complete BA bcch allocation sequence number indication
extind	'0'B		
baind	'0'B		
rfl4	'1001'B		ARFCN: 520, 590, 600, 647, 664, 700, 720, 760, 780.
rfl	'042D32CF28D822536000 0000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCHFreqListGSM450A			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 450 cell A. ARFCN = 262, 263, 274, 282, 284, 287, 290 and 293			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format complete BA bcch allocation sequence number indication
extind	'0'B		
baind	'0'B		
rfl4	'1100'B		ARFCN: 262, 263, 274, 282, 284, 287, 290 and 293
rfl	'8316D86AF50300000000 00000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCHFreqListGSM480A			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 480 cell A. ARFCN = 308, 310, 321, 329, 331, 334, 337 and 340.			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format complete BA bcch allocation sequence number indication
extind	'0'B		
baind	'0'B		
rfl4	'1100'B		ARFCN: 308, 310, 321, 329, 331, 334, 337 and 340.
rfl	'9A17D86AF503000000000 000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGSM900A			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell A. ARFCN = 10, 20, 40, 80, 90, 100, 110, 120			
Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format incomplete BA bcch allocation sequence number indication
extind	'1'B		
baind	'0'B		
rfl4	'0000'B		bits 124–121 bits 120–0
rfl	'802008020080000000008 000080200'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS900			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 GPRS cell A. ARFCN = 5,20, 80,90,100, 110,120,122,124. Values are taken from 51.010 Table 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'1'B		incomplete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1010'B		bits 124–121
rfl	'80200802008000000000 000080010'O		bits 120–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS1800			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 1800 cell. ARFCN = 515, 590, 600, 700, 780, 810 870, 875, 885. Values are taken from 51.010 Table 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'0195452D3DB0147A8000 0000000000'O		ARFCN = 515, 590, 600, 700, 780, 810 870, 875, 885
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS1900 Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for GSM 1900 cell. ARFCN = 515, 590, 600, 655, 700, 710, 740, 780, 810. Values are taken from 51.010 Table 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'01B0F251A4D85A7B600000000000'O		ARFCN = 515, 590, 600, 655, 700, 710, 740, 780, 810.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS700 Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for GSM 700 cell. ARFCN = 438,447,457,467,477,487,497,502,507. Values are taken from 51.010 Table 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'DB31B0FB6D45600000000000000'O		ARFCN: 438,447,457,467,477,487,497,502,507
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS850 Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for DCS 1800 cell A. ARFCN = 137,147,157,177,197,207,217,227,237. Values are taken from 51.010 Table 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'44C6394B5A8A30000000 0000000000'O		ARFCN: 137,147,157,177,197,207,217,227,237
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS450 Group : Structured Type : NeighCellDescr Derivation Path : Encoding Variation : Comments : for GSM 450 cell A. ARFCN = 259, 263, 269, 275, 279, 283, 287 and 292			
Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'8194D88D70C500000000 0000000000'O		ARFCN: 259, 263, 269, 275, 279, 283, 287 and 292
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighBCCH_FreqListGPRS480			
Group :			
Structured Type : NeighCellDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 450 cell A. ARFCN = 306, 310, 316, 322, 326, 330, 334 and 339			
Element Name	Element Value	Element Encoding	Comments
rf12	'10'B		range 128 format complete BA bcch allocation sequence number indication
extind	'0'B		
baind	'0'B		
rf14	'1100'B		ARFCN: 306, 310, 316, 322, 326, 330, 334 and 339
rf1	'9914D88D70C500000000 0000000000'O		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCHHoppingFreqList_GSM900			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8C051EB0A0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCHHoppingFreqList_DCSPCS			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8D0414D8A0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCHHoppingFreqList_GSM700			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8CDF9EB0A0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCHHoppingFreqList_GSM850			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8C449EB0A0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM900_CellA			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 11			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000001011'B		absolute RF channel number = 11
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM900_CellB			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 17			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000010001'B		absolute RF channel number = 17
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM900_CellC			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 49			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000110001'B		absolute RF channel number = 49
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM1800			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =750			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1011101110'B		absolute RF channel number = 750
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM1900			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =750			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1011101110'B		absolute RF channel number = 750
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM450			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =275			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0100010011'B		absolute RF channel number =275
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM480			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =322			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0101000010'B		absolute RF channel number = 322
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM900_CellA			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 6			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000000110'B		absolute RF channel number = 6
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM900_CellB			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 12			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000001100'B		absolute RF channel number = 12
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM900_CellC			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 44			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000101100'B		absolute RF channel number = 44
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM1800			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =650			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1010001010'B		absolute RF channel number = 650
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM1900			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =650			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1010001010'B		absolute RF channel number = 650
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM450			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =267			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0100001011'B		absolute RF channel number = 267
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM480			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =314			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0100111010'B		absolute RF channel number = 314
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AddPSI3quater			
Group :			
Structured Type : AdditionalPSIMessages			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
nON_GSM_INFORMATION	'00'B		
pSI8_BROADCAST	'0'B		
pSI3ter_BROADCAST	'0'B		
pSI3quater_BROADCAST	'1'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CCCH_Info(p_BS_PA_MFRMS, p_BS_AG_BLKRES: BITSTRING)			
Group :			
Structured Type : CCCH_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
bS_PA_MFRMS	p_BS_PA_MFRMS		
bS_AG_BLKRES	p_BS_AG_BLKRES		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900A			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell A			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'000000000000002000020 00020080000'O		bit map o format, ARFCN = 20, 30, 50, 70
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_CellChDesOmit			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : Omit descriptor			
Element Name	Element Value	Element Encoding	Comments
iei	-		
refFreqList	-		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellIdentification(p_MCC, p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_RAC : O1)			
Group :			
Structured Type : CellIdentification			
Derivation Path :			
Encoding Variation :			
Comments : CellIdentification			
Element Name	Element Value	Element Encoding	Comments
locationAreaidentificationIE	c_LocAreaid_v(p_MCC, p_MNC, p_LAC)		3GPP TS 44.018
rAC	p_RAC		3GPP TS 23.003
cellIdentityIE	'0001'O		3GPP TS 44.018
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellOptionBCCH(p_DN_Ind, p_Pwrc: B1;p_DTX :B2; p_RadioLinkTimeout : B4)			
Group :			
Structured Type : CellOptionBCCH			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information lelement identifier
dN_Ind	p_DN_Ind		dynamic ARFCN mapping indicator
pwr	p_Pwrc		power control indicator
dtx	p_DTX		discontinuous transmission indicator
radioLinkTimeout	p_RadioLinkTimeout		radio link timeout
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellOptionSACCH(p_DTX8, p_Pwrc: B1;p_DTX65 :B2; p_RadioLinkTimeout : B4)			
Group :			
Structured Type : CellOptionSACCH			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information lelement identifier
dtx8	p_DTX8		discontinuous transmission indicator, most signifigent bit
pwr	p_Pwrc		power control indicator
dtx65	p_DTX65		discontinuous transmission indicator
radioLinkTimeout	p_RadioLinkTimeout		radio link timeout
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell1
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'011111'B		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	'01010'B		-80 dBm not present if gPRS_PwrMask = 0
gPRS_SelectMask	'1'B		GPRS_TEMPORARY_OFFSET present
gPRS_TEMPORARY_OFFSET	'000'B		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	'00000'B		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'1'B		HCS params present
hCS_Params	c_HCS('001'B,'10100'B)		not present if hCS_Mask = 0
sl13_Mask	'1'B		
sl13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sl13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell2
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'010111'B		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	'01010'B		-88 dBm not present if gPRS_PwrMask = 0
gPRS_SelectMask	'0'B		GPRS_TEMPORARY_OFFSET not present
gPRS_TEMPORARY_OFFSET	OMIT		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	OMIT		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'0'B		HCS params not present
hCS_Params	OMIT		not present if hCS_Mask = 0
sl13_Mask	'1'B		
sl13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sl13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell3
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'010110'B		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	'01010'B		-89 dBm not present if gPRS_PwrMask = 0
gPRS_SelectMask	'1'B		GPRS_TEMPORARY_OFFSET present
gPRS_TEMPORARY_OFFSET	'000'B		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	'00000'B		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'1'B		HCS params present
hCS_Params	c_HCS('001'B,'10100'B)		not present if hCS_Mask = 0
sl13_Mask	'1'B		
sl13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sl13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_CellSelParam(p_CellReselHysteresis: B3; p_MS_TXPWR_MAX_CCH: B5; p_aCS : B1; p_nECI : B1; p_RXLEV_ACCESS_MIN:B6)			
Group :			
Structured Type : CellSelParam			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
cellReselHysteresis	p_CellReselHysteresis		cell reselected hysteresis
mS_TXPWR_MAX_CCH	p_MS_TXPWR_MAX_CCH		MS maximum TX power for CCH
acs	p_aCS		additional reselect parameter indicator
neci	p_nECI		half rate support
rXLEV_ACCESS_MIN	p_RXLEV_ACCESS_MIN		MS minimum received signal level
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChannelDescr (p_ARFCN : B10; p_TSC : B3)			
Group :			
Structured Type : ChannelDescr			
Derivation Path :			
Encoding Variation :			
Comments : Channel description 3GPP TS 44.018 clause 10.5.2.5			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'01100100'B
cht_schn	'00101'B		channel type and TDMA offset
tn	'000'B		timeslot number
tsc	p_TSC		training sequence code
hch	tsc_RR_HopOff		hch = 1 indicating hopping channel
maio	OMIT		mobile allocation index offset – hopping
hsn	OMIT		hopping sequence number – hopping
spr	'00'B		'00'B – non hopping
arfcn	p_ARFCN		absolute RF channel number – non hopping
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ChannelDescr2_FH (p_Cht_Schn : B5 ; p_TN : B3 ; p_TSC : B3 ; p_Maio : B6 ; p_HSN : B6)			
Group :			
Structured Type : ChannelDescr2			
Derivation Path :			
Encoding Variation :			
Comments : Channel description 2 3GPP TS 44.018 clause 10.5.2.5a			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'01100110'B
cht_schn	p_Cht_Schn		channel type and TDMA offset
tn	p_TN		timeslot number
tsc	p_TSC		training sequence code
hch	'1'B		hch = 1 indicating hopping channel
maio	p_Maio		mobile allocation index offset – hopping
hsn	p_HSN		hopping sequence number – hopping
spr	OMIT		'00'B – non hopping
arfcn	OMIT		absolute RF channel number – non hopping
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ChMode(p_Mode : B8)			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'01100011'B
mode	p_Mode		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeDataRI_14_5			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01100011'B		data, 14.5 kbit/s radio interface rate
mode	'00001111'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV1			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01100011'B		speech full rate or half rate version 1
mode	'00000001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV2			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01100011'B		speech full rate or half rate version 2
mode	'00100001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV3			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'01100011'B		speech full rate or half rate version 3
mode	'01000001'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChneededAny			
Group :			
Structured Type : ChNeeded			
Derivation Path :			
Encoding Variation :			
Comments : any channel			
Element Name	Element Value	Element Encoding	Comments
iei	-		information element identity
ch2	'00'B		
ch1	'00'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ChSpecificPara(p_DedChInfo:DedCH_Info;p_CCCH_Info: CCCH_Info;p_PCCCH_Info: PCCCH_Info; p_PBCCH_Info: PBCCH_Info) Group : Structured Type : ChannelSpecificInfo Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
dedCH_Info	p_DedChInfo		parameters for dedicated channel. valid for combinations: 1, 2, 3, 5, 7, 8, 9, 10
cCCH_Info	p_CCCH_Info		parameters for common control channels: PCH, SCH, ... valid for combinations: 4, 5, 6
pCCCH_Info	p_PCCCH_Info		parameters for packet common control channels: PCCCH, PPCH, ... valid for combinations: 11, 12
pBCCH_Info	p_PBCCH_Info		parameters for packet broadcast channel: PBCCH. valid for combination: 11
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSetting(p_StartCiph : B1) Group : Structured Type : CipherModeSetting Derivation Path : Encoding Variation : Comments : Cipher mode setting 3GPP TS 44.018 clause 10.5.2.9			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier
startingCiph	p_StartCiph		starting ciphering, 1 = start
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSettingGSM			
Group :			
Structured Type : CipherModeSetting			
Derivation Path :			
Encoding Variation :			
Comments : Cipher is on, cipher algorithm is specified by PIXIT.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algld	px_GSM_CipherAlg		algorithm identifier
startingCiph	px_GSM_CipheringOnOff		starting ciphering
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSettingGSM900A			
Group :			
Structured Type : CipherModeSetting			
Derivation Path :			
Encoding Variation :			
Comments : Cipher is on, cipher algorithm is specified by PIXIT.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algld	px_GSM_CipherAlg		algorithm identifier
startingCiph	px_GSM_CipheringOnOff		starting ciphering
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSettingGSM1800A			
Group :			
Structured Type : CipherModeSetting			
Derivation Path :			
Encoding Variation :			
Comments : Cipher is on, cipher algorithm is specified by PIXIT.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algld	px_GSM_CipherAlg		algorithm identifier
startingCiph	px_GSM_CipheringOnOff		starting ciphering
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSettingGSM450A			
Group :			
Structured Type : CipherModeSetting			
Derivation Path :			
Encoding Variation :			
Comments : Cipher is on, cipher algorithm is specified by PIXIT.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algld	px_GSM_CipherAlg		algorithm identifier
startingCiph	px_GSM_CipheringOnOff		starting ciphering
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherModeSettingGSM480A			
Group :			
Structured Type : CipherModeSetting			
Derivation Path :			
Encoding Variation :			
Comments : Cipher is on, cipher algorithm is specified by PIXIT.			
Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algld	px_GSM_CipherAlg		algorithm identifier
startingCiph	px_GSM_CipheringOnOff		starting ciphering
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CipherResponse			
Group :			
Structured Type : CipherResponse			
Derivation Path :			
Encoding Variation :			
Comments : Cipher response 3GPP TS 44.018 clause 10.5.2.10			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'1010'B
spareBits	'000'B		spare bits
cipherResponse	'0'B		cipher response bit
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CompactNeighCellParams2List_OMIT Group : Structured Type : CompactNeighCellParams2List Derivation Path : Encoding Variation : Comments : this type definition is {1 < COMPACT Neighbour Cell params 2 struct>}**0 The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constraint.			
Element Name	Element Value	Element Encoding	Comments
prefix1	OMIT		
compactNeighCellParam2	OMIT		not present if prefix1 = 0
endingRepetition	'0'B		not present if prefix1 = 0. If present, always = 0 indicating the end of the repetition
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21			

Structured Type Constraint Declaration			
Constraint Name : c_ControlChDescr(p_ATT : B1; p_BS_AG_BLKs_RES, p_CCCH_CONF, p_BS_PA_MFRMS: B3; p_CBQ2 : B2; p_T3212:O1) Group : Structured Type : ControlChDescr Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
mSCRelease	'1'B		release 99 onwards
att	p_ATT		attach-detach allowed
bS_AG_BLKs_RES	p_BS_AG_BLKs_RES		base station access grant blocks reservation
cCCH_CONF	p_CCCH_CONF		CCCH configuration
spareBits	'000'B		spare bits
cBQ2	p_CBQ2		cell bar qualify 2
bS_PA_MFRMS	p_BS_PA_MFRMS		number of multiframes for paging request
t3212	p_T3212		t3212 value
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DedCh(p_ChannelMode:ChMode; p_CipherMode: CipherModeSetting; p_CiphyKey : B64; p_PowerLevel : B5; p_TimingAdvance : B7)			
Group :			
Structured Type : DedCH_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
chMode	p_ChannelMode		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	p_CipherMode		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	p_CiphyKey		power level value used in L1 header
powerLevel	p_PowerLevel		
timingAdvance	p_TimingAdvance		timing advance value used in L1 header
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_DedicatedModeOrTBF			
Group :			
Structured Type : DedicatedModeOrTBF			
Derivation Path :			
Encoding Variation :			
Comments : Reference : 3GPP TS 44.018 clause 10.5.2.25b			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
spareBit	'0'B		always = 0
twoMsgAssig	'0'B		two message assignment
downlink	'0'B		down link assignement
tBForDedicated	'0'B		TBF or dedicated mode
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_DynamicAllocation
Group :
Structured Type : DynamicAllocation
Derivation Path :
Encoding Variation :
Comments : It defines all the necessary parameters for dynamic allocation for the TBF.

Element Name	Element Value	Element Encoding	Comments
extendedAlloc	'0'B		0 – dynamic allocation; 1 – extended dynamic allocation
uSFGranularity	'0'B		0 – one block; 1 – four blocks
physicalChId	tsc_PhyCh1		
tN0	FALSE		TRUE – time slot 0 is allocated; FALSE -- not allocated
uSF_TN0	–		USF value for slot 0
tN1	FALSE		TRUE – time slot 1 is allocated; FALSE -- not allocated
uSF_TN1	–		USF value for slot 1
tN2	FALSE		TRUE – time slot 2 is allocated; FALSE -- not allocated
uSF_TN2	–		USF value for slot 2
tN3	FALSE		TRUE – time slot 3 is allocated; FALSE -- not allocated
uSF_TN3	–		USF value for slot 3
tN4	TRUE		TRUE – time slot 4 is allocated; FALSE -- not allocated
uSF_TN4	tsc_DefUSF		USF value for slot 4
tN5	FALSE		TRUE – time slot 5 is allocated; FALSE -- not allocated
uSF_TN5	–		USF value for slot 5
tN6	FALSE		TRUE – time slot 6 is allocated; FALSE -- not allocated
uSF_TN6	–		USF value for slot 6
tN7	FALSE		TRUE – time slot 7 is allocated; FALSE -- not allocated
uSF_TN7	–		USF value for slot 7

Detailed Comments : The uSF_TNx field is not applicable when tNx = FALSE.

Structured Type Constraint Declaration			
Constraint Name : c_DynamicAllocationPacket			
Group :			
Structured Type : DynamicAllocationPacket			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
extendedAllocMask	'0'B		0 – dynamic allocation; 1 – extended dynamic allocation
mask	'0'B		
p0	OMIT		not present if mask=0
pR_Mode	OMIT		not present if mask=0
uSFGranularity	'0'B		0 – one block; 1 – four blocks
			one block
uplinkTFImask	'1'B		
uplinkTFI	'00000'B		not present if uplinkTFImask=0
spareBit	'0'B		
tBFStartingTimeMask	'0'B		no starting time
tBFStartingTime	OMIT		not present if tBFStartingTimeMask=0
timeSlotAllocMask	'1'B		
timeSlotAlloc	c_TimeSlotAllocation_UA_TN4(tsc_USF1)		not present if timeSlotAllocMask=1
timeSlotAllocPowerControl	OMIT		not present if timeSlotAllocMask=0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_DynMap(p_GSMBand : B4)			
Group :			
Structured Type : DYNAMIC_ARFCN_MAPPING			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
gSM_Band	p_GSMBand		
aRFCN_FIRST	'0000000001'B		
bAND_OFFSET	'0110110110'B		
aRFCN_RANGE	'1011010'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_EDGE_Struct_Any			
Group :			
Structured Type : EDGE_Struct			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
modulationCapability	?		
pwrMask1	?		
eDGE_RF_PowerCapability 1	*		not present if pwrMask1 = 0
pwrMask2	?		
eDGE_RF_PowerCapability 2	*		not present if pwrMask2 = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ExtInfo			
Group :			
Structured Type : ExtInfo_NonGPRSCellOptions			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
extLength	'000001'B		
eCSC	'1'B		
ECSR3G	'1'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_FreqParam_PBBCH			
Group :			
Structured Type : FreqParam			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8 Values are taken from 51010 clause 40.2.3.4			
Element Name	Element Value	Element Encoding	Comments
tSC	'101'B		
encodingMask	'01'B		
aRFCN	OMIT		present if encodingMask = '00'B
indirectEncoding	c_IndirectEncoding		present if encodingMask = '01'B
directEncoding1	OMIT		present if encodingMask = '10'B
directEncoding2	OMIT		present if encodingMask = '11'B
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FDD_Descr(p_ARFCN: B14; p_ScrmCode : BITSTRING)			
Group :			
Structured Type : UTRAN_FDD_Descr			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
bandwidthMask	'0'B		
bandwidthFDD	-		not present if bandwidthMask = 0
prefix1	'1'B		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells1	c_G_FDD_NeighCell1(p_ARFCN, p_ScrmCode)		
prefix2	-		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells2	-		
endingRepetition	'0'B		always = '0'B indicating the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FDD_NeighCell1(p_ARFCN: B14; p_ScrnCode : BITSTRING)			
Group :			
Structured Type : RepeatedUTRAN_FDD_NeighCells			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
arfcnIndexMask	'0'B		
fDD_ARFCN	p_ARFCN		
fDD_Indic0	'0'B		
nR_OF_FDD_CELLS	'00001'B		
fDD_CELL_INFORMATION	p_ScrnCode		length of this bitstring = p(nR_OF_FDD_CELLS)
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_FreqInfoBCCH(p_ARFCN : B10)			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		h='1'B: hopping channel; h='0'B: non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B, if h = '0'B, otherwise OMIT
maio	OMIT		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	OMIT		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	p_ARFCN		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	OMIT		hopping frequency list if h='1'B, otherwise OMIT.
the definition see 3GPP TS 44.018 section 10.5.2.13			
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GenCellSel Group : Structured Type : GenCellSel Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
gPRS_CELL_RESELECT_HYSTERESIS	'000'B		0 dB
c31_HYST	'0'B		Not used in C31
c32_QUAL	'0'B		
rRANDOM_ACCESS_RETRY	'0'B		No access to other cells
t_ReselMask	'1'B		
t_RESEL	'001'B		not present if t_ReselMask = 0
			10 seconds
rA_ReselectHysteresisMask	'1'B		
rA_RESELECT_HYTERESIS	'000'B		not present if rA_ReselectHysteresisMask = 0
			0 dB
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GlobalPowerCtrlParams Group : Structured Type : GlobalPowerControlParameters Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
aLPHA	'0000'B		
t_AVG_W	'00000'B		
t_AVG_T	'00000'B		
pb	'0110'B		
pC_MEAS_CHAN	'0'B		
spareBit	'0'B		
n_AVG_I	'0110'B		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsPSI1(p_NMO : B2)
Group :
Structured Type : GPRS_CellOptions
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
nMO	p_NMO		network operation mode 2
t3168	'011'B		2 second
t3192	'010'B		1.5 second
dRX_TIMER_MAX	'000'B		non-DRX not supported, 0 second
aCCESS_BURST_TYPE	'1'B		11 bits
cONTROL_ACK_TYPE	'1'B		RLC/MAC control block
bS_CV_MAX	'0111'B		7
pAN_Mask	'1'B		
pAN_DEC	'001'B		
pAN_INC	'001'B		
pAN_MAX	'000'B		
optionalExtMask	'1'B		for R99
extensionLength	'000011'B		
extensionInfo	c_GPRS_CellOptionsExtension		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsSI13(p_NMO : B2)
Group :
Structured Type : GPRS_CellOptions
Derivation Path :
Encoding Variation :
Comments : values from TS 51.010-1 v.5.5.0 subclause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
nMO	p_NMO		network operation mode I
t3168	'011'B		2 second
t3192	'010'B		1.5 second
dRX_TIMER_MAX	'000'B		non-DRX not supported, 0 second
aCCESS_BURST_TYPE	'1'B		11 bits
cONTROL_ACK_TYPE	'1'B		RLC/MAC control block
bS_CV_MAX	'0111'B		7
pAN_Mask	'1'B		
pAN_DEC	'011'B		3
pAN_INC	'011'B		3
pAN_MAX	'010'B		N3102=12
optionalExtMask	'1'B		for R99
extensionLength	'000011'B		
extensionInfo	c_GPRS_CellOptionsExtension		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsSI13DTM(p_NMO : B2)
Group :
Structured Type : GPRS_CellOptions
Derivation Path :
Encoding Variation :
Comments : values from TS 51.010-1 v.5.5.0 subclause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
nMO	p_NMO		network operation mode I
t3168	'011'B		2 second
t3192	'010'B		1.5 second
dRX_TIMER_MAX	'000'B		non-DRX not supported, 0 second
aCCESS_BURST_TYPE	'1'B		11 bits
cONTROL_ACK_TYPE	'1'B		RLC/MAC control block
bS_CV_MAX	'0111'B		7
pAN_Mask	'1'B		
pAN_DEC	'011'B		3
pAN_INC	'011'B		3
pAN_MAX	'010'B		N3102=12
optionalExtMask	'1'B		for R99
extensionLength	'000011'B		
extensionInfo	c_GPRS_CellOptionsExtensionDTM		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsExtension
Group :
Structured Type : ExtensionInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extensionMask	'0'B		EGPRS not supported
eGPRS_PACKET_CHANNEL_REQUEST	OMIT		EGPRS not supported
bEP_PERIOD	OMIT		EGPRS not supported
pFC_FEATURE_MODE	'0'B		packet context procedure not supported
dTM_SUPPORT	'0'B		DTM not supported
bSS_PAGING_COORDINATION	'0'B		CS paging coordination not supported
cCN_ACTIVE	OMIT		R4 extension
nW_EXT_UTBF	OMIT		
multiTBFCap	OMIT		R6 extension
extUTBFNoData	OMIT		
dTMEhancCap	OMIT		
mbmsMask	OMIT		
dedModeMBMSSupprt	OMIT		not present if mbmsMask = 0
mNCISupport	OMIT		not present if mbmsMask = 0
spareBit	OMIT		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsExtensionDTM
Group :
Structured Type : ExtensionInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extensionMask	'0'B		EGPRS not supported
eGPRS_PACKET_CHANNE L_REQUEST	OMIT		EGPRS not supported
bEP_PERIOD	OMIT		EGPRS not supported
pFC_FEATURE_MODE	'0'B		packet context procedure not supported
dTM_SUPPORT	'1'B		DTM supported
bSS_PAGING_COORDINA TION	'0'B		CS paging coordination not supported
cCN_ACTIVE	OMIT		R4 extension
nW_EXT_UTBF	OMIT		
multiTBFCap	OMIT		R6 extension
extUTBFNoData	OMIT		
dTMEhancCap	OMIT		
mbmsMask	OMIT		
dedModeMBMSSupprt	OMIT		not present if mbmsMask = 0
mNCISupport	OMIT		not present if mbmsMask = 0
spareBit	OMIT		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_MobileAllocationLists(p_mA_NUM:B4;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)
Group :
Structured Type : GPRS_MobileAllocationLists
Derivation Path :
Encoding Variation :
Comments : The definition in CSN.1 is {1 < GPRS Mobile Allocations struct >}**0, so the prefix bit and following structure may repeat infinite times, this struct definition shall be changed if more than 5 GPRSMobileAllocation are required in the Constraint.
 Reference : 3GPP TS 44.060 clause 11.2.19

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		always = 1
gPRS_MobileAllocation1	c_GPRSMobileAllocations(p_mA_NUM,p_mA_LENGTH,p_mA_BITMAP)		
prefix2	OMIT		always = 1
gPRS_MobileAllocation2	OMIT		
prefix3	OMIT		always = 1
gPRS_MobileAllocation3	OMIT		
prefix4	OMIT		always = 1
gPRS_MobileAllocation4	OMIT		
prefix5	OMIT		always = 1
gPRS_MobileAllocation5	OMIT		
endingRepetiton	'0'B		Its value is always zero and indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_GPRSMobileAlloc(p_mA_LENGTH : B6; p_mA_BITMAP : BITSTRING)			
Group :			
Structured Type : GPRSMobileAlloc			
Derivation Path :			
Encoding Variation :			
Comments : Reference: 3GPP TS 44.060 clause 12.10a Values are taken from TS 51010 Section 40 defaults.			
Element Name	Element Value	Element Encoding	Comments
hSN	'000000'B		3GPP TS 45.002
rFL_Mask	'0'B		
rFL_NumberList	–		not present if rFL_Mask = 0
mA_ARFCN_Mask	'0'B		
mA_LENGTH	p_mA_LENGTH		not present if mA_ARFCN_Mask = 1
mA_BITMAP	p_mA_BITMAP		not present if mA_ARFCN_Mask = 1
aRFCN_IndexMask	–		not present if mA_ARFCN_Mask = 0
aRFCN_IndexList	–		not present if mA_ARFCN_Mask = 0 or aRFCN_IndexMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRSMobileAllocations(p_mA_NUM:B4;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)			
Group :			
Structured Type : GPRSMobileAllocations			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
mA_NUMBER	p_mA_NUM		
GPRSMobileAllocation	c_GPRSMobileAlloc(p_mA_LENGTH,p_mA_BITMAP)		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRSMobAllocListNone			
Group :			
Structured Type : GPRS_MobileAllocationLists			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
prefix1	-		always = 1
gPRS_MobileAllocation1	-		
prefix2	-		always = 1
gPRS_MobileAllocation2	-		
prefix3	-		always = 1
gPRS_MobileAllocation3	-		
prefix4	-		always = 1
gPRS_MobileAllocation4	-		
prefix5	-		always = 1
gPRS_MobileAllocation5	-		
endingRepetiton	'0'B		Its value is always zero and indicating the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GPRS_PowerControlParam			
Group :			
Structured Type : GPRS_PowerControlParam			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
aLPHA	'0000'B		
t_AVG_W	'01100'B		
t_AVG_T	'01100'B		
pC_MEAS_CHAN	'0'B		BCCH
n_AVG_I	'0111'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_HCS(p_priorityClass:B3;p_hCS_THR:B5)			
Group :			
Structured Type : HCS			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
priorityClass	p_priorityClass		
hCS_THR	p_hCS_THR		-110 dBm
Detailed Comments : 3GPP TS 44.060 clause 11.2.20			

Structured Type Constraint Declaration			
Constraint Name : c_HoppingPCCCHCarrierList(p_mAIO:B6;p_TS_Allocation:B8)			
Group :			
Structured Type : HoppingPCCCHCarrierList			
Derivation Path :			
Encoding Variation :			
Comments : The definition of this type is <Hopping PCCCH Carriers Lists struct> ::= {1<Hopping PCCCH Carriers struct>}**0. The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more hoppingPCCCHCarriers if more 3 hoppingPCCCHCarriers are required in the constraint.			
Element Name	Element Value	Element Encoding	Comments
prefixBit1	'1'B		
hoppingPCCCHCarriers1	c_HoppingPCCCHCarriers(p_mAIO,p_TS_Allocation)		not present if prefixBit1 = 0
prefixBit2	OMIT		
hoppingPCCCHCarriers2	OMIT		not present if prefixBit2 = 0
prefixBit3	OMIT		
hoppingPCCCHCarriers3	OMIT		not present if prefixBit3 = 0
endingBit	'0'B		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Constraint Declaration			
Constraint Name : c_HoppingPCCCHCarriers(p_mAIO:B6;p_TS_Allocation:B8)			
Group :			
Structured Type : HoppingPCCCHCarriers			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
mAIO	p_mAIO		
timeslotAllocation	p_TS_Allocation		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Constraint Declaration

Constraint Name : c_G_IARO
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Element Value	Element Encoding	Comments
constructMask	OMIT		
compressInterRATHO	OMIT		present if constructMask = LL
reservMask1	OMIT		present if constructMask = LH
reservMask2	OMIT		present if reservMask1 = 0
eGPRS_UplinkAssign	OMIT		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
multiBlocksPDA	-		not present if reservMask2 = 0 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	OMIT		present if constructMask = HL
freqParam_bt	OMIT		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	OMIT		present if constructMask = HL
mask1	OMIT		present if constructMask = HH
mask2	OMIT		
packetUplinkAssign	OMIT		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	OMIT		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_IARO_PDA(p_TLLI :O4; p_Gamma : B5)
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
constructMask	'11'B		
compressInterRATHO	–		present if constructMask = LL
reservMask1	–		present if constructMask = LH
reservMask2	–		present if reservMask1 = 0
eGPRS_UplinkAssign	–		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
multiBlocksPDA	–		not present if reservMask2 = 0 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	–		present if constructMask = HL
freqParam_bt	–		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	–		present if constructMask = HL
mask1	'0'B		present if constructMask = HH
mask2	'1'B		
packetUplinkAssign	OMIT		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	c_PktDownlinkAss_IARO(p_TLLI, p_Gamma)		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_IARO_PUA(p_Gamma : B5; p_StartTime : B16)
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
constructMask	'11'B		
compressInterRATHO	-		present if constructMask = LL
reservMask1	-		present if constructMask = LH
reservMask2	-		present if reservMask1 = 0
eGPRS_UplinkAssign	-		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
multiBlocksPDA	-		not present if reservMask2 = 0 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	-		present if constructMask = HL
freqParam_bt	-		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	-		present if constructMask = HL
mask1	'0'B		present if constructMask = HH
mask2	'0'B		
packetUplinkAssign	c_PktUplinkAss_IARO(p_Gamma, p_StartTime)		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	OMIT		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_IndirectEncoding			
Group :			
Structured Type : IndirectEncoding			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8 Values are taken from 51010 clause 40.2.3.4			
Element Name	Element Value	Element Encoding	Comments
mAIO	'000010'B		MAIO
mA_NUMBER	'0010'B		MA_NUMBER
			List 2
changeMark1Mask	'0'B		
mA_ChangeMark1	OMIT		not present if changeMark1Mask = 0
changeMark2Mask	OMIT		not present if changeMark1Mask = 0
mA_ChangeMark2	OMIT		not present if changeMark1Mask = 0 or changeMark2Mask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_LAI(p_PLMN:O3; p_LAC: O2)			
Group :			
Structured Type : LocAreald_v			
Derivation Path :			
Encoding Variation :			
Comments : without IEI			
Element Name	Element Value	Element Encoding	Comments
plmn	p_PLMN		MCC + MNC
lac	p_LAC		location area code
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_LLC_SAPI_11			
Group :			
Structured Type : LLC_SAPI_v			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
spare	'0000'B		
ILC_SAPI_Value	'1011'B		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_LocAreald_v_UpdateAccept (p_G_CellConfigInfo : G_CellConfigInfo)
Group :
Structured Type : LocAreald_v
Derivation Path :
Encoding Variation :
Comments : Location Area Identification Value
 3G TS 24.008 cl. 10.5.1.3

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN (p_G_CellConfigInfo.mcc, p_G_CellConfigInfo.mnc)		MCC + MNC 3 digits each
lac	p_G_CellConfigInfo.lac		LAC

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LSA_ID_Info_OMIT
Group :
Structured Type : LSA_ID_Info
Derivation Path :
Encoding Variation :
Comments : The definition is < LSA ID Information struct> ::= {1 {0 <LSA_ID : bit(24)> | 1 <ShortLSA_ID : (10)>}}**0, so the TTCN definition shall be modified to include more ISA_ID if the constraint requires more than 5 ISA_ID.
 Reference : 3GPP TS 44.060 clause 12.28

Element Name	Element Value	Element Encoding	Comments
prefixBit1	OMIT		value always equal to "1"
ISA_ID_Mask1	OMIT		
ISA_ID1	OMIT		not present if ISA_ID_Mask1 = 1
ShortLSA_ID1	OMIT		not present if ISA_ID_Mask1 = 0
prefixBit2	OMIT		value always equal to "1"
ISA_ID_Mask2	OMIT		
ISA_ID2	OMIT		not present if ISA_ID_Mask2 = 1
ShortLSA_ID2	OMIT		not present if ISA_ID_Mask2 = 0
prefixBit3	OMIT		value always equal to "1"
ISA_ID_Mask3	OMIT		
ISA_ID3	OMIT		not present if ISA_ID_Mask3 = 1
ShortLSA_ID3	OMIT		not present if ISA_ID_Mask3 = 0
prefixBit4	OMIT		value always equal to "1"
ISA_ID_Mask4	OMIT		
ISA_ID4	OMIT		not present if ISA_ID_Mask4 = 1
ShortLSA_ID4	OMIT		not present if ISA_ID_Mask4 = 0
prefixBit5	OMIT		value always equal to "1"
ISA_ID_Mask5	OMIT		
ISA_ID5	OMIT		not present if ISA_ID_Mask4 = 1
ShortLSA_ID5	OMIT		not present if ISA_ID_Mask4 = 0
endBit	'0'B		value always equal to "0" to indicate the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MeasResults_Any
Group :
Structured Type : MeasResults
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
ba_used	?		bcch allocation used
dtx_used	?		dtx was used
rxlev_fsc	?		received signal strength on the full serving cell
ba3G_used	?		3G bcch allocation used
meas_valid	?		measurement results valid
rxlev_ssc	?		received signal strength on a subset of the serving cell
spareBit1	?		spare bit
rxqual_fsc	?		received signal quality on the full serving cell
rxqual_ssc	?		received signal quality on a subset of the serving cell
no_neighCells	?		number of neighbouring cells (nc)
rxlev_nc1	?		received signal strength on nc1
bcchfrq_nc1	?		bcch frequency position of nc1
bsic_nc1	?		base station identity code of nc1
rxlev_nc2	?		received signal strength on nc2
bcchfrq_nc2	?		bcch frequency position of nc2
bsic_nc2	?		base station identity code of nc2
rxlev_nc3	?		received signal strength on nc3
bcchfrq_nc3	?		bcch frequency position of nc3
bsic_nc3	?		base station identity code of nc3
rxlev_nc4	?		received signal strength on nc4
bcchfrq_nc4	?		bcch frequency position of nc4
bsic_nc4	?		base station identity code of nc4
rxlev_nc5	?		received signal strength on nc5
bcchfrq_nc5	?		bcch frequency position of nc5
bsic_nc5	?		base station identity code nc5

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
rxlev_nc6	?		received signal strength on nc6
bcchfrq_nc6	?		bcch frequency position of nc6
bsic_nc6	?		base station identity code of nc6
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MM_MS_Identity			
Group :			
Structured Type : MM_MS_Identity			
Derivation Path :			
Encoding Variation :			
Comments : Mobile Identity 3G TS 24.008 cl. 10.5.1.4			
Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		'00010111'B
iel	'05'O		
iDigit1	'1111'B		1st identity digit
oddEvenInd	'0'B		Odd/even indicator
typeOfId	'100'B		Type of identity
otherDigits	tsc_G_TMSI_Def		Other identity digits
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Constraint Declaration

Constraint Name : cr_MSCLSMK3_Any
Group :
Structured Type : MSCLSMK3
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100000'B		'00100000'B
iel	?		OCTETSTRING [1]
spareBit	'0'B		spare bit
multibandSupported	?		
a5_7	?		a5/7 algorithm supported
a5_6	?		a5/6 algorithm supported
a5_5	?		a5/5 algorithm supported
a5_4	?		a5/4 algorithm supported
associatedRadioCapabilty2	*		present if multibandSupported = 101 or 110
spareBits1	*		present if multibandSupported = 001 or 010 or 100
associatedRadioCapabilty1	*		present if multibandSupported = 001 or 010 or 100 or 101 or 110
maskBit1	?		
rGSM_RadioCapability	*		R-GSM band associated radio capability. not present if maskBit1 = 0
maskBit2	?		
multiSlotClass	*		multi slot class. not present if multiSlotClass = 0
uCS2Treatment	?		
extMeasurementCapability	?		extended measurement capability
maskBit3	?		
msMeasurementCapability	cr_MS_MeasCapability_Any IF_PRESENT		MS measurement capability not present if maskBit3 = 0
maskBit4	?		
msPositioningMethod	*		MS positioning method capability not present if maskBit4 = 0
maskBit5	?		
eEDGE_MultiSlot	*		EDGE multi slot capability not present if maskBit5 = 0
maskBit6	?		
psk8_Struct	cr_EDGE_Struct_Any IF_PRESENT		EDGE struct not present if maskBit6 = 0
maskBit7	?		
gSM400BandsSupported	*		not present if maskBit7 = 0

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
gSM400AssociatedRadioCapability	*		not present if gSM400BandsSupported = 00 or maskBit7 = 0
maskBit8	?		
gSM850AssociatedRadioCapability	*		not present if maskBit8 = 0
maskBit9	?		
pCS1900AssociatedRadioCapability	*		not present if maskBit9 = 0
uMTS_FDD_RAT_Capability	?		
uMTS384TDD_RAT_Capability	?		
cDMA2000_RAT_Capability	?		
maskBit10	?		
dTM_GPRS_MultiSlotSubclass	*		not present if maskBit10 = 0
singleSlotDTM	*		not present if maskBit10 = 0
maskBit11	*		not present if maskBit10 = 0
dTM_EGPRS_MultiSlotSubclass	*		not present if maskBit10 = 0 or maskBit11 = 0
maskBit12	?		
singleBandSupport	*		not present if maskBit12 = 0
maskBit13	*		
gSM700AssociatedRadioCapability	*		not present if maskBit13 = 0
uMTS128TDD_RAT_Capability	*		
gERANFeatPack1	*		
mask14	*		
extDTM_GPRS_MultiSlotSubclass	*		not present if maskBit14 = 0
extDTM_EGPRS_MultiSlotSubclass	*		not present if maskBit14 = 0
mask15	*		
highMultislotCap	*		not present if mask15 = 0
mask16	*		
gERANluModeLength	*		not present if maskBit16 = 0
gERANFLOluCap	*		
gERANluModeSpareBits	*		not present if maskBit16 = 0
gERANFeatPack2	*		
gMSKMultislotPowerProfile	*		
pSKMultislotPowerProfile	*		
mask17	?		rel 6 features
tGSM400BandsSupported	*		not present if maskBit17 = 0
tGSM400AssocRadioCap	*		not present if maskBit17 = 0
mask18	?		
tGSM900AssocRadioCap	*		not present if maskBit18 = 0
dAdvancedRxPerf	?		
dTMEhancCap	?		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
mask19	?		
dTMGPRSHighMultislotClasses	*		not present if maskBit19 = 0
offsetReq	*		not present if maskBit19 = 0
mask20	*		not present if maskBit19 = 0
dTMEGPRSHighMultislotClasses	*		not present if maskBit19 and maskBit20 = 0
rptdACCHCap	?		
spareBits2	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_MS_MeasCapability_Any			
Group :			
Structured Type : MS_MeasCapability			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
sMS_VALUE	?		
sM_VALUE	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_MobileAlloc			
Group :			
Structured Type : MobileAlloc			
Derivation Path :			
Encoding Variation :			
Comments : Mobile allocation 3GPP TS 44.018 clause 10.5.2.21			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'01110010'B
iel	'00'O		'00'O for non hopping
mac_8n	OMIT		mac64 – mac57
mac_7n	OMIT		mac56 – mac49
mac_6n	OMIT		mac48 – mac41
mac_5n	OMIT		mac40 – mac33
mac_4n	OMIT		mac32 – mac25
mac_3n	OMIT		mac24 – mac17
mac_2n	OMIT		mac16 – mac9
mac_1n	OMIT		mac8 – mac1
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_MobileAlloc_12			
Group :			
Structured Type : MobileAlloc			
Derivation Path :			
Encoding Variation :			
Comments : Indicates 12 freqs from the CA (as specified in 26_6_5_1)			
Element Name	Element Value	Element Encoding	Comments
iei	'01110010'B		
iel	'03'O		
mac_8n	–		
mac_7n	–		
mac_6n	–		
mac_5n	–		
mac_4n	–		
mac_3n	'00000001'B		
mac_2n	'11111110'B		
mac_1n	'00001111'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_MobileAlloc_9			
Group :			
Structured Type : MobileAlloc			
Derivation Path :			
Encoding Variation :			
Comments : Indicates 9 freqs from the CA (as specified in 26_6_5_1)			
Element Name	Element Value	Element Encoding	Comments
iei	'01110010'B		
iel	'03'O		
mac_8n	-		
mac_7n	-		
mac_6n	-		
mac_5n	-		
mac_4n	-		
mac_3n	'00000001'B		
mac_2n	'11111110'B		
mac_1n	'00000100'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_MobileAlloc_DTM			
Group :			
Structured Type : MobileAlloc			
Derivation Path :			
Encoding Variation :			
Comments : Indicates 12 freqs from the CA (as specified in 26_6_5_1)			
Element Name	Element Value	Element Encoding	Comments
iei	-		LV Only
iel	'03'O		
mac_8n	-		
mac_7n	-		
mac_6n	-		
mac_5n	-		
mac_4n	-		
mac_3n	'00000001'B		
mac_2n	'11111110'B		
mac_1n	'00001111'B		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_MultiRateConfig
Group :
Structured Type : MultiRateConfig
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00000011'B		
iel	'02'O		
mrVersion	'001'B		multirate speech version
nSCB	'0'B		noise suppression control bit
iCMI	'0'B		initial codec mode indicator
spareBit	'0'B		0
startMode	'00'B		start mode
mrSpeechPara	'01'O		parameters for multirate speech

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MultislotAlloc_Omit
Group :
Structured Type : MultislotAlloc
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	-		IEI
iel	-		OCTETSTRING [1]
ext1	-		
da7	-		down link time slot allocation bit
da6	-		down link time slot allocation bit
da5	-		down link time slot allocation bit
da4	-		down link time slot allocation bit
da3	-		down link time slot allocation bit
da2	-		down link time slot allocation bit
da1	-		down link time slot allocation bit
ext2	-		always = 1
ua7	-		uplink link time slot allocation bit
ua6	-		uplink link time slot allocation bit
ua5	-		uplink link time slot allocation bit
ua4	-		uplink link time slot allocation bit
ua3	-		uplink link time slot allocation bit
ua2	-		uplink link time slot allocation bit
ua1	-		uplink link time slot allocation bit
channelset1	-		channel set 1
channelset2	-		channel set 2
channelset3	-		channel set 3
channelset4	-		channel set 4
channelset5	-		channel set 5
channelset6	-		channel set 6
channelset7	-		channel set 7
channelset8	-		channel set 8

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_NC_MeasParams			
Group :			
Structured Type : NC_MeasParams			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
nETWORK_CONTROL_ORDER	'00'B		
mask	'1'B		
nC_NON_DRX_PERIOD	'111'B		not present if mask = 0
nC_REPORTING_PERIOD_I	'111'B		not present if mask = 0
nC_Reporting_PERIOD_T	'011'B		not present if mask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighCellParam(p_StartFreq:B10;p_CellSelection_Cell1:CellSelection;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING;p_CellSelection_Cell2:CellSelection)			
Group :			
Structured Type : NeighCellParam			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
sTART_FREQUENCY	p_StartFreq		
cellSelectionParams	p_CellSelection_Cell1		
nR_OF_REMAINING_CELLS	'0001'B		
fREQ_DIFF_LENGTH	p_FreqDiffLen		
fFREQUENCY_DIFF1	p_FreqDiff		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
cellSelectionParams1	p_CellSelection_Cell2		
fFREQUENCY_DIFF2	OMIT		the length of this field is 1 + Val(fFREQUENCY_DIFF_LENGTH)
cellSelectionParams2	OMIT		
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.20. More fFREQUENCY_DIFF + cellSelectionParams shall be added into this type definition if nR_OF_REMAINING_CELLS is greater than 2. In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fFREQUENCY_DIFF and cellSelectionParams			

Structured Type Constraint Declaration			
Constraint Name : c_NeighCellParams2List_OMIT Group : Structured Type : NeighCellParams2List Derivation Path : Encoding Variation : Comments : this type definition is {1 < Neighbour Cell params 2 struct>**0 The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.			
Element Name	Element Value	Element Encoding	Comments
prefix1	OMIT		value = 1 if present
neighCellParam2_1	OMIT		
endingRepetition	'0'B		always = 0 indicating the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_NeighCellParamsList(p_StartFreq:B10;p_CellSelection_Cell1:CellSelection;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING;p_CellSelection_Cell2:CellSelection) Group : Structured Type : NeighCellParamsList Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		always = 1 indicating the start of Neighbour Cell params struct
neighCellParam1	c_NeighCellParam(p_StartFreq,p_CellSelection_Cell1,p_FreqDiffLen,p_FreqDiff,p_CellSelection_Cell2)		
endingBit	'0'B		always = 0 indicating the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_NonGPRSCellOptions
Group :
Structured Type : NonGPRSCellOptions
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.27

Element Name	Element Value	Element Encoding	Comments
aTT	'1'B		MS shall apply IMSI attach and detach procedures
t3212Mask	'1'B		
t3212	'00000000'B		not present if t3212Mask = 0
nECI	'1'B		Timeout value New establishment causes supported
pWRC	'0'B		Power control indicator
dTX	'10'B		
rADIO_LINK_TIMEOUT	'0001'B		value 8
bS_AG_BLK_RES	'010'B		2 reserved
cCCH_CONF	'001'B		
bS_PA_MFRMS	'100'B		6 multiframes
mAX_RETRANS	'00'B		1 retransmission allowed
tX_INTEGER	'0010'B		5 slots used for spread transmission
eC	'0'B		emergency call allowed
mS_TXPWR_MAX_CCCH	'01010'B		
extensionBitsMask	'1'B		
extensionBits	c_ExtInfo		not present if extensionBitsMask = 0. 3GPP TS 44.060 clause 12.26

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PacketChDescr(p_ARFCN : B10)
Group :
Structured Type : PacketChDescr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
chType	'00001'B		channel type
tN	'100'B		time slot
tSC	'101'B		training sequence code
maskBit1	'0'B		
maskBit2	'0'B		not present if maskBit1 = 1.
spareBit1	'0'B		not present if maskBit1 = 1 or maskBit2 = 1
aRFCN	p_ARFCN		not present if maskBit1 = 1 or maskBit2 = 1
spareBit	-		not present if maskBit1 = 1 or maskBit2 = 0
mAIO	-		not present if maskBit1 = 1 or maskBit2 = 0
mA_NumberInd	-		
maskBit3	-		
spareBits	-		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 1
CHANGE_MARK_1	-		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 0
mIAO	-		not present if maskBit1 = 0
hSN	-		not present if maskBit1 = 0

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_PacketChDescrHopping(p_Timeslot: B3; p_CellCfgInfo : G_CellConfigInfo)			
Group :			
Structured Type : PacketChDescr			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
chType	'00001'B		channel type
tN	p_Timeslot		time slot
tSC	p_CellCfgInfo.tSC		training sequence code
maskBit1	'1'B		
maskBit2	-		not present if maskBit1 = 1.
spareBit1	-		not present if maskBit1 = 1 or maskBit2 = 1
aRFCN	-		not present if maskBit1 = 1 or maskBit2 = 1
spareBit	-		not present if maskBit1 = 1 or maskBit2 = 0
mAIO	-		not present if maskBit1 = 1 or maskBit2 = 0
mA_NumberInd	-		
maskBit3	-		
spareBits	-		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 1
CHANGE_MARK_1	-		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 0
mIAO	p_CellCfgInfo.tCH_Freq.mai o		not present if maskBit1 = 0
hSN	p_CellCfgInfo.tCH_Freq.hs n		not present if maskBit1 = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PacketRequestReference(p_randomAccessInfo: INTEGER;p_frameNumber : RFN)			
Group :			
Structured Type : PacketRequestReference			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.11			
Element Name	Element Value	Element Encoding	Comments
randomAccessInfo	INT_TO_BIT(p_randomAccessInfo,11)		
frameNumber	p_frameNumber		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PacketTimingAdvance Group : Structured Type : PacketTimingAdvance Derivation Path : Encoding Variation : Comments : 3GPP TS 44.060 clause 12.12 <p style="text-align: center;">Values are taken from 51010 clause 40.2.3.4</p>			
Element Name	Element Value	Element Encoding	Comments
taValueMask	'1'B		
timingAdvanceValue	'111110'B		not present if taValueMask = 0 30 bit periods
taIndexMask	'0'B		
timingAdvanceIndex	OMIT		not present if taIndexMask = 0
timingAdvanceSlotNumber	OMIT		not present if taIndexMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_PagModeNormal Group : Structured Type : PageModeIE Derivation Path : Encoding Variation : Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	-		
sprb	'00'B		spare bits
pgm	'00'B		page mode
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_PageModelE			
Group :			
Structured Type : PageModelE			
Derivation Path :			
Encoding Variation :			
Comments : Page mode 3GPP TS 44.018 clause 10.5.2.26			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
sprb	'00'B		spare bits
pgm	tsc_RR_PagingNormal		page mode
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCH_Descr_Def			
Group :			
Structured Type : PBCCH_Descr			
Derivation Path :			
Encoding Variation :			
Comments : values from TS 51.010-1 v.5.5.0 subclause 40.2.1.1.1			
Element Name	Element Value	Element Encoding	Comments
pb	'0110'B		-12 dB
tSC	'101'B		
tN	'100'B		Timeslot 4
carrierMask1	'1'B		
carrierMask2	OMIT		not BCCH carrier
aRFCN	OMIT		ARFCN not present
mAIO	'000010'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCHFreqInfo(p_FreqList : FreqListNoIEI)			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
h	'1'B		h='1'B: hopping channel; h='0'B: non-hopping channel
spr	'000'B		'000'B
spr1	OMIT		'00'B, if h = '0'B, otherwise OMIT
maio	'000010'B		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	'000000'B		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	OMIT		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	p_FreqList		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PBCCH_Info_Def(p_LowRate : B6)			
Group :			
Structured Type : PBCCH_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
pSI1_REPEAT_PERIOD	'0010'B		The repeat period of packet system information Type 1
pSI_COUNT_HR	'0011'B		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_LR	p_LowRate		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PCCCH_DescrListNone			
Group :			
Structured Type : PCCCH_DescriptionList			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
prefix1	-		value = 1 if present
pCCCHDescription1	-		the value of this bit is always zero to indicate the end of the structure
endingRepetition	'0'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PCCCH_DescriptionList_Hopping(p_MA_Number:B4;p_mAIO:B6;p_TS_Allocation:B8)			
Group :			
Structured Type : PCCCH_DescriptionList			
Derivation Path :			
Encoding Variation :			
Comments : The definition of this type is <PCCCH Description Lists struct> ::= {1 <PCCCH Description struct>}**0, so the prefix bit and following structure may repeat infinite times. This TTCN definition shall be modified to include more pCCCHDescription if more than 1 pCCCHDescription are required in the constraint.			
Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		value = 1 if present
pCCCHDescription1	c_PCCCHDescription_Hopping(p_MA_Number,p_mAIO,p_TS_Allocation)		the value of this bit is always zero to indicate the end of the structure
endingRepetition	'0'B		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Constraint Declaration			
Constraint Name : c_PCCCHDescription_Hopping(p_MA_Number:B4;p_mAIO:B6;p_TS_Allocation:B8)			
Group :			
Structured Type : PCCCHDescription			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
tSC	'101'B		
nonHoppingPCCCHCarrierMask	'1'B		
nonHoppingPCCCHCarriers	OMIT		not present if nonHoppingPCCCH_Carriers = 1
mA_NUMBER	p_MA_Number		not present if nonHoppingPCCCH_Carriers = 0
hoppingPCCCHCarriers	c_HoppingPCCCHCarrierList(p_mAIO,p_TS_Allocation)		not present if nonHoppingPCCCH_Carriers = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PCCCH_Info(p_BS_PBCCH_BLKs : B2; p_BS_PAG_BLKs_RES: B4; p_BS_PRACH_BLKs : B4)			
Group :			
Structured Type : PCCCH_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
bS_PBCCH_BLKs	p_BS_PBCCH_BLKs		
bS_PAG_BLKs_RES	p_BS_PAG_BLKs_RES		
bS_PRACH_BLKs	p_BS_PRACH_BLKs		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_PCCCHParams
Group :
Structured Type : PCCCH_OrganisationParameters
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
bS_PCC_REL	'0'B		
bS_PBCCH_BLKs	'10'B		
bS_PAG_BLKs_RES	'0010'B		
bS_PRACH_BLKs	'0001'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PktDownlinkAss_IARO(p_TLLI :O4; p_Gamma : B5)
Group :
Structured Type : PacketDownlinkAssign
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tLLI	p_TLLI		TLLI
mask	'1'B		
tFI_Assignment	tsc_downlinkTFI		temporary flow identifier
rLC_Mode	'0'B		not present if mask = 0 RLC mode
alphaMask	'1'B		not present if mask = 0.
aLPHA	'0101'B		not present if mask = 0 or alphaMask = 0
gAMMA	p_Gamma		not present if mask = 0
pOLLING	'0'B		not present if mask = 0
tA_VALID	'1'B		not present if mask = 0
taIndexMask	'0'B		
tIMING_ADVANCE_INDEX	-		not present if mask = 0 or taIndexMask = 0
startingTimeMask	'0'B		not present if mask = 0
tBF_STARTING_TIME	OMIT		not present if mask = 0 or startingTimeMask = 0
pwrCtrlMask	'0'B		not present if mask = 0
p0	-		not present if mask = 0 or pwrCtrlMask = 0
spareBit	-		not present if mask = 0 or pwrCtrlMask = 0
pR_MODE	-		not present if mask = 0 or pwrCtrlMask = 0
egprsMask	'0'B		L
eGPRSWindowSize	-		not present if egprsMask = L
linkQualityMeasMode	-		not present if egprsMask = L
bepPriod2Mask	-		not present if egprsMask = L
BepPeriod2	-		not present if egprsMask = L or bepPriod2Mask = 0
r6Mask	-		not present if egprsMask = L
pfiMask	-		not present if egprsMask = L or r6Mask = L
pFI	-		not present if egprsMask = L, r6Mask = L or pfiMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PktUplinkAss_IARO(p_Gamma : B5; p_StartTime : B16)
Group :
Structured Type : PacketUplinkAssign
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
allocMask	'1'B		0 -> indicating single block allocation
tFI_Assignment	tsc_uplinkTFI		temporary flow identifier
pOLLING	'1'B		not present if allocMask = 0
spareBit	'0'B		not present if allocMask = 0
uSF	tsc_DefUSF		not present if allocMask = 0 or fixedAllocMask = 1
uSFGranularity	'0'B		not present if allocMask = 0 or fixedAllocMask = 1
p0Mask	'0'B		not present if allocMask = 0 or fixedAllocMask = 1
p0	-		not present if allocMask = 0 or fixedAllocMask = 1 or p0Mask = 0
pR_MODE	-		not present if allocMask = 0 or fixedAllocMask = 1 or p0Mask = 0
ChannelCodingCommand	'00'B		not present if allocMask = 0
tLLI_BlockChannelCodeing	'1'B		not present if allocMask = 0
alphaMask	'1'B		not present if allocMask = 0
aLPHA	'0101'B		not present if allocMask = 0 or alphaMask = 0
gMMA	p_Gamma		not present if allocMask = 0
taMask	'0'B		not present if allocMask = 0
tIMING_ADVANCE_INDEX	-		not present if allocMask = 0 or taMask = 0
startingTimeMask	'1'B		not present if allocMask = 0
tBF_STARTING_TIME	p_StartTime		not present if allocMask = 0 or startingTimeMask = 0
alpha1Mask	-		present if allocMask = 0
aLPHA1	-		single block allocation not present if allocMask = 1 or alpha1Mask = 0
gMMA1	-		not present if allocMask = 1
prefixBits	-		not present if allocMask = 1
tBF_STARTING_TIME1	-		the value is 01 if present not present if allocMask = 1
p02Mask	-		not present if allocMask = 1
p02	-		not present if allocMask = 1 or p02Mask = L
spareBit2	-		not present if allocMask = 1 or p02Mask = L

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
pR_MODE2	–		not present if allocMask = 1 or p02Mask = L
r99Mask	'0'B		
extRAMask	–		not present if r99Mask = L
extRA	–		not present if r99Mask = L or extRAMask = 0
r6Mask	–		not present if r99Mask = L
pfiMask	–		not present if r99Mask = L or r6Mask = L
pFI	–		not present if r99Mask = L, r6Mask = L or pfiMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PowerCommand			
Group :			
Structured Type : PowerCommand			
Derivation Path :			
Encoding Variation :			
Comments : Power command 3GPP TS 44.018 clause 10.5.2.28			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
spareBits	'00'B		spare bits
fpc	'0'B		fast measurement reporting and power control
powerLevel	'01010'B		power level (0–31)
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_PowerControlParams(p_Gamma : B5)
Group :
Structured Type : PowerControlParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
aLPHA	'0101'B		
gmmaMask0	'0'B		
gMMA_TN0	-		not present if maskTN0 = 0
gmmaMask1	'0'B		
gMMA_TN1	-		not present if maskTN1 = 0
gmmaMask2	'0'B		
gMMA_TN2	-		not present if maskTN2 = 0
gmmaMask3	'0'B		
gMMA_TN3	-		not present if maskTN3 = 0
gmmaMask4	'1'B		
gMMA_TN4	p_Gamma		not present if maskTN4 = 0
gmmaMask5	'0'B		
gMMA_TN5	-		not present if maskTN5 = 0
gmmaMask6	'0'B		
gMMA_TN6	-		not present if maskTN6 = 0
gmmaMask7	'0'B		
gMMA_TN7	-		not present if maskTN7 = 0

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_PRACHCtrlParams			
Group :			
Structured Type : PRACH_ControlParameters			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
aCC_CONTR_CLASS	'0000000000000000'B		
mAX_RETRANS1	'00'B		
mAX_RETRANS2	'00'B		
mAX_RETRANS3	'00'B		
mAX_RETRANS4	'00'B		
sParameter	'0001'B		
tX_INT	'0010'B		
persistenceLevelMask	'0'B		
pERSISTENCE_LEVEL1	-		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL2	-		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL3	-		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL4	-		not present if persistenceLevelMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PSI2_Instance2_GSM			
Group :			
Structured Type : PSI2Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
rFL_Contents_Len	tsc_RFLContentsLen_3		Length of RFL contents
rFL_Contents	tsc_PSI2_INST2_RFL_Contents_GSM		Reference : 3GPP TS 44.060 clause 11.2.19 RFL contents
mALen	tsc_MALen_5		Length of GPRS MA contents
mABitmap	tsc_PSI2_MABitmap_GSM		Reference: 3GPP TS 44.060 clause 12.10a GPRS MA bitmap
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RACH_ControlParam(p_MaxRetx: B2; p_TxInteger: B4; p_CellBarAccess: B1; p_Re: B1; p_Acc2: B5;p_EmergCall: B1; p_Acc1:B10)			
Group :			
Structured Type : RACHControlParam			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
maxretx	p_MaxRetx		maximum retransmissions
txInteger	p_TxInteger		Tx integer, number of slots to spread transmission
cellBarAccess	p_CellBarAccess		cell barred for access
re	p_Re		call reestablishment allowed
acc_2	p_Acc2		access control class 15–11
ec	p_EmergCall		emergency call allowed
acc_1	p_Acc1		access control class 9–0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ReferenceAddress_PRR(p_packetRequestReference : PacketRequestReference)			
Group :			
Structured Type : ReferenceAddress			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
globalTFImask	'1'B		
gLOBAL_TFI	OMIT		not present if globalTFImask=1
mask2	'1'B		not present if globalTFImask=0
tLLI	OMIT		not present if globalTFImask=0 and mask2=1
mask3	'1'B		not present if globalTFImask=0 and mask2=0
tQI	OMIT		not present if globalTFImask=0 and mask2=0 and mask3=1
packetRequestRef	p_packetRequestReference		not present if globalTFImask=0 and mask2=0 and mask3=0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ReferenceFreq(p_rFL_NUMBER:B4;p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING) Group : Structured Type : ReferenceFreq Derivation Path : Encoding Variation : Comments : Reference : 3GPP TS 44.060 clause 11.2.19 rFL_Contents is the value part of "Frequency List" information element, the allowed formats are bit map 0, 1024 range, 512 range, 256 range, 128 range and variable bit map			
Element Name	Element Value	Element Encoding	Comments
rFL_NUMBER lengthOfRFLContents rFL_Contents	p_rFL_NUMBER p_rFL_Contents_Len p_rFL_Contents		identification of the RFL IE length = 3 the value part of "Frequency List" information element defined in 3GPP TS 44.018 clause 10.5.2.13
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ReferenceFreqLists(p_rFL_NUMBER:B4;p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING) Group : Structured Type : ReferenceFreqLists Derivation Path : Encoding Variation : Comments : The definition in CSN.1 is {1 < Reference Frequency struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more ReferenceFreq if more than 5 ReferenceFreq are required in the Constraint. Reference : 3GPP TS 44.060 clause 11.2.19			
Element Name	Element Value	Element Encoding	Comments
prefix1 referenceFreq1 endingRepetition	'1'B c_ReferenceFreq(p_rFL_NUMBER,p_rFL_Contents_Len,p_rFL_Contents) '0'B		value = 1 if present Value always ZERO, indicates the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RefFreqListNone			
Group :			
Structured Type : ReferenceFreqLists			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
prefix1	-		value = 1 if present
referenceFreq1	-		
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_RFN_0			
Group :			
Structured Type : RFN			
Derivation Path :			
Encoding Variation :			
Comments : Assign some arbitrary values to the RFN.			
Element Name	Element Value	Element Encoding	Comments
t1_	'00000'B		(FN div 1326) mod 32
t3	'000000'B		FN mod 26
t2	'00000'B		FN mod 51
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_RFN_Omit			
Group :			
Structured Type : RFN			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
t1_	'11111'B		(FN div 1326) mod 32
t3	'111111'B		FN mod 51
t2	'11111'B		Results in ignoring of RFN by the lower Layer.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_RR_CauNormalevent			
Group :			
Structured Type : RR_Cause			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	-		
cause	'00000000'B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ReqRef (p_RR_RA : INTEGER ; p_RR_RFN : RFN)			
Group :			
Structured Type : ReqRef			
Derivation Path :			
Encoding Variation :			
Comments : Request reference 3GPP TS 44.018 clause 10.5.2.30			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
radoAccessInfo	INT_TO_BIT (p_RR_RA , 8)		
fn	p_RR_RFN		ER1978
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_RR_Cause			
Group :			
Structured Type : RR_Cause			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	-		
cause	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH4_Ch(p_CipherMode: CipherModeSetting; p_CipherKey : B64; p_PowerLevel : B5; p_TimingAdvance : B7)			
Group :			
Structured Type : DedCH_Info			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
chMode	c_ChMode(tsc_SignallingOnly)		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	p_CipherMode		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	p_CipherKey		power level value used in L1 header
powerLevel	p_PowerLevel		
timingAdvance	p_TimingAdvance		timing advance value used in L1 header
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SDCCH8_FreqGSM900			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN =50			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000110010'B		absolute RF channel number = 50
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ServingCellParams			
Group :			
Structured Type : ServingCellParams			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
gPRS_RXLEV_ACCESS_MIN	'011111'B		-80 dBm
gPRS_MS_TXPWR_MAX_CCH	'01010'B		
hCS_ServingCellParametersMask	'1'B		
hCS_ServingCellParameters	c_HCS('001'B,'00000'B)		not present if hCS_ServingCellParametersMask = 0
mULTIBAND_REPORTING	'00'B		Normal Reporting of six strongest cells
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Constraint Declaration			
Constraint Name : c_SI1_RO(p_BandInd : B1)			
Group :			
Structured Type : SI1RO			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
mask	'0'B		
nCH_Position	OMIT		not present if mask = L
bandIndicator	p_BandInd		L= DCS1800; H=PCS1900
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI2quater_GPRS_3G_MeasParams(p_QSearch_P : B4; p_SearchPrio : B1)
Group :
Structured Type : SI2quaterRO_GPRS_3G_MeasParamDescr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearch_P	p_QSearch_P		
sEARCH_PRIO_3G	p_SearchPrio		
fDD_REP_QUANT_Mask	'0'B		
fDD_REP_QUANT	-		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTI NG	-		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	'0'B		
fDD_REPORTING_OFFSET	-		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRES HOLD	-		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	'0'B		
tDD_MULTIRAT_REPORTI NG	-		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	'0'B		
tDD_REPORTING_OFFSET	-		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRES HOLD	-		not present if tDD_ReportingMask = 0

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_SI2quaterMeasParams3G_Meas(p_Qsearch_I, p_Qoffset : B4; p_Qmin : B3)			
Group :			
Structured Type : SI2quaterRO_MeasParamDescr3G			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
qsearch_I	p_Qsearch_I		
qsearch_C_Initial	'0'B		
fDDMask	'1'B		
fDD_Qoffset	p_Qoffset		not present if fDDMask = 0
fDD_REP_QUANT	'0'B		not present if fDDMask = 0
fDD_MULTIRAT_REPORTI NG	'01'B		not present if fDDMask = 0
fDD_Qmin	p_Qmin		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	-		not present if tDDMask = 0
tDD_MULTIRAT_REPORTI NG	-		not present if tDDMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SI2quaterMeasParams3G_ISHO			
Group :			
Structured Type : SI2quaterRO_MeasParamDescr3G			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
qsearch_I	'0111'B		
qsearch_C_Initial	'0'B		
fDDMask	'1'B		
fDD_Qoffset	'1000'B		not present if fDDMask = 0
fDD_REP_QUANT	'0'B		not present if fDDMask = 0
fDD_MULTIRAT_REPORTI NG	'01'B		not present if fDDMask = 0
fDD_Qmin	'000'B		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	-		not present if tDDMask = 0
tDD_MULTIRAT_REPORTI NG	-		not present if tDDMask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI2quarter_3G_1NCell(p_ARFCN: B14; p_ScrnCode : BITSTRING)
Group :
Structured Type : NeighCellDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
indexMask	'0'B		
indexStart3G	–		not present if indexMask = 0
absoluteIndexMask	'0'B		
absoluteIndexStartEMR	–		not present if absoluteIndexMask = 0
fDDMask	'1'B		
uTRAN_FDD_Description	c_G_FDD_Descr(p_ARFCN , p_ScrnCode)		not present if fDDMask = 0
tDDMask	'0'B		
uTRAN_TDD_Description	–		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quarterRO(p_NeighCellMask : B1; p_NeighCellDescr3G : NeighCellDescr3G;
p_MeasParamMask : B1; p_MeasParamDescr3G : SI2quarterRO_MeasParamDescr3G;
p_GPRS3GMeasParamMask : B1; p_GPRS3GMeasParamDescr :
SI2quarterRO_GPRS_3G_MeasParamDescr)

Group :

Structured Type : SI2quarterRO

Derivation Path :

Encoding Variation :

Comments :

Element Name	Element Value	Element Encoding	Comments
bA_IND	'0'B		
bA_IND_3G	'0'B		
mP_CHANGE_MARK	'0'B		
sl2quarter_INDEX	'0000'B		
sl2quarter_COUNT	'0000'B		
measParamMask	'0'B		
measParamDescription	-		not present if measParamMask = 0
gprsRTDMask	'0'B		
gPRS_RealTimeDiffDescr	-		not present if gprsRTDMask = 0
gprsBSICMask	'0'B		
gPRS_BSIC_Description	-		not present if gprsBSICMask = 0
gprsRepPrioMask	'0'B		
gPRS_REP_PRIORITY_Des cr	-		not present if gprsRepPrioMask = 0
gprsMeasParamMask	'0'B		
gPRS_MeasParamsDescr	-		not present if gprsMeasParamMask = 0
ncMeasParamMask	'0'B		
NC_Measurement_Paramete rs	-		not present if ncMeasParamMask = 0
extnLengthMask	'0'B		
extensionLength	-		
extnMask	-		not present if extnLengthMask = 0
numCells	-		not present if extnLengthMask = 0 or extnMask = 0
cCNSupported	-		not present if extnLengthMask = 0 or extnMask = 0
neighCellMask	p_NeighCellMask		
neighCellDes3G	p_NeighCellDescr3G		not present if neighCellMask = 0
measParam3GMask	p_MeasParamMask		
measurementParams3G	p_MeasParamDescr3G		not present if measParam3GMask = 0
gprsMeasParam3GMask	p_GPRS3GMeasParamMask		
gPRS_3G_MeasParamDescr	p_GPRS3GMeasParamDescr		not present if gprsMeasParam3GMask = 0
rel5Mask	'0'B		

Continued on next page

Continued from previous page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
addMeasMask	OMIT		not present if mask = L or rel5Mask = L
addMeasParam3G	OMIT		not present if mask = L, rel5Mask = L or addMeasMask = 0
addMeasMask2	OMIT		not present if mask = L or rel5Mask = L
fddRepThres2Mask	OMIT		not present if mask = L, rel5Mask = L or addMeasMask2 = 0
fddRepThreshold2	OMIT		not present if mask = L, rel5Mask = L, addMeasMask2 = 0 or fddRepThres2Mask = 0
rel6Mask	OMIT		not present if rel5Mask = L
cCNActive	OMIT		not present if rel5Mask = L or rel6Mask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_DTM(p_RAC : O1; p_NMO : B2)
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : ref: 51.010 clause 40.2.1

Element Name	Element Value	Element Encoding	Comments
mask	'1'B		the rest fields except spareBits are all not present if mask = L
bCCH_CHANGE_MARK	'000'B		
sl_CHANGE_FIELD	'0000'B		
sl3ChangeMask	'0'B		
sl13_CHANGE_MARK	OMIT		not present if sl3ChangeMask = 0
gPRS_MobileAllocation	OMIT		not present if sl3ChangeMask = 0
pbccchMask	'0'B		'0' -> no PBCCH
rAC	p_RAC		present if pbccchMask = 0
sPGC_CCCH_SUP	'1'B		present if pbccchMask = 0
pPRIORITY_ACCESS_THR	'110'B		present if pbccchMask = 0
nETWORK_CONTROLI_OR DER	'00'B		present if pbccchMask = 0
gPRS_CellOptions	c_GPRS_CellOptionsSI13DTM(p_NMO)		present if pbccchMask = 0
gPRS_PowerControlParameters	c_GPRS_PowerControlParameter		present if pbccchMask = 0
pSI1_REPEAT_PERIOD	OMIT		present if pbccchMask = 1
pBCCH_Description	OMIT		present if pbccchMask = 1
r99Mask	'1'B		
sGSNR	'1'B		present if r99Mask = H
r4Mask	OMIT		
sl_STATUS_IND	OMIT		present if r4Mask = H
r6Mask	OMIT		
txPwrMaxCCHMask	OMIT		not present if r6Mask = L
lbMSTxPwrMaxCCH	OMIT		not present if r6Mask = L or txPwrMaxCCHMask = 0
sl2nSupport	OMIT		not present if r6Mask = L

Detailed Comments : The info element has a fixed length of 20 octets.

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_GPRS(p_RAC : O1; p_NMO : B2)
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : ref: 51.010 clause 40.2.1

Element Name	Element Value	Element Encoding	Comments
mask	'1'B		the rest fields except spareBits are all not present if mask = L
bCCH_CHANGE_MARK	'000'B		
sl_CHANGE_FIELD	'0000'B		
sl3ChangeMask	'0'B		
sl13_CHANGE_MARK	OMIT		not present if sl3ChangeMask = 0
gPRS_MobileAllocation	OMIT		not present if sl3ChangeMask = 0
pbccchMask	'0'B		'0' -> no PBCCH
rAC	p_RAC		present if pbccchMask = 0
sPGC_CCCH_SUP	'1'B		present if pbccchMask = 0
pPRIORITY_ACCESS_THR	'110'B		present if pbccchMask = 0
nETWORK_CONTROLI_OR DER	'00'B		present if pbccchMask = 0
gPRS_CellOptions	c_GPRS_CellOptionsSI13(p_NMO)		present if pbccchMask = 0
gPRS_PowerControlParameters	c_GPRS_PowerControlParameter		present if pbccchMask = 0
pSI1_REPEAT_PERIOD	OMIT		present if pbccchMask = 1
pBCCH_Description	OMIT		present if pbccchMask = 1
r99Mask	'1'B		
sGSNR	'1'B		present if r99Mask = H
r4Mask	OMIT		
sl_STATUS_IND	OMIT		present if r4Mask = H
r6Mask	OMIT		
txPwrMaxCCHMask	OMIT		not present if r6Mask = L
lbMSTxPwrMaxCCH	OMIT		not present if r6Mask = L or txPwrMaxCCHMask = 0
sl2nSupport	OMIT		not present if r6Mask = L

Detailed Comments : The info element has a fixed length of 20 octets.

Structured Type Constraint Declaration			
Constraint Name : c_SI13PBCCH_Location_SI13			
Group :			
Structured Type : SI13PBCCH_Location			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.37b			
Element Name	Element Value	Element Encoding	Comments
sl13LocationMask	'0'B		SI13 Location
sl13_LOCATION	'0'B		SI13 on BCCH Norm
PBCCH_LOCATION	OMIT		not present if sl13LocationMask = 1
pSI1_REPEAT_PERIOD	OMIT		not present if sl13LocationMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SI15_RO(p_GSMBand : B4)			
Group :			
Structured Type : SI15RO			
Derivation Path :			
Encoding Variation :			
Comments : ref: 51.010 clause 20.1			
Element Name	Element Value	Element Encoding	Comments
si15Index	'00'B		
si15Count	'00'B		
dm_CHANGE_MARK	'0000'B		
prefix1	'1'B		
dynMappingList	c_DynMap(p_GSMBand)		
endingRepetition	'0'B		Always set to 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2quater(p_SI2ter : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : Indicates SI2quater sent on BCCH Norm

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sl2terIndicator	p_SI2ter		no SI 2ter
earlyClassMarkSendingControl	'0'B		
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sl13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'1'B		mask bit for SI2quaterPosition
sl2quaterPosition	'0'B		not present if mask5 = L
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2ter
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : all bits are spare, except SI2ter

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sl2terIndicator	'1'B		SI 2ter
earlyClassMarkSendingControl	'0'B		no ECMS
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sl13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'0'B		mask bit for SI2quaterPosition
sl2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_GPRS
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : indicating SI13 is broadcasted. 3GPP TS 51.010 clause 40.2.1.1.1 GPRS supported

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional selection parameters (L= no optional parameter)
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset (L= no power offset)
powerOffset	OMIT		not present
sl2terIndicator	'0'B		no SI 2ter (L=no SI2ter)
earlyClassMarkSendingControl	'1'B		perform early classmark sending (H=allowed)
mask3	'0'B		no system information type 9 (L=no SI9)
schedulingWhere	OMIT		not present
mask4	'1'B		GPRS supported (H=support GPRS)
rA_Colour	'001'B		RA colour
sl13Position	'0'B		SI13 is on BCCH Norm
earlyClassMarksendingRestriction3G	'1'B		UTRAN classmark change message shall be sent with the Early classmark sending (L= no)
mask5	'0'B		L=no SI2ter
sl2quaterPosition	OMIT		
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_Spare
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : all bits are spare, 3GPP TS 51.010 clause 26.6.14.

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sl2terIndicator	'0'B		no SI 2ter
earlyClassMarkSendingControl	'0'B		no ECMS
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sl13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'0'B		mask bit for SI2quaterPosition
sl2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI4_RO_GPRS
Group :
Structured Type : SI4RO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 51.010 clause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional Cell selection parameter
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset
powerOffset	OMIT		not present if powerOffsetMask = 0
raColourMask	'1'B		GPRS indicator (H)
rA_Colour	'001'B		
sl13Position	'0'B		on BCCH Norm
breakMask	'0'B		L
breakIndicator	'0'B		present if breakMask = L, SI4 Rest Octets_S, is not sent in SYSTEM INFORMATION TYPE 7 and 8
IsaParamMask	OMIT		not present
pRIO_THR	OMIT		not present
ISA_OFFSET	OMIT		not present
mccMask	OMIT		not present
mCC	OMIT		not present
nMC	OMIT		not present
cellIDMask	OMIT		not present
cellIdentity	OMIT		not present
IsaMask	OMIT		not present
sl4RO_LSA_ID_Info	OMIT		not present
cBQ3Mask	OMIT		not present if breakMask = L
cBQ3	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altMask	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altPosition	OMIT		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI4_RO_Spare
Group :
Structured Type : SI4RO
Derivation Path :
Encoding Variation :
Comments : all bits are set to spare, 3GPP TS 51.010 clause 26.6.14

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional Cell selection parameter
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset
powerOffset	OMIT		not present
raColourMask	'0'B		no GPRS indicator
rA_Colour	OMIT		not present
si13Position	OMIT		not present
breakMask	'0'B		break
breakIndicator	'0'B		SI4 Rest Octets_S, is not sent in SYSTEM INFORMATION TYPE 7 and 8
IsaParamMask	OMIT		not present
pRIO_THR	OMIT		not present
ISA_OFFSET	OMIT		not present
mccMask	OMIT		not present
mCC	OMIT		not present
nMC	OMIT		not present
cellIDMask	OMIT		not present
cellIdentity	OMIT		not present
IsaMask	OMIT		not present
si4RO_LSA_ID_Info	OMIT		not present
cBQ3Mask	OMIT		not present
cBQ3	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altMask	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altPosition	OMIT		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_PBCCH_DCS
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : Used for DCS 1800 and PCS 1900.
 Values taken from subclause 40.2.1 of TS 51.101-1 v.5.5.0

Element Name	Element Value	Element Encoding	Comments
mask	'1'B		H, SI13 Rest Octets is not spare
bCCH_CHANGE_MARK	'000'B		
sI_CHANGE_FIELD	'0000'B		update of unspecified SI messages
sI3ChangeMask	'1'B		GPRS Mobile Allocation is present
sI13_CHANGE_MARK	'00'B		
gPRS_MobileAllocation	c_GPRSMobileAlloc('000011'B, '1111'B)		If the number of bits used here changes, spare padding must also be changed
pbccchMask	'1'B		PBCCH present
rAC	OMIT		'00000101'B
sPGC_CCCH_SUP	OMIT		
pRRIORITY_ACCESS_THR	OMIT		
nETWORK_CONTROLI_ORDER	OMIT		
gPRS_CellOptions	OMIT		
gPRS_PowerControlParameters	OMIT		
pSI1_REPEAT_PERIOD	'0010'B		3 frames PSI1repeat period
pBCCH_Description	c_PBCCH_Descr_Def		
r99Mask	'1'B		R99 addition present
sGSNR	'1'B		R99 onwards SGSN
r4Mask	'0'B		no R4 addition
sI_STATUS_IND	OMIT		present if r4Mask = H
r6Mask	OMIT		
txPwrMaxCCHMask	OMIT		not present if r6Mask = L
lbMSTxPwrMaxCCH	OMIT		not present if r6Mask = L or txPwrMaxCCHMask = 0
sI2nSupport	OMIT		not present if r6Mask = L

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_PBCCH_GSM
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : Used for GSM 900, 700 and 850.
 Values taken from subclause 40.2.1 of TS 51.101-1 v.5.5.0

Element Name	Element Value	Element Encoding	Comments
mask	'1'B		H, SI13 Rest Octets is not spare
bCCH_CHANGE_MARK	'000'B		
sl_CHANGE_FIELD	'0000'B		update of unspecified SI messages
sl3ChangeMask	'1'B		GPRS Mobile Allocation is present
sl13_CHANGE_MARK	'00'B		
gPRS_MobileAllocation	c_GPRSMobileAlloc('000101'B, '001111'B)		If the number of bits used here changes, spare padding must also be changed
pbccchMask	'1'B		PBCCH present
rAC	OMIT		'00000101'B
sPGC_CCCH_SUP	OMIT		
pRRIORITY_ACCESS_THR	OMIT		
nETWORK_CONTROLI_ORDER	OMIT		
gPRS_CellOptions	OMIT		
gPRS_PowerControlParameters	OMIT		
pSI1_REPEAT_PERIOD	'0010'B		3 frames PSI1repeat period
pBCCH_Description	c_PBCCH_Descr_Def		
r99Mask	'1'B		R99 addition present
sGSNR	'1'B		R99 onwards SGSN
r4Mask	'0'B		no R4 addition
sl_STATUS_IND	OMIT		present if r4Mask = H
r6Mask	OMIT		
txPwrMaxCCHMask	OMIT		not present if r6Mask = L
lbMSTxPwrMaxCCH	OMIT		not present if r6Mask = L or txPwrMaxCCHMask = 0
sl2nSupport	OMIT		not present if r6Mask = L

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3RO_GPRS_SI2quarter
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional selection parameters (L= no optional parameter)
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset (L= no power offset)
powerOffset	OMIT		not present
sl2terIndicator	'0'B		no SI 2ter (L=no SI2ter)
earlyClassMarkSendingControl	'1'B		perform early classmark sending (H=allowed)
mask3	'0'B		no system information type 9 (L=no SI9)
schedulingWhere	OMIT		not present
mask4	'1'B		GPRS supported (H=support GPRS)
rA_Colour	'001'B		RA colour
sl13Position	'0'B		SI13 is on BCCH Norm
earlyClassMarksendingRestriction3G	'1'B		UTRAN classmark change message shall be sent with the Early classmark sending (L= no)
mask5	'1'B		SI2quarter broadcasted (L=no SI2ter)
sl2quarterPosition	'0'B		
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2quaterBCCHExt(p_SI2ter : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : Indicates SI2quater sent on BCCH Ext

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sl2terIndicator	p_SI2ter		no SI 2ter
earlyClassMarkSendingControl	'0'B		
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sl13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'1'B		mask bit for SI2quaterPosition
sl2quaterPosition	'1'B		sent on BCCH Ext
SI13altPosition	OMIT		only present if lu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI6_RO_Spare(p_Band : B1)
Group :
Structured Type : SI6RO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
pchNchMask	'0'B		PCH, NCH info mask
pagingChRestructuring	-		not present if pchNchMask = 0
nLN_SACCH	-		not present if pchNchMask = 0
prioMask	-		not present if pchNchMask = 0
callPriority	-		not present if pchNchMask = 0 or prioMask = 0
nLN_Status	-		not present if pchNchMask = 0
inbandMask	'0'B		
inbandNotifications	-		not present if inbandMask = 0
inbandPagings	-		not present if inbandMask = 0
dTM_Supported	'0'B		
rAC	-		
mAX_LAPDm	-		
bandIndicator	p_Band		L = 1800 band supported, H = 1900 band supported
txPwrMask	'0'B		
gPRS_MS_TXPWT_MAX_CH	-		not present if txPwrMask = L
mBMSMask	'0'B		
dedModeMBMSNoteSupport	-		not present if mBMSMask = L
mNCISupport	-		not present if mBMSMask = L

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_SplitPGCycleInitial			
Group :			
Structured Type : DRXparamter			
Derivation Path :			
Encoding Variation :			
Comments : DRX paramter 3GPP 24.008 / 10.5.5.6. This is just to initialise the tcv and should be overwritten by what is received from the UE			
Element Name	Element Value	Element Encoding	Comments
splitPGcycleCode	'00000000'B		Split PG cycle code
cnDRXcoef	'0000'B		CN specific DRX cycle length coefficient
splitOnCCCH	'0'B		Split on CCCCH
nonDRXtimer	'000'B		non-DRX timer
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_TA			
Group :			
Structured Type : TA			
Derivation Path :			
Encoding Variation :			
Comments : Timing advance GSM 04.08, 10.5.2.40			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'01111101'B
sprb	'00'B		'00'B
value	'000000'B		Note 1 one unit = 48/13 microseconds (in 1 bit periods)
Detailed Comments : Note 1. the value of 0 for Timing advance will be used, until the primitive support to inform SS of Timing advance desired to be simulated. Once this support is available default value of 20 for GSM cell and 30 for GPRS cell shall be used.			

Structured Type Constraint Declaration			
Constraint Name : c_G_TBFFMode(p_downlink : B1)			
Group :			
Structured Type : DedicatedModeOrTBF			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
spareBit	'0'B		always = 0
twoMsgAssig	'0'B		two message assignment
downlink	p_downlink		down link assignement
tBForDedicated	'1'B		TBF or dedicated mode
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_TCH_FreqGSM900			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments : no hopping ARFCN = 30			
Element Name	Element Value	Element Encoding	Comments
h	'0'B		non-hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000011110'B		absolute RF channel number = 30
hoppingFreqList	OMIT		hopping frequency list OMIT.
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_TimeSlotAllocation_TN4(p_PhychId : PhysicalChId)
Group :
Structured Type : TimeSlotAllocation
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
physicalChId	p_PhychId		Single PDCH or multi-slot configured PDCHs
tN0	FALSE		TRUE – time slot 0 is allocated; FALSE -- not allocated
tN1	FALSE		TRUE – time slot 1 is allocated; FALSE -- not allocated
tN2	FALSE		TRUE – time slot 2 is allocated; FALSE -- not allocated
tN3	FALSE		TRUE – time slot 3 is allocated; FALSE -- not allocated
tN4	TRUE		TRUE – time slot 4 is allocated; FALSE -- not allocated
tN5	FALSE		TRUE – time slot 5 is allocated; FALSE -- not allocated
tN6	FALSE		TRUE – time slot 6 is allocated; FALSE -- not allocated
tN7	FALSE		TRUE – time slot 7 is allocated; FALSE -- not allocated

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TimeSlotAllocation_UA_TN4(p_USF: B3)
Group :
Structured Type : TimeSlotAllocation_UA
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tN0mask	'0'B		
uSF_TN0	OMIT		not present if tN0mask=0
tN1mask	'0'B		
uSF_TN1	OMIT		not present if tN1mask=0
tN2mask	'0'B		
uSF_TN2	OMIT		not present if tN2mask=0
tN3mask	'0'B		
uSF_TN3	OMIT		not present if tN3mask=0
tN4mask	'1'B		
uSF_TN4	p_USF		not present if tN4mask=0
tN5mask	'0'B		
uSF_TN5	OMIT		not present if tN5mask=0
tN6mask	'0'B		
uSF_TN6	OMIT		not present if tN6mask=0
tN7mask	'0'B		
uSF_TN7	OMIT		not present if tN7mask=0

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_TrCHFReqInfoHop (mod , hsn : INTEGER ; p_FreqListNoIEI : FreqListNoIEI)			
Group :			
Structured Type : FreqInfo			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	Element Value	Element Encoding	Comments
h	'1'B		h='1'B: hopping channel; h='0'B: non-hopping channel
spr	'000'B		'000'B
spr1	-		'00'B, if h = '0'B, otherwise OMIT
maio	INT_TO_BIT((tsc_G_MAIO MOD mod), 6)		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	INT_TO_BIT(hsn, 6)		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	-		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	p_FreqListNoIEI		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_UtranPreConfigInfo			
Group :			
Structured Type : UTRANPreConfigInfo			
Derivation Path :			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.7a			
Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
iel	?		
value	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI6_RO_DTM(p_Band : B1; p_RAC : B8; p_LAPDm : B3)
Group :
Structured Type : SI6RO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
pchNchMask	'0'B		PCH, NCH info mask
pagingChRestructuring	-		not present if pchNchMask = 0
nLN_SACCH	-		not present if pchNchMask = 0
prioMask	-		not present if pchNchMask = 0
callPriority	-		not present if pchNchMask = 0 or prioMask = 0
nLN_Status	-		not present if pchNchMask = 0
inbandMask	'0'B		
inbandNotifications	-		not present if inbandMask = 0
inbandPagings	-		not present if inbandMask = 0
dTM_Supported	'1'B		
rAC	p_RAC		
mAX_LAPDm	p_LAPDm		
bandIndicator	p_Band		L = 1800 band supported, H = 1900 band supported
txPwrMask	-		
gPRS_MS_TXPWT_MAX_CH	-		not present if txPwrMask = L
mBMSMask	'0'B		
dedModeMBMSNoteSupport	-		not present if mBMSMask = L
mNCISupport	-		not present if mBMSMask = L

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_MobileIdTMSI_Iv			
Group :			
Structured Type : MS_Identity_Iv			
Derivation Path :			
Encoding Variation :			
Comments : Default TMSI			
Element Name	Element Value	Element Encoding	Comments
iel	'05'O		TMSI consists of 4 octets special coding for TMSI even TMSI
iDigit1	'1111'B		
oddEvenInd	'0'B		
typeOfId	'100'B		
otherDigits	tsc_G_TMSI_Def		
Detailed Comments :			

ASN.1 Type Constraint Declaration
Constraint Name : c_PowerOffsetInfoBelow64k
Group :
ASN1 Type : PowerOffsetInformation
Derivation Path :
Encoding Variation :
Comments :
Constraint Value
<pre> { gainFactorInformation signalledGainFactors:{ modeSpecificInfo fdd:{ gainFactorBetaC tsc_GainFactorBetaC_Below64k }, gainFactorBetaD tsc_GainFactorBetaD, referenceTFC_ID 0 }, powerOffsetPp_m OMIT } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_PowerOffsetInfoComputed
Group	:
ASN1 Type	: PowerOffsetInformation
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ gainFactorInformation computedGainFactors : 0, powerOffsetPp_m OMIT }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_PowerOffsetInfoHigher64k
Group	:
ASN1 Type	: PowerOffsetInformation
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ gainFactorInformation signalledGainFactors:{ modeSpecificInfo fdd:{ gainFactorBetaC tsc_GainFactorBetaC_Higher64k }, gainFactorBetaD tsc_GainFactorBetaD, referenceTFC_ID 0 }, powerOffsetPp_m OMIT }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_PowerOffsetInfoDefCfg9
Group	:
ASN1 Type	: PowerOffsetInformation
Derivation Path	: c_PowerOffsetInfoHigher64k.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE gainFactorInformation.signalledGainFactors.modeSpecificInfo.fdd.gainFactorBetaC BY 8	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_148_DL_Info_RM160(p_ActTime: ActivationTime)
Group :
ASN1 Type : CphyTrchConfigReq
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  activationTime activationCFN : p_ActTime,
  ulconnectedTrCHList OMIT,
  ulTFCS OMIT,
  dlconnectedTrCHList {
    { trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_576_TFS},
    { trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_DL_RM160 }
  },
  dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( cd_PowerOffsetInfoDefCfg9 )
}
  
```

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.17):
 TTI = 40 ms;
 five transport formats: TransportBlocks = 0, TB size = 576 bits; TransportBlock = 1, Size = 576 bits;
 TransportBlocks = 2, TB size = 576 bits; TransportBlock = 3, Size = 576 bits; TransportBlocks = 4,
 TB size = 576 bits.
 coding = turbo;
 CRCsize = 16;
 RateMatching = 125
 For DCH5 (34.108 cl. 6.10.2.4.17):
 TTI = 40 ms;
 two transport formats: TransportBlocks = 1, TB size = 148 bits; TransportBlock = 0, Size = 148.
 coding = convolutional;
 coding rate = 1/3;
 CRCsize = 16;
 RateMatching = 155.

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_148_UL_Info_RM160(p_ActTime: ActivationTime)
Group :
ASN1 Type : CphyTrchConfigReq
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  activationTime activationCFN : p_ActTime,
  ulconnectedTrCHList {
    { trchid tsc_UL_DCH1,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_576_TFS},
    { trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_UL_RM160 }
  },
  ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx , -- sent to SS
  dlconnectedTrCHList OMIT,
  dlTFCS OMIT
}
  
```

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.17):
 TTI = 40 ms;
 five transport formats: TransportBlocks = 0, TB size = 576 bits; TransportBlock = 1, Size = 576 bits;
 TransportBlocks = 2, TB size = 576 bits; TransportBlock = 3, Size = 576 bits; TransportBlocks = 4,
 TB size = 576 bits.
 coding = turbo;
 CRCsize = 16;
 RateMatching = 125
 For DCH2 (34.108 cl. 6.10.2.4.17):
 TTI = 40 ms;
 two transport formats: TransportBlocks = 1, TB size = 148 bits; TransportBlock = 0, Size = 148.
 coding = convolutional;
 coding rate = 1/3;
 CRCsize = 16;
 RateMatching = 155..

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DL_CommonInformationDCH_ToDCH_Offset1 (p_Sf: SF512_AndPilot; p_Tfci_Existence : BOOLEAN)
Group	:
ASN1 Type	: DL_CommonInformation
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { dl_DPCH_InfoCommon{ cfnHandling maintain :NULL, modeSpecificInfo fdd:{ dl_DPCH_PowerControlInfo { modeSpecificInfo fdd:{ dpc_Mode singleTPC } }, powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT, dl_rate_matching_restriction OMIT, spreadingFactorAndPilot p_Sf, positionFixedOrFlexible flexible, tfci_Existence p_Tfci_Existence } }, modeSpecificInfo fdd:{ defaultDPCH_OffsetValue 1 , dpch_CompressedModelInfo OMIT, tx_DiversityMode noDiversity -- ssdt_Information OMIT This has been changed to dummy } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DL_CommonInformationPredefSIB16 (p_SF512_AndPilot : SF512_AndPilot)
Group	:
ASN1 Type	: DL_CommonInformationPredef
Derivation Path	:
Encoding Variation	:
Comments	: p_SF512_AndPilot depends on the configuration (one of the following constants could be used: tsc_DL_DPCH1_SFP_Speech, tsc_DL_DPCH1_SFP_Streaming, tsc_DL_DPCH1_SFP_64k_PS or tsc_DL_DPCH1_SFP_64k_CS)
Constraint Value	
<pre> { dl_DPCH_InfoCommon { modeSpecificInfo fdd : { spreadingFactorAndPilot p_SF512_AndPilot, positionFixedOrFlexible fixed, tfci_Existence FALSE} } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCommand (p_CiphAlg: CipheringAlgorithm; p_new_U_RNTI : U_RNTI_Short; p_CellInfoCfg : CellInfoCfg ; p_SF : SpreadingFactor ; p_SFCode : SF512_AndCodeNumber ; p_UARFCN_DL : UARFCN; p_Def_config_id: DefaultConfigIdentity)

Group :

ASN1 Type : HandoverToUTRANCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```

r3 : {
  handoverToUTRANCommand_r3 {
    new_U_RNTI p_new_U_RNTI,
    dummy OMIT,
    cipheringAlgorithm p_CiphAlg,
    specificationMode preconfiguration : {
      preConfigMode defaultConfig : {
        defaultConfigMode fdd,
        defaultConfigIdentity p_Def_config_id
      },
      rab_Info {
        rab_Identity gsm_MAP_RAB_Identity : '00000001'B,
        cn_DomainIdentity cs_domain
      },
      modeSpecificInfo fdd : {
        ul_DPCH_Info {
          ul_DPCH_PowerControllInfo {
            dpcch_PowerOffset -20,
            pc_Preamble 1,
            sRB_delay 7
          },
          scramblingCodeType longSC,
          reducedScramblingCodeNumber 0,
          spreadingFactor p_SF
        },
        dl_CommonInformationPost {
          dl_DPCH_InfoCommon {
            dl_DPCH_PowerControllInfo {
              modeSpecificInfo fdd : { dpc_Mode singleTPC }
            }
          }
        },
        dl_InformationPerRL_List {
          {
            primaryCPICH_Info { primaryScramblingCode p_CellInfoCfg.priScrmCode },
            dl_DPCH_InfoPerRL
            {
              pCPICH_UsageForChannelEst mayBeUsed,
              dl_ChannelisationCode {
                secondaryScramblingCode 1,
                sf_AndCodeNumber p_SFCode ,
                scramblingCodeChange noCodeChange
              },
              tpc_CombinationIndex 0
            }
          }
        },
        frequencyInfo {
          uarfcn_DL p_UARFCN_DL
        }
      }
    },
  },
}

```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>maxAllowedUL_TX_Power 21 }, nonCriticalExtensions OMIT }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCommandNoRABInfo (p_CiphAlg: CipheringAlgorithm; p_new_U_RNTI : U_RNTI_Short; p_CellInfoCfg : CellInfoCfg ; p_SF : SpreadingFactor ; p_SFCode : SF512_AndCodeNumber ; p_UARFCN_DL : UARFCN; p_Def_config_id: DefaultConfigIdentity)

Group :

ASN1 Type : HandoverToUTRANCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```

r3 : {
  handoverToUTRANCommand_r3 {
    new_U_RNTI p_new_U_RNTI,
    dummy OMIT,
    cipheringAlgorithm p_CiphAlg,
    specificationMode preconfiguration : {
      preConfigMode defaultConfig : {
        defaultConfigMode fdd,
        defaultConfigIdentity p_Def_config_id
      },
      rab_Info OMIT,
      modeSpecificInfo fdd : {
        ul_DPCH_Info {
          ul_DPCH_PowerControlInfo {
            dpcch_PowerOffset -20,
            pc_Preamble 1,
            sRB_delay 7
          },
          scramblingCodeType longSC,
          reducedScramblingCodeNumber 0,
          spreadingFactor p_SF
        },
        dl_CommonInformationPost {
          dl_DPCH_InfoCommon {
            dl_DPCH_PowerControlInfo {
              modeSpecificInfo fdd : { dpc_Mode singleTPC }
            }
          }
        },
        dl_InformationPerRL_List {
          {
            primaryCPICH_Info { primaryScramblingCode p_CellInfoCfg.priScrmCode },
            dl_DPCH_InfoPerRL
            {
              pCPICH_UsageForChannelEst mayBeUsed,
              dl_ChannelisationCode {
                secondaryScramblingCode 1,
                sf_AndCodeNumber p_SFCode ,
                scramblingCodeChange noCodeChange
              },
              tpc_CombinationIndex 0
            }
          }
        },
        frequencyInfo {
          uarfcn_DL p_UARFCN_DL
        }
      },
      maxAllowedUL_TX_Power 21
    },
    nonCriticalExtensions OMIT
  }
}

```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
}
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PredefinedRB_CfgSIB16
Group :
ASN1 Type : PredefinedRB_Configuration
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  re_EstablishmentTimer useT315,
  srb_InformationList {
    { rb_Identity tsc_RB1,
      rlc_InfoChoice rlc_Info : {
        ul_RLC_Mode ul_UM_RLC_Mode : {
          transmissionRLC_Discard timerBasedNoExplicit : dt100
        },
        dl_RLC_Mode dl_UM_RLC_Mode : NULL
      },
      rb_MappingInfo {{
        ul_LogicalChannelMappings oneLogicalChannel : {
          ul_TransportChannelType dch : tsc_UL_DCH5,
          logicalChannelIdentity tsc_UL_DCCH1,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 1
        },
        dl_LogicalChannelMappingList {{
          dl_TransportChannelType dch : tsc_DL_DCH5,
          logicalChannelIdentity tsc_DL_DCCH1
        }}
      }}
    },
    { rb_Identity tsc_RB2,
      rlc_InfoChoice rlc_Info : {
        ul_RLC_Mode ul_AM_RLC_Mode : {
          transmissionRLC_Discard maxDAT_Retransmissions : {
            maxDAT dat4,
            timerMRW te100,
            maxMRW mm4
          },
          transmissionWindowSize tw8,
          timerRST tr500,
          max_RST rst4,
          pollingInfo {
            timerPollProhibit tpp200,
            timerPoll tp200,
            poll_SDU sdu1,
            lastTransmissionPDU_Poll TRUE,
            lastRetransmissionPDU_Poll TRUE,
            pollWindow pw99
          }
        },
        dl_RLC_Mode dl_AM_RLC_Mode : {
          inSequenceDelivery TRUE,
          receivingWindowSize rw8,
          dl_RLC_StatusInfo {
            timerStatusProhibit tsp200,
            dummy te200,
            missingPDU_Indicator TRUE }
        }
      },
      rb_MappingInfo {{
        ul_LogicalChannelMappings oneLogicalChannel : {
          ul_TransportChannelType dch : tsc_UL_DCH5,
  
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>logicalChannelIdentity tsc_UL_DCCH2, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 2 }, dl_LogicalChannelMappingList {{ dl_TransportChannelType dch : tsc_DL_DCH5, logicalChannelIdentity tsc_DL_DCCH2 }} }}, { rb_Identity tsc_RB3, rlc_InfoChoice rlc_Info : { ul_RLC_Mode ul_AM_RLC_Mode : { transmissionRLC_Discard maxDAT_Retransmissions : { maxDAT dat4, timerMRW te100, maxMRW mm4 }, transmissionWindowSize tw8, timerRST tr500, max_RST rst4, pollingInfo { timerPollProhibit tpp200, timerPoll tp200, poll_SDU sdu1, lastTransmissionPDU_Poll TRUE, lastRetransmissionPDU_Poll TRUE, pollWindow pw99 } }, dl_RLC_Mode dl_AM_RLC_Mode : { inSequenceDelivery TRUE, receivingWindowSize rw8, dl_RLC_StatusInfo { timerStatusProhibit tsp200, dummy te200, missingPDU_Indicator TRUE } } }, rb_MappingInfo {{ ul_LogicalChannelMappings oneLogicalChannel : { ul_TransportChannelType dch : tsc_UL_DCH5, logicalChannelIdentity tsc_UL_DCCH3, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 3 }, dl_LogicalChannelMappingList {{ dl_TransportChannelType dch : tsc_DL_DCH5, logicalChannelIdentity tsc_DL_DCCH3 }} }}, { rb_Identity tsc_RB4, rlc_InfoChoice rlc_Info : { ul_RLC_Mode ul_AM_RLC_Mode : { transmissionRLC_Discard maxDAT_Retransmissions : { maxDAT dat4, timerMRW te100, maxMRW mm4 }, transmissionWindowSize tw8, timerRST tr500,</pre>

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>max_RST rst4, pollingInfo { timerPollProhibit tpp200, timerPoll tp200, poll_SDU sdu1, lastTransmissionPDU_Poll TRUE, lastRetransmissionPDU_Poll TRUE, pollWindow pw99 } }, dl_RLC_Mode dl_AM_RLC_Mode : { inSequenceDelivery TRUE, receivingWindowSize rw8, dl_RLC_StatusInfo { timerStatusProhibit tsp200, dummy te200, missingPDU_Indicator TRUE } } }, rb_MappingInfo {{ ul_LogicalChannelMappings oneLogicalChannel : { ul_TransportChannelType dch : tsc_UL_DCH5, logicalChannelIdentity tsc_UL_DCCH4, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, dl_LogicalChannelMappingList {{ dl_TransportChannelType dch : tsc_DL_DCH5, logicalChannelIdentity tsc_DL_DCCH4 }} }} }, rb_InformationList { { rb_Identity tsc_RB10, rlc_InfoChoice rlc_Info : { ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE } , dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE } } }, rb_MappingInfo { { ul_LogicalChannelMappings oneLogicalChannel : { ul_TransportChannelType dch : tsc_UL_DCH1, logicalChannelIdentity tsc_UL_DTCH1, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 6 }, dl_LogicalChannelMappingList { { dl_TransportChannelType dch : tsc_DL_DCH1, logicalChannelIdentity tsc_DL_DTCH1 } } } } }, { rb_Identity tsc_RB11, rlc_InfoChoice rlc_Info : { ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE } , dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE } }, rb_MappingInfo {</pre>

Continued on next page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> { ul_LogicalChannelMappings oneLogicalChannel : { ul_TransportChannelType dch : tsc_UL_DCH2, logicalChannelIdentity tsc_UL_DTCH2, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 6 }, dl_LogicalChannelMappingList { { dl_TransportChannelType dch : tsc_DL_DCH2, logicalChannelIdentity tsc_DL_DTCH2 } } } }, { rb_Identity tsc_RB12, rlc_InfoChoice rlc_Info : { ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE } , dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE } }, rb_MappingInfo { { ul_LogicalChannelMappings oneLogicalChannel : { ul_TransportChannelType dch : tsc_UL_DCH3, logicalChannelIdentity tsc_UL_DTCH3, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 6 }, dl_LogicalChannelMappingList { { dl_TransportChannelType dch : tsc_DL_DCH3, logicalChannelIdentity tsc_DL_DTCH3 } } } } } } } } } } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration
Constraint Name : c_PreDefPhyChCfgSIB16 (p_SF512_AndPilot : SF512_AndPilot) Group : ASN1 Type : PreDefPhyChConfiguration Derivation Path : Encoding Variation : Comments :
Constraint Value
<pre> { ul_DPCH_InfoPredef c_UL_DPCH_InfoPredefSIB16, dl_CommonInformationPredef c_DL_CommonInformationPredefSIB16 (p_SF512_AndPilot) } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PreDefTransChCfg_Speech12_2k
Group :
ASN1 Type : PreDefTransChConfiguration
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ul_CommonTransChInfo {
    tfc_Subset allowedTFC_List : {0, 1, 2, 3, 4, 5},
    modeSpecificInfo fdd : {ul_TFCS normalTFCI_Signalling : addition : {
      ctfcSize ctfc6Bit : {{
        ctfc6 0,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      }},
    },
    {
      ctfc6 1,
      powerOffsetInformation {
        gainFactorInformation signalledGainFactors : {
          modeSpecificInfo fdd : { gainFactorBetaC 0},
          gainFactorBetaD 0 },
        powerOffsetPp_m 0
      }
    },
    {
      ctfc6 11,
      powerOffsetInformation {
        gainFactorInformation signalledGainFactors : {
          modeSpecificInfo fdd : { gainFactorBetaC 0},
          gainFactorBetaD 0 },
        powerOffsetPp_m 0
      }
    },
    {
      ctfc6 12,
      powerOffsetInformation {
        gainFactorInformation signalledGainFactors : {
          modeSpecificInfo fdd : { gainFactorBetaC 0},
          gainFactorBetaD 0 },
        powerOffsetPp_m 0
      }
    },
    {
      ctfc6 13,
      powerOffsetInformation {
        gainFactorInformation signalledGainFactors : {
          modeSpecificInfo fdd : { gainFactorBetaC 0},
          gainFactorBetaD 0 },
        powerOffsetPp_m 0
      }
    },
    {
      ctfc6 23,
      powerOffsetInformation {
        gainFactorInformation signalledGainFactors : {
          modeSpecificInfo fdd : { gainFactorBetaC 0},
          gainFactorBetaD 0 },
    
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>powerOffsetPp_m 0 } } } } }, ul_AddReconfTrChInfoList {{ ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH1, transportFormatSet dedicatedTransChTFS : c_DCH_81_TFS_UE), { ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH2, transportFormatSet dedicatedTransChTFS : c_DCH_103_TFS_UE), { ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH3, transportFormatSet dedicatedTransChTFS : c_DCH_60_TFS_UE), { ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH5, transportFormatSet dedicatedTransChTFS : c_DCH_148_TFS_UE_UL }}, dl_CommonTransChInfo { sccpch_TFCS OMIT, modeSpecificInfo fdd : { dl_Parameters sameAsUL : NULL} }, dl_TrChInfoList {{ dl_TransportChannelType dch, dl_transportChannelIdentity tsc_DL_DCH1, tfs_SignallingMode sameAsULTrCH : { ul_TransportChannelType dch, ul_TransportChannelIdentity tsc_UL_DCH1 }, dch_QualityTarget { bler_QualityValue 0} }, { dl_TransportChannelType dch, dl_transportChannelIdentity tsc_DL_DCH2, tfs_SignallingMode sameAsULTrCH : { ul_TransportChannelType dch, ul_TransportChannelIdentity tsc_UL_DCH2 }, dch_QualityTarget { bler_QualityValue 0}}, { dl_TransportChannelType dch, dl_transportChannelIdentity tsc_DL_DCH3, tfs_SignallingMode sameAsULTrCH : { ul_TransportChannelType dch, ul_TransportChannelIdentity tsc_UL_DCH3 }, dch_QualityTarget { bler_QualityValue 0} , { dl_TransportChannelType dch, dl_transportChannelIdentity tsc_DL_DCH5, tfs_SignallingMode sameAsULTrCH : { ul_TransportChannelType dch, ul_TransportChannelIdentity tsc_UL_DCH5</pre>

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>}, dch_QualityTarget { bler_QualityValue 0} } }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cr_RadioAccessCapabilityAnyBand (
 p_PDCP_Capability: PDCP_Capability;
 p_DL_TurboSupport: TurboSupport;
 p_UL_TurboSupport: TurboSupport;
 p_SimultaneousSCCPCH_DPCH_Reception: SimultaneousSCCPCH_DPCH_Reception;
 p_SecurityCapability: SecurityCapability)

Group :

ASN1 Type : UE_RadioAccessCapability

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```

{
  pdcp_Capability p_PDCP_Capability,
  rlc_Capability {
    totalRLC_AM_BufferSize px_TotalRLC_AM_BufferSize,
    maximumRLC_WindowSize px_MaxRLC_WindowSize,
    maximumAM_EntityNumber px_MaxAM_EntityNumberRLC_Cap
  },
  transportChannelCapability {
    dl_TransChCapability {
      maxNoBitsReceived px_DL_MaxTB_Bits,
      maxConvCodeBitsReceived px_DL_MaxCC_TB_Bits,
      turboDecodingSupport p_DL_TurboSupport,
      maxSimultaneousTransChs px_DL_MaxTrCHs,
      maxSimultaneousCCTrCH_Count px_DL_MaxCCTrCH,
      maxReceivedTransportBlocks px_DL_MaxTTI_TB,
      maxNumberOfTFC px_DL_MaxTFS,
      maxNumberOfTF px_DL_MaxTF
    },
    ul_TransChCapability {
      maxNoBitsTransmitted px_UL_MaxTB_Bits,
      maxConvCodeBitsTransmitted px_UL_MaxCC_TB_Bits,
      turboEncodingSupport p_UL_TurboSupport,
      maxSimultaneousTransChs px_UL_MaxTrCHs,
      modeSpecificInfo fdd: NULL,
      maxTransmittedBlocks px_UL_MaxTTI_TB,
      maxNumberOfTFC px_UL_MaxTFS,
      maxNumberOfTF px_UL_MaxTF
    }
  },
  rf_Capability {fddRF_Capability * ,
  tddRF_Capability OMIT},
  physicalChannelCapability {
    fddPhysChCapability
    {
      downlinkPhysChCapability {
        maxNoDPCH_PDSCH_Codes px_MaxNoDPCH_PDSCH_Codes,
        maxNoPhysChBitsReceived px_MaxNoPhysChBitsReceived,
        supportForSF_512 pc_SupportForSF_512,
        dummy ?,
        dummy2 ?
      },
      uplinkPhysChCapability {
        maxNoDPDCH_BitsTransmitted px_MaxNoDPDCH_BitsTransmitted,
        dummy ?
      }
    }
  },
  tddPhysChCapability OMIT
},
  ue_MultiModeRAT_Capability {
    multiRAT_CapabilityList {
  
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> supportOfGSM pc_UMTS_GSM, supportOfMulticarrier pc_SupportOfMultiCarrier }, multiModeCapability fdd }, securityCapability p_SecurityCapability, ue_positioning_Capability { standaloneLocMethodsSupported pc_UE_PositioningStandaloneLocMethodsSup, ue_BasedOTDOA_Supported pc_UE_PositioningBasedOTDOA_Sup, networkAssistedGPS_Supported px_UE_PositioningNetworkAssistedGPS_Sup, supportForUE_GPS_TimingOfCellFrames pc_UE_PositioningGPS_TimingOfCellFramesSup, supportForIPDL pc_UE_PositioningIPDL_Sup }, measurementCapability * } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration
<p>Constraint Name : c_RestRB_IntegrityProtActivationInfoList_NoSRB4(p_SN0, p_SN1, p_SN3: RRC_MessageSequenceNumber)</p> <p>Group :</p> <p>ASN1 Type : IntegrityProtActivationInfoList</p> <p>Derivation Path :</p> <p>Encoding Variation :</p> <p>Comments : To Start Integrity on RB2 in UL</p>
Constraint Value
<pre> {{ rb_Identity tsc_RB0, rrc_MessageSequenceNumber p_SN0 }, { rb_Identity tsc_RB1, rrc_MessageSequenceNumber p_SN1 }, { rb_Identity tsc_RB3, rrc_MessageSequenceNumber p_SN3 }} </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_MulRatHo
Group :
ASN1 Type : SysInfoTypeSB1
Derivation Path :
Encoding Variation :
Comments : Default setting of SB1 for multi-RAT handover test. No SIB6 and SIB12, SIB16 may segmented upto 8 segments. scheduling defined in 3GPP TS 34.123-3 clause 8.4.4.2

Constraint Value

```

{
  sib_ReferenceList {{
    sib_Type sysInfoType7 : NULL,
    scheduling {scheduling {
      sib_Pos rep32 : 11
    }}
  }},
  {
    sib_Type sysInfoType11 : 1,
    scheduling { scheduling {
      segCount 3,
      sib_Pos rep128 : 29,
      sib_PosOffsetInfo {so2, so2}
    }}
  },
  {
    sib_Type sysInfoType16 : {
      predefinedConfigIdentity 1,
      predefinedConfigValueTag 0
    },
    scheduling {scheduling {
      segCount 8,
      sib_Pos rep128 : 35,
      sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2, so2}
    }}
  },
  {
    sib_Type sysInfoType18 : 1,
    scheduling { scheduling {
      segCount 1,
      sib_Pos rep128 : 6
    }}
  }
},
nonCriticalExtensions OMIT
}
    
```

Detailed Comments : Assum no segmentation for SIB7.
 Contains scheduling informations for SIB7, SIB11, SIB16, SIB18 only, the scheduling information for other SIBs may be added later.
 The value 1 of valueTags is a place holder. actual values of them will be non-zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB7_DefMulRatHo
Group	:
ASN1 Type	: SysInfoType7
Derivation Path	: c_SIB7_Def.
Encoding Variation	:
Comments	: Default system information block type 7
Constraint Value	
REPLACE prach_Information_SIB6_List BY OMIT	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB5_DefMulRatHo (p_CellInfo : CellInfoCfg)
Group	:
ASN1 Type	: SysInfoType5
Derivation Path	: cb_SIB5_Def.
Encoding Variation	:
Comments	: Default system information block type 5 for multi RAT HO test
Constraint Value	
REPLACE sib6indicator BY FALSE	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul1
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: one segment
Constraint Value	
<pre>{ scheduling { sib_Pos rep128 :35 } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul2
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: two segments
Constraint Value	
<pre>{ scheduling { segCount 2, sib_Pos rep128 :35, sib_PosOffsetInfo {so4} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul3
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: three segments
Constraint Value	
<pre>{ scheduling { segCount 3, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul4
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: four segments
Constraint Value	
<pre>{ scheduling { segCount 4, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul5
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: five segments
Constraint Value	
<pre>{ scheduling { segCount 5, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2, so2, so24} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul6
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: six segments
Constraint Value	
<pre>{ scheduling { segCount 6, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2, so2, so24, so4} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul7
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: seven segments
Constraint Value	
<pre>{ scheduling { segCount 7, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul8
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: eight segments
Constraint Value	
<pre>{ scheduling { segCount 8, sib_Pos rep128 :35, sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Speech12_2k (p_SF512_AndPilot : SF512_AndPilot)
Group	:
ASN1 Type	: SysInfoType16
Derivation Path	:
Encoding Variation	:
Comments	: Default system information block type 16
Constraint Value	
<pre>{ predefinedRadioConfiguration { predefinedRB_Configuration c_PredefinedRB_CfgSIB16, preDefTransChConfiguration c_PreDefTransChCfg_Speech12_2k, preDefPhyChConfiguration c_PreDefPhyChCfgSIB16 (p_SF512_AndPilot) }}</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoDL_576_148_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ dlconnectedTrCHList { { trchid tsc_DL_DCH1, transportChannellInfo c_DCH_576_TFS}, { trchid tsc_DL_DCH5, transportChannellInfo cd_DCH_148_TFS_DL_RM160 }}, dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx (cd_PowerOffsetInfoDefCfg9) -- sent to SS }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoUL_576_148_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ ulconnectedTrCHList { { trchid tsc_UL_DCH1, transportChannellInfo c_DCH_576_TFS }, { trchid tsc_UL_DCH5, transportChannellInfo cd_DCH_148_TFS_UL_RM160 }}, ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx -- sent to SS }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UL_DPCH_InfoPredefSIB16
Group	:
ASN1 Type	: UL_DPCH_InfoPredef
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ ul_DPCH_PowerControllInfo fdd : { powerControlAlgorithm algorithm1 : 1 }, modeSpecificInfo fdd : { tfci_Existence FALSE, puncturingLimit pl0_88 } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_URNTI_Short (p_SRNC_Id : SRNC_Identity ; p_SRNTI_2 : S_RNTI_2)
Group	:
ASN1 Type	: U_RNTI_Short
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ srnc_Identity p_SRNC_Id, s_RNTI_2 p_SRNTI_2 }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DCH_148_TFS_DL_RM160
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	: c_DCH_148_TFS_DL.
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
REPLACE semistaticTF_Information.rateMatchingAttribute BY 160	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 40 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DCH_148_TFS_UL_RM160
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	: c_DCH_148_TFS_UL.
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
REPLACE semistaticTF_Information.rateMatchingAttribute BY 160	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 40 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DCH_148_TTI_10_TFS_RM160
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	: c_DCH_148_TTI_10_TFS.
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
REPLACE semistaticTF_Information.rateMatchingAttribute BY 160	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TransportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_AM_RLC_SRB_DefCfg1
Group	:
ASN1 Type	: DL_AM_RLC_Mode
Derivation Path	: cb_DL_AM_RLC.
Encoding Variation	:
Comments	: The value specified in 25.331 sec 13.7 for default configuration id 1. This is required for 60.4
Constraint Value	
REPLACE dl_RLC_StatusInfo.timerStatusProhibit BY tsp100, REPLACE dl_RLC_StatusInfo.missingPDU_Indicator BY FALSE, REPLACE dl_RLC_StatusInfo.timerStatusPeriodic BY tsp100	
Detailed Comments	: ANITE added this constraint

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_AM_RLC_SRB_IR_G
Group	:
ASN1 Type	: DL_AM_RLC_Mode
Derivation Path	: cb_DL_AM_RLC.
Encoding Variation	:
Comments	: The value specified in 25.331 sec 13.7 for default configuration id 3. This is required for 60.x test cases
Constraint Value	
REPLACE dl_RLC_StatusInfo.timerStatusProhibit BY tsp100, REPLACE dl_RLC_StatusInfo.missingPDU_Indicator BY FALSE, REPLACE dl_RLC_StatusInfo.timerStatusPeriodic BY tsp300	
Detailed Comments	: ANITE added this constraint

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_CommonInformationDCH_DPCH_Offset2 (p_Sf: SF512_AndPilot)
Group	:
ASN1 Type	: DL_CommonInformation
Derivation Path	: c_DL_CommonInformationDCH_DPCH_Offset.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.positionFixedOrFlexible BY fixed, REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.tpci_Existence BY FALSE, REPLACE modeSpecificInfo.fdd.defaultDPCH_OffsetValue BY tsc_S_RNTI_2	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_122_AMR_Offset2 (p_DL_CommonInformation : DL_CommonInformation; p_SecondaryScramblingCode : SecondaryScramblingCode)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_122_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_64K_CS_Offset2 (p_DL_CommonInformation : DL_CommonInformation; p_SecondaryScramblingCode : SecondaryScramblingCode)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_64K_CS.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_AMR_Offset2 (p_sf : SF512_AndCodeNumber; p_DL_CommonInformation : DL_CommonInformation)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_SRB_StandAloneDPCH_Offset2 (p_SecondaryScramblingCode : SecondaryScramblingCode)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_SRB_StandAloneDPCH_Offset.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_CommonInformation BY cd_DL_CommonInformationDCH_DPCH_Offset2(tsc_DL_DPCH1_SFP_SRB), REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB11_InterRATNoSIB12Ind (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg ; p_InterRAT_1, p_InterRAT_2 : G_CellConfigInfo)
Group	:
ASN1 Type	: SysInfoType11
Derivation Path	: c_SIB11_3_Intra3_Inter2_InterRAT_Def.
Encoding Variation	:
Comments	: Default system information block type 11. To be used by cell A,B,C,G and H: – 5 intra cells frequency of the same frequency – 3 inter cell frequency of the same frequency.
Constraint Value	
REPLACE sib12indicator BY FALSE	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_122_AMR_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_122_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dlconnectedTrCHList.[3].transportChannellInfo BY cd_DCH_148_TFS_DL_RM160	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_13_6_StandAlone_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_13_6_StandAlone.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dlconnectedTrCHList.[0].transportChannellInfo BY cd_DCH_148_TTI_10_TFS_RM160	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_2_0_To3_IR_G (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_2_0_To3.
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3
Constraint Value	
REPLACE dlTFCS BY c_TFCS_Cmpl0_1_2_3_Tx (c_PowerOffsetInfoBelow64k)	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoUL_122_AMR_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoUL_122_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE ulconnectedTrCHList.[3].transportChannellInfo BY cd_DCH_148_TFS_UL_RM160	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoUL_13_6_StandAlone_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoUL_13_6_StandAlone.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE ulconnectedTrCHList.[0].transportChannellInfo BY cd_DCH_148_TTI_10_TFS_RM160	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_UL_AM_RLC_SRB_DefCfg1
Group	:
ASN1 Type	: UL_AM_RLC_Mode
Derivation Path	: cb_UL_AM_RLC.
Encoding Variation	:
Comments	: The value specified in 25.331 sec 13.7 for default configuration id 1. This is required for 60.4
Constraint Value	
REPLACE transmissionWindowSize BY tw128, REPLACE max_RST BY rst1, REPLACE timerRST BY tr300, REPLACE pollingInfo.timerPollProhibit BY OMIT, REPLACE pollingInfo.timerPoll BY OMIT, REPLACE pollingInfo.poll_PDU BY OMIT, REPLACE pollingInfo.poll_SDU BY OMIT, REPLACE pollingInfo.lastTransmissionPDU_Poll BY FALSE, REPLACE pollingInfo.lastRetransmissionPDU_Poll BY FALSE, REPLACE pollingInfo.pollWindow BY OMIT, REPLACE pollingInfo.timerPollPeriodic BY tper100	
Detailed Comments : ANITE added this constraint	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_UL_AM_RLC_SRB_IR_G
Group	:
ASN1 Type	: UL_AM_RLC_Mode
Derivation Path	: cb_UL_AM_RLC.
Encoding Variation	:
Comments	: The value specified in 25.331 sec 13.7 for default configuration id 3. This is required for 60.x test cases
Constraint Value	
REPLACE transmissionWindowSize BY tw128, REPLACE max_RST BY rst1, REPLACE timerRST BY tr300, REPLACE pollingInfo.timerPollProhibit BY OMIT, REPLACE pollingInfo.timerPoll BY OMIT, REPLACE pollingInfo.poll_PDU BY OMIT, REPLACE pollingInfo.poll_SDU BY OMIT, REPLACE pollingInfo.lastTransmissionPDU_Poll BY FALSE, REPLACE pollingInfo.lastRetransmissionPDU_Poll BY FALSE, REPLACE pollingInfo.pollWindow BY OMIT, REPLACE pollingInfo.timerPollPeriodic BY tper300	
Detailed Comments	: ANITE added this constraint

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_IntegrityProtectModify_NoSRB4(p1,p2,p3,p4 : RRC_MessageSequenceNumber)
Group	:
ASN1 Type	: IntegrityProtectionModelInfo
Derivation Path	:
Encoding Variation	:
Comments	: Used in 60 series tests
Constraint Value	
<pre> { integrityProtectionModeCommand modify : { dl_IntegrityProtActivationInfo { rrc_MessageSequenceNumberList {p1,p2,p3,p4 } -- fixed reasonable value } }, integrityProtectionAlgorithm uia1 } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RB_ActTimeInfoListSRBs_NoSRB4 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3 : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1) , c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2) , c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3) }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_576_TFS_2
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for transport channel used in Streaming/Unknown/UL:14.4 DL:14.4kbps
Constraint Value	
<pre>{ tti40 :{ { tb_Size 576, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType turbo: NULL, rateMatchingAttribute 165, crc_Size crc16 } }</pre>	
Detailed Comments	: TTI = 40 ms; five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits. coding = turbo; CRCsize = 16; RateMatching = 165

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_TFS_3 (p_RM : INTEGER)
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for transport channel used in Conversational/Unknown/UL:28.8 DL:28.8kbps and Streaming/Unknown/UL:28.8 DL:28.8kbps

Constraint Value

```
{
  tti tti40 :{ { tb_Size 576,
    numberOfTbSizeList { zero : NULL, one : NULL, small : 2},
    logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo: NULL,
    rateMatchingAttribute p_RM,
    crc_Size crc16
  }
}
```

Detailed Comments : TTl = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits;
TransportBlocks = 2, TB size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = parameter

ASN.1 Type Constraint Declaration

Constraint Name : c_MIB_MulRatOrBMC (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : MasterInformationBlock
Derivation Path :
Encoding Variation :
Comments : Default setting of MIB. 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```

{
  mib_ValueTag 1,
  plmn_Type gsm_MAP : {
    plmn_Identity {
      mcc o_HexToDigitsMCC ( p_CellInfo.mcc),
      mnc o_HexToDigitsMNC ( p_CellInfo.mnc ) }
    },
  sibSb_ReferenceList {
    {
      sibSb_Type sysInfoTypeSB1 : 1,
      scheduling {scheduling {
        segCount 2,
        sib_Pos rep16 : 1
      }}
    },
    {
      sibSb_Type sysInfoType1 : 1,
      scheduling {scheduling {
        sib_Pos rep128 : 5
      }}
    },
    {
      sibSb_Type sysInfoType2 : 1,
      scheduling {scheduling {
        sib_Pos rep128 : 7
      }}
    },
    {
      sibSb_Type sysInfoType3 : 1,
      scheduling {scheduling {
        sib_Pos rep64 : 13
      }}
    },
    {
      sibSb_Type sysInfoType4 : 1,
      scheduling {scheduling {
        sib_Pos rep64 : 15
      }}
    },
    {
      sibSb_Type sysInfoType5 : 1,
      scheduling {scheduling {
        segCount 4,
        sib_Pos rep128 : 19,
        sib_PosOffsetInfo {so4, so2, so2}
      }}
    }
  }
}

```

Detailed Comments : Assum no segmentation for SIB1, SIB2, SIB3, SIB4.
 Contains scheduling informations for SIB1, SIB2, SIB3, SIB4, SIB5 and SB1 only, the scheduling information for other SIBs are in SysInfoTypeSB1.
 The value 1 of valueTags is a place holder. actual values of them will be non-zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SB1_Schedul2
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SB1 of two segment
Constraint Value	
<pre>{ scheduling { segCount 2, sib_Pos rep16 :1, sib_PosOffsetInfo {so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB11_Schedul1_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB11 of one segment, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { sib_Pos rep128 :29 } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB11_Schedul2_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB11 of two segments, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { segCount 2, sib_Pos rep128 :29, sib_PosOffsetInfo {so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB11_Schedul3_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB11 of three segments, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { segCount 3, sib_Pos rep128 :29, sib_PosOffsetInfo {so2, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul1_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of one segment, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { sib_Pos rep128 :19 } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul2_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of two segments, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { segCount 2, sib_Pos rep128 :19, sib_PosOffsetInfo {so4} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul3_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of three segments, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { segCount 3, sib_Pos rep128 :19, sib_PosOffsetInfo {so4, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul4_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of four segments, 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Constraint Value	
<pre>{ scheduling { segCount 4, sib_Pos rep128 :19, sib_PosOffsetInfo {so4, so2, so2} } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_Cmpl0_To3_Rx
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	: TFCS information with power offset information – for transmitter
Constraint Value	
<pre>normalTFCI_Signalling: complete: { ctfcSize ctfc4Bit:{ { ctfc4 0, powerOffsetInformation OMIT }, { ctfc4 1, powerOffsetInformation OMIT }, { ctfc4 2, powerOffsetInformation OMIT }, { ctfc4 3, powerOffsetInformation OMIT } } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_Cmpl0_To5_Rx
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	: TFCS information without power offset information – for receiver
Constraint Value	
<pre>normalTFCI_Signalling: complete: { ctfcSize ctfc4Bit:{ { ctfc4 0, powerOffsetInformation OMIT }, { ctfc4 1, powerOffsetInformation OMIT }, { ctfc4 2, powerOffsetInformation OMIT }, { ctfc4 3, powerOffsetInformation OMIT }, { ctfc4 4, powerOffsetInformation OMIT }, { ctfc4 5, powerOffsetInformation OMIT } } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_To5_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {  
  ctfcSize ctfc4Bit:{  
    {  
      ctfc4 0,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      ctfc4 1,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      ctfc4 2,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      ctfc4 3,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      ctfc4 4,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      ctfc4 5,  
      powerOffsetInformation p_PowerOffsetInformation  
    }  
  }  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrCHInfoUL_2_0_To5 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3, 4,5
Constraint Value	
<pre> { ulconnectedTrCHList {{ trchid tsc_UL_DCH1, transportChannelInfo p_DchTFS1 }}, { trchid tsc_UL_DCH5, transportChannelInfo p_DchTFS5 }}, ulTFCS c_TFCS_Cmpl0_To5_Rx } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoDL_2_0_To3 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3
Constraint Value	
<pre> { dlconnectedTrCHList {{ trchid tsc_DL_DCH1, transportChannelInfo p_DchTFS1 }}, { trchid tsc_DL_DCH5, transportChannelInfo p_DchTFS5 }}, dlTFCS c_TFCS_Cmpl0_1_2_3_Tx (c_PowerOffsetInfoHigher64k) } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoDL_2_0_To5 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3, 4, 5
Constraint Value	
<pre> { dlconnectedTrCHList { { trchid tsc_DL_DCH1, transportChannellInfo p_DchTFS1 }, { trchid tsc_DL_DCH5, transportChannellInfo p_DchTFS5 } }, dlTFCS c_TFCS_Cmpl0_To5_Tx (c_PowerOffsetInfoBelow64k) } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoUL_2_0_To3 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3
Constraint Value	
<pre> { ulconnectedTrCHList { { trchid tsc_UL_DCH1, transportChannellInfo p_DchTFS1 }, { trchid tsc_UL_DCH5, transportChannellInfo p_DchTFS5 } }}, ulTFCS c_TFCS_Cmpl0_To3_Rx } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_2
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {trchid tsc_DL_DCH1,
      trCH_LogCHMappingList { { logicalChannel_Mapping dl_LogicalChannelMapping : {
        macHeaderManipulation normalMacHeader ,
        dl_TransportChannelType dch,
        logicalChannelIdentity tsc_DL_DTCH1,
        logicalChannelType dTCH,
        rlc_SizeList configured : NULL,
        mac_LogicalChannelPriority 7
      }},
      rB_Identity tsc_RB10 }
    }},
    { trchid tsc_DL_DCH5,
      trCH_LogCHMappingList
      {
        { logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH1,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 1
        }},
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH2,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 2
          }},
            rB_Identity tsc_RB2
          },
          {
            logicalChannel_Mapping dl_LogicalChannelMapping : {
              macHeaderManipulation normalMacHeader ,
              dl_TransportChannelType dch,
              logicalChannelIdentity tsc_DL_DCCH3,
              logicalChannelType dCCH,
              rlc_SizeList configured : NULL,
              mac_LogicalChannelPriority 3
            }},
              rB_Identity tsc_RB3
            },
            {
              logicalChannel_Mapping dl_LogicalChannelMapping : {
                macHeaderManipulation normalMacHeader ,
                dl_TransportChannelType dch,
                logicalChannelIdentity tsc_DL_DCCH4,

```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } } }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_2
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DTCH1,
            logicalChannelType dTCH
          },
          rB_Identity tsc_RB10
        }
      }
    },
    {
      trchid tsc_UL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH2,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH3,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader ,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH4,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB4
        }
      }
    }
  }
}
  
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> } } }, dlconnectedTrCHList OMIT } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration
<p>Constraint Name : cb_DL_DPCH_AMR (p_sf : SF512_AndCodeNumber; p_DL_CommonInformation : DL_CommonInformation)</p> <p>Group :</p> <p>ASN1 Type : DL_DPCHInfo</p> <p>Derivation Path :</p> <p>Encoding Variation :</p> <p>Comments :</p>
Constraint Value
<pre> { dl_CommonInformation p_DL_CommonInformation , dl_DPCH_InfoPerRL fdd : { pCPICH_UsageForChannelEst mayBeUsed, dpch_FrameOffset (((tsc_DefaultDPCH_OffsetValue*512) MOD 38400) / 256), -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400 -- Actual value DPCH-FrameOffset = IE value * 256 -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 dl_ChannelisationCodeList { { secondaryScramblingCode 1, sf_AndCodeNumber p_sf }}, tpc_CombinationIndex 0 }, powerOffsetOfTFPI_PO1 0, powerOffsetOfTPC_PO2 0, powerOffsetOfPILOT_PO3 0, dl_TxPower tsc_DL_TxPower_DPCH, dl_TxPowerMax 15, dl_TxPowerMin -35 } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_103_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for RAB subflow#2 on dedicated channel
Constraint Value	
<pre> { tti tti20 :{ { tb_Size 103, numberOfTbSizeList { zero : NULL, one : NULL }, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 190, crc_Size crc0 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.4: TTI = 20 ms; two transport formats: TransportBlocks = 0, TB size = 103 bits; TansportBlock = 1, Size = 103. coding = convolutional; coding rate = 1/3; CRCsize = N/A; RateMatching = 190

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_103_TFS_UE
Group	:
ASN1 Type	: DedicatedTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for RAB subflow#2 on dedicated channel used in message sent to UE
Constraint Value	
<pre> { tti tti20 :{ { rlc_Size bitMode : sizeType1 : 103, numberOfTbSizeList { zero : NULL, one : NULL }, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 190, crc_Size crc0 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.4: TTI = 20 ms; two transport formats: TransportBlocks = 0, TB size = 103 bits; TansportBlock = 1, Size = 103. rlc_Size = TB_Size (DCH, w/o MUX) coding = convolutional; coding rate = 1/3; CRCsize = N/A; RateMatching = 190

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_576_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for transport channel used in CreateCell_DCH_57_6kCS_RAB_SRB
Constraint Value	
<pre> { tti tti40 :{{tb_Size 576, numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType turbo: NULL, rateMatchingAttribute 145, crc_Size crc16 } } </pre>	
Detailed Comments	: 3GPP TS 34.108 clause 6.10.2.4.17 TTI = 40 ms; five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4, TB size = 576 bits. coding = turbo; CRCsize = 16; RateMatching = 125

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_60_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for RAB subflow#3 on dedicated channel
Constraint Value	
<pre> { tti tti20 :{ { tb_Size 60, numberOfTbSizeList { zero : NULL, one : NULL }, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 235, crc_Size crc0 } } </pre>	
Detailed Comments	: TS 34.108 subcl. 6.10.2.4.1.4: TTI = 20 ms; two transport formats: TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60. coding = convolutional; coding rate = 1/2; CRCsize = N/A; RateMatching = 235

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_60_TFS_UE
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#3 on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti20 :{ { rlc_Size bitMode : sizeType1: 60,
    numberOfTbSizeList { zero : NULL, one : NULL },
    logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 235,
    crc_Size crc0
  }
}
```

Detailed Comments : TS 34.108 subcl. 6.10.2.4.1.4:
TTI = 20 ms;
two transport formats:
TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60.
rlc_Size = TB_Size (DCH, w/o MUX)
coding = convolutional;
coding rate = 1/2;
CRCsize = N/A;
RateMatching = 235

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 81,
    numberOfTbSizeList { zero : NULL },
    logicalChannelList allSizes : NULL
  },
  { tb_Size 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  },
  { tb_Size 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  }
},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats: TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39 bits; TransportBlock = 1, Size = 81.
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS_DL
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 0,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  },
  { tb_Size 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  },
  { tb_Size 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  }
},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats: TransportBlocks = 1, TB size = 0 bits; TransportBlocks = 1, TB size = 39 bits; TransportBlock = 1, Size = 81.
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS_UE
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti20 :{ { rlc_Size bitMode : sizeType1: 81,
    numberOfTbSizeList { zero : NULL },
    logicalChannelList allSizes : NULL
  },
  { rlc_Size bitMode : sizeType1 : 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  },
  { rlc_Size bitMode : sizeType1: 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
  }
},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats:
TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39 bits; TransportBlock = 1,
Size = 81.
rlc_Size = TB_Size (DCH, w/o MUX)
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information – for receiver

Constraint Value

```
normalTFCI_Signalling : complete :  
{  
  ctfcSize ctfc6Bit:{  
    {  
      ctfc6 0,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc6 1,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc6 11,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc6 12,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc6 13,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc6 23,  
      powerOffsetInformation OMIT  
    }  
  }  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCI_Signalling : complete :
{
  ctfcSize ctfc6Bit:{
    {
      ctfc6 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 11,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 12,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 13,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 23,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_122_AMR
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{  
  dlconnectedTrCHList { {  
    trchid tsc_DL_DCH1,  
    transportChannellInfo c_DCH_81_TFS_DL  
  },  
  {  
    trchid tsc_DL_DCH2,  
    transportChannellInfo c_DCH_103_TFS  
  },  
  {  
    trchid tsc_DL_DCH3,  
    transportChannellInfo c_DCH_60_TFS  
  },  
  {  
    trchid tsc_DL_DCH5,  
    transportChannellInfo c_DCH_148_TFS_DL  
  }  
},  
dlTFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_122_AMR
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      transportChannellInfo c_DCH_81_TFS
    },
    {
      trchid tsc_UL_DCH2,
      transportChannellInfo c_DCH_103_TFS
    },
    {
      trchid tsc_UL_DCH3,
      transportChannellInfo c_DCH_60_TFS
    },
    {
      trchid tsc_UL_DCH5,
      transportChannellInfo c_DCH_148_TFS_UL
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_4DCCH_3DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH1,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB10
        }
      }
    },
    {
      trchid tsc_DL_DCH2,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH2,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB11
        }
      }
    },
    {
      trchid tsc_DL_DCH3,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH3,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB12
        }
      }
    },
    {
      trchid tsc_DL_DCH5,
      trCH_LogCHMappingList {
        {
  
```

Continued on next page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH1, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 1 }, rB_Identity tsc_RB1 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH2, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 2 }, rB_Identity tsc_RB2 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH3, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 3 }, rB_Identity tsc_RB3 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH4, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } } } } } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH_3DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DTCH1,
            logicalChannelType dTCH
          },
          rB_Identity tsc_RB10
        }
      }
    },
    {
      trchid tsc_UL_DCH2,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DTCH2,
            logicalChannelType dTCH
          },
          rB_Identity tsc_RB11
        }
      }
    },
    {
      trchid tsc_UL_DCH3,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DTCH3,
            logicalChannelType dTCH
          },
          rB_Identity tsc_RB12
        }
      }
    },
    {
      trchid tsc_UL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        }
      }
    }
  }
}
    
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>}, { logicalChannel_Mapping ul_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, ul_TransportChannelType dch, logicalChannelIdentity tsc_UL_DCCH2, logicalChannelType dCCH }, rB_Identity tsc_RB2 }, { logicalChannel_Mapping ul_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, ul_TransportChannelType dch, logicalChannelIdentity tsc_UL_DCCH3, logicalChannelType dCCH }, rB_Identity tsc_RB3 }, { logicalChannel_Mapping ul_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, ul_TransportChannelType dch, logicalChannelIdentity tsc_UL_DCCH4, logicalChannelType dCCH }, rB_Identity tsc_RB4 } } }, dlconnectedTrCHList OMIT }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_122_AMR (p_DL_CommonInformation : DL_CommonInformation;
p_SecondaryScramblingCode : SecondaryScramblingCode)
Group :
ASN1 Type : DL_DPCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dl_CommonInformation p_DL_CommonInformation,
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode,
      sf_AndCodeNumber tsc_DL_DPCH1_ChC_Speech
    } },
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCl_PO1 tsc_DPCH_PowerOffsetTFCl,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DL_CommonInformationRB_SetUpSpeech (p_Sf: SF512_AndPilot)
Group	:
ASN1 Type	: DL_CommonInformation
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { dl_DPCH_InfoCommon{ cfnHandling maintain :NULL, modeSpecificInfo fdd:{ dl_DPCH_PowerControlInfo { modeSpecificInfo fdd:{ dpc_Mode singleTPC } }, powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT, dl_rate_matching_restriction OMIT, spreadingFactorAndPilot p_Sf, positionFixedOrFlexible fixed, tpci_Existence FALSE } }, modeSpecificInfo fdd:{ defaultDPCH_OffsetValue OMIT, dpch_CompressedModeInfo OMIT , tx_DiversityMode noDiversity -- ssdt_Information OMIT } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_1
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : fdd2100	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_10
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandX	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_11
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXI	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_12
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_13
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXIII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_14
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXIV	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_15
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 :bandXV	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_16
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXVI	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_17
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXVII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_18
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXVIII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_19
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2	: bandXIX
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_2
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator	: fdd1900
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_20
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2	: bandXX
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_21
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXXI	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_22
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandXXII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_3
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : fdd1800	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_4
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : bandIV	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_5
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : bandV	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_6
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : bandVI	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_7
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator : bandVII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_8
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandVIII	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RadioFrequencyBandFDD_9
Group	:
ASN1 Type	: FrequencyBandFDD
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
frequencyBandIndicator2 : bandIX	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_AICH_Info
Group	:
ASN1 Type	: AICH_Info
Derivation Path	:
Encoding Variation	:
Comments	: no transmission diversity, AICH timing = e0
Constraint Value	
<pre>{ channelisationCode256 tsc_AICH1_ChC, sttd_Indicator FALSE, aich_TransmissionTiming e0 }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_148_TFS_DL
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
<pre>{ tti tti40 :{{ tb_Size 148, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 170, crc_Size crc16 } }</pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 40 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TransportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_148_TFS_UE_UL
Group	:
ASN1 Type	: DedicatedTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel used in message sent to UE
Constraint Value	
<pre> { tti tti40 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT}, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 170, crc_Size crc16 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 40 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size = TB_Size -4 =144 bits.(DCH, w/ MUX) coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_148_TFS_UL
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
<pre> { tti tti40 :{{ tb_Size 148, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 170, crc_Size crc16 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.2: TTI = 40 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_148_TTI_10_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel
Constraint Value	
<pre> { tti tti10 :{{ tb_Size 148, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 192, -- dummy value, value is not needed for 13.6 kbps crc_Size crc16 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.3: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size =148 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 192 (dummy value, value is not needed for 13.6 kbps)

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DCH_148_TTI_10_TFS_UE
Group	:
ASN1 Type	: DedicatedTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for signalling bearer on dedicated channel used in message sent to UE
Constraint Value	
<pre> { tti tti10 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT}, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional :third, rateMatchingAttribute 192, -- dummy value, value is not needed for 13.6 kbps crc_Size crc16 } } </pre>	
Detailed Comments	: TS 34.108 cl. 6.10.2.4.1.3: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size = TB_Size -4 =144 bits.(DCH, w/ MUX) coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 192

ASN.1 Type Constraint Declaration	
Constraint Name : c_DL_AddReconfTransChInfo (p_DITrChId:TransportChannelIdentity; p_UITrChId:TransportChannelIdentity) Group : ASN1 Type : DL_AddReconfTransChInformation Derivation Path : Encoding Variation : Comments :	
Constraint Value	
<pre> { dl_TransportChannelType dch, dl_transportChannelIdentity p_DITrChId, tfs_SignallingMode sameAsULTrCH : { ul_TransportChannelType dch, ul_TransportChannelIdentity p_UITrChId }, dch_QualityTarget{ bler_QualityValue -20 } } </pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name : c_DL_AddReconfTransChInfoListDCCH_SRB Group : ASN1 Type : DL_AddReconfTransChInfoList Derivation Path : Encoding Variation : Comments :	
Constraint Value	
<pre> { c_DL_AddReconfTransChInfo(tsc_DL_DCH5,tsc_UL_DCH5) } </pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_DL_CommonTransChInfoSameAsUL
Group	:
ASN1 Type	: DL_CommonTransChInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ sccpch_TFCS OMIT, modeSpecificInfo fdd:{ dl_Parameters sameAsUL: NULL } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_FACH_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for FACH
Constraint Value	
<pre>{ tti tti10 :{ { tb_Size 168, numberOfTbSizeList { zero : NULL, one : NULL, small : 2 }, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 220, crc_Size crc16 } }</pre>	
Detailed Comments	: TTI = 10 ms; three transport formats: TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits; TransportBlock = 0, Size = 168. coding = convolutional; rate = 1/2; CRCsize = 16; RateMatching = 220

ASN.1 Type Constraint Declaration	
Constraint Name	: c_FACH_TFS_PS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for FACH (PS) used for SS configuration
Constraint Value	
<pre> { tti tti10 :{ { tb_Size 360, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType turbo : NULL, rateMatchingAttribute 130, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360. coding = turbo; CRCsize = 16; RateMatching = 130

ASN.1 Type Constraint Declaration	
Constraint Name	: c_FACH_TFS_PS_UE
Group	:
ASN1 Type	: CommonTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for FACH (PS)
Constraint Value	
<pre> { tti tti10 :{ { rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType2: 3}, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType turbo : NULL, rateMatchingAttribute 130, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360. rlc_Size = TB_Size (FACH) coding = turbo; CRCsize = 16; RateMatching = 130

ASN.1 Type Constraint Declaration	
Constraint Name	: c_FACH_TFS_UE
Group	:
ASN1 Type	: CommonTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for FACH
Constraint Value	
<pre> { tti tti10 :{ { rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15}, numberOfTbSizeList { zero : NULL, one : NULL, small : 2}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 220, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 10 ms; three transport formats: TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits; TransportBlock = 0, Size = 168. rlc_Size = TB_Size (FACH) coding = convolutional; rate = 1/2; CRCsize = 16; RateMatching = 220

ASN.1 Type Constraint Declaration	
Constraint Name	: c_FreqInfo (p_uarfcnDL : UARFCN)
Group	:
ASN1 Type	: FrequencyInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { modeSpecificInfo fdd: { uarfcn_UL OMIT, uarfcn_DL p_uarfcnDL } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_MIB_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : MasterInformationBlock
Derivation Path :
Encoding Variation :
Comments : Default setting of MIB. 3GPP TS 34.123-3 clause 8.4.3

Constraint Value

```

{
  mib_ValueTag 1,
  plmn_Type gsm_MAP : {
    plmn_Identity {
      mcc o_HexToDigitsMCC ( p_CellInfo.mcc),
      mnc o_HexToDigitsMNC (p_CellInfo.mnc ) }
    },
  sibSb_ReferenceList {
    {
      sibSb_Type sysInfoTypeSB1 : 1,
      scheduling {scheduling {
        sib_Pos rep16 : 1
      }}
    },
    {
      sibSb_Type sysInfoType1 : 1,
      scheduling {scheduling {
        sib_Pos rep64 : 11
      }}
    },
    {
      sibSb_Type sysInfoType2 : 1,
      scheduling {scheduling {
        sib_Pos rep64 :11
      }}
    },
    {
      sibSb_Type sysInfoType3 : 1,
      scheduling {scheduling {
        sib_Pos rep64 : 10
      }}
    },
    {
      sibSb_Type sysInfoType4 : 1,
      scheduling {scheduling {
        sib_Pos rep64 : 26
      }}
    },
    {
      sibSb_Type sysInfoType5 : 1,
      scheduling {scheduling {
        segCount 4,
        sib_Pos rep64 : 19,
        sib_PosOffsetInfo {so4, so2, so2}
      }}
    }
  }
}
  
```

Detailed Comments : Assum no segmentation for SIB1, SIB2, SIB3, SIB4.
 Contains scheduling informations for SIB1, SIB2, SIB3, SIB4, SIB5 and SB1 only, the scheduling information for other SIBs are in SysInfoTypeSB1.
 The value 1 of valueTags is a place holder. actual values of them will be non-zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration	
Constraint Name	: c_PCH_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for PCH
Constraint Value	
<pre> { tti tti10 :{ { tb_Size 240, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 230, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240. coding = convolutional; rate = 1/2; CRCsize = 16; RateMatching = 230

ASN.1 Type Constraint Declaration	
Constraint Name	: c_PCH_TFS_UE
Group	:
ASN1 Type	: CommonTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for PCH
Constraint Value	
<pre> { tti tti10 :{ { rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 24}, numberOfTbSizeList { zero : NULL, one : NULL}, logicalChannelList allSizes : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 230, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240. rlc_Size = TB_Size (PCH) coding = convolutional; rate = 1/2; CRCsize = 16; RateMatching = 230

ASN.1 Type Constraint Declaration	
Constraint Name	: c_PichInfo
Group	:
ASN1 Type	: PICH_Info
Derivation Path	:
Encoding Variation	:
Comments	: value for pi_CountPerFrame FFS
Constraint Value	
<pre> fdd :{ channelisationCode256 tsc_PICH1_ChC, pi_CountPerFrame e18, sttd_Indicator FALSE } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RACH_TFS
Group	:
ASN1 Type	: CommonOrDedicatedTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for RACH
Constraint Value	
<pre> { tti tti20 :{{ tb_Size 168, numberOfTbSizeList { one : NULL}, logicalChannelList configured : NULL }, { tb_Size 360, numberOfTbSizeList { one : NULL }, logicalChannelList configured : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 150, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 20 ms; two transport formats: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits; coding = convolutional; rate = 1/2; CRCsize = 16

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RACH_TFS_UE
Group	:
ASN1 Type	: CommonTransChTFS
Derivation Path	:
Encoding Variation	:
Comments	: transport format set for RACH used in message sent to UE
Constraint Value	
<pre> { tti tti20 :{{ rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15}, numberOfTbSizeList { one : NULL}, logicalChannelList configured : NULL }, { rlc_Size fdd : { octetModeRLC_SizeInfoType2 sizeType2 : 3}, numberOfTbSizeList { one : NULL }, logicalChannelList configured : NULL }}, semistaticTF_Information { channelCodingType convolutional : half, rateMatchingAttribute 150, crc_Size crc16 } } </pre>	
Detailed Comments	: TTI = 20 ms; two transport formats: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits; rlc_Size = TB_Size (RACH) coding = convolutional; rate = 1/2; CRCsize = 16; RateMatching = 1

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RB2_IntegrityProtActivationInfoList(p_RRCSN : RRC_MessageSequenceNumber)
Group	:
ASN1 Type	: IntegrityProtActivationInfoList
Derivation Path	:
Encoding Variation	:
Comments	: To Start Integrity on RB2 in UL
Constraint Value	
<pre> {{ rb_Identity tsc_RB2, rrc_MessageSequenceNumber p_RRCSN }} </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RB_ActTimeInfo(p_RB_Id: INTEGER; p_N: RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ rb_Identity p_RB_Id, rlc_SequenceNumber p_N }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_RB_ActivationTimeInfoList_RB3(p_RLC_SQN : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ { rb_Identity tsc_RB3, rlc_SequenceNumber p_RLC_SQN } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_RestRB_IntegrityProtActivationInfoList(p_SN0, p_SN1, p_SN3, p_SN4:
RRC_MessageSequenceNumber)
Group :
ASN1 Type : IntegrityProtActivationInfoList
Derivation Path :
Encoding Variation :
Comments : To Start Integrity on RB2 in UL

Constraint Value

```
{{  
  rb_Identity tsc_RB0,  
  rrc_MessageSequenceNumber p_SN0  
  },  
  {  
    rb_Identity tsc_RB1,  
    rrc_MessageSequenceNumber p_SN1  
  },  
  {  
    rb_Identity tsc_RB3,  
    rrc_MessageSequenceNumber p_SN3  
  },  
  {  
    rb_Identity tsc_RB4,  
    rrc_MessageSequenceNumber p_SN4  
  }  
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_Def
Group :
ASN1 Type : SysInfoTypeSB1
Derivation Path :
Encoding Variation :
Comments : Default setting of SB1. scheduling is defined in 3GPP TS 34.123-3 clause 8.4.3

Constraint Value

```

{
  sib_ReferenceList {
    {
      sib_Type sysInfoType6 : 1,
      scheduling {scheduling {
        segCount 4,
        sib_Pos rep64 : 3,
        sib_PosOffsetInfo {so4, so2, so2}
      }}
    },
    {
      sib_Type sysInfoType7 : NULL,
      scheduling {scheduling {
        sib_Pos rep16 : 2
      }}
    },
    {
      sib_Type sysInfoType11 : 1,
      scheduling { scheduling {
        segCount 3,
        sib_Pos rep64 : 29,
        sib_PosOffsetInfo {so2, so2}
      }}
    },
    {
      sib_Type sysInfoType12 : 1,
      scheduling { scheduling {
        segCount 3,
        sib_Pos rep64 : 13,
        sib_PosOffsetInfo {so2, so2}
      }}
    },
    {
      sib_Type sysInfoType18 : 1,
      scheduling { scheduling {
        sib_Pos rep64 : 18
      }}
    }
  },
  nonCriticalExtensions OMIT
}
    
```

Detailed Comments : Assum no segmentation for SIB7.
 Contains scheduling informations for SIB6, SIB7, SIB11, SIB12, SIB18 only, the scheduling information for other SIBs may be added later.
 The value 1 of valueTags is a place holder. actual values of them will be non-zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SB1_Schedul1
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SB1 of one segment
Constraint Value	
<pre>{ scheduling { sib_Pos rep16 :1 } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB18_Def (p_CellInfo : CellInfoCfg)
Group	:
ASN1 Type	: SysInfoType18
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ idleModePLMNIdentities { plmnsOfIntraFreqCellsList OMIT, plmnsOfInterFreqCellsList OMIT, plmnsOfInterRATCellsList OMIT }, connectedModePLMNIdentities OMIT, nonCriticalExtensions OMIT }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB2_Def (p_CellInfo : CellInfoCfg)
Group	:
ASN1 Type	: SysInfoType2
Derivation Path	:
Encoding Variation	:
Comments	: Default system information block type 2
Constraint Value	
<pre>{ ura_IdentityList { p_CellInfo.ura_Identity }, nonCriticalExtensions OMIT }</pre>	
Detailed Comments	: for cell 1 and cell 2.

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB7_Def
Group :
ASN1 Type : SysInfoType7
Derivation Path :
Encoding Variation :
Comments : Default system information block type 7

Constraint Value

```
{  
  modeSpecificInfo fdd : {  
    ul_Interference -100  
  },  
  prach_Information_SIB5_List { 2 },  
  prach_Information_SIB6_List { 2 },  
  nonCriticalExtensions OMIT  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupAM_DCH (
 p_UL_IgchId : LogicalChannelIdentity;
 p_MAC_Igch_prtDCH , p_MAC_Igch_prtRACH : MAC_LogicalChannelPriority ;
 p_DL_IgchId : LogicalChannelIdentity
)
Group :
ASN1 Type : SRB_InformationSetup
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  rb_Identity OMIT,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB,
    dl_RLC_Mode dl_AM_RLC_Mode : cd_DL_AM_RLC_SRB
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_UL_IgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_Igch_prtDCH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType dch: tsc_DL_DCH5,
        logicalChannelIdentity p_DL_IgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_UL_IgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1 } },
        mac_LogicalChannelPriority p_MAC_Igch_prtRACH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType fach: NULL,
        logicalChannelIdentity p_DL_IgchId
      }}
    }
  }
}
    
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupAM_FACH (p_RB_Id: RB_Identity; p_UI_IgchId: LogicalChannelIdentity; p_MAC_Igch_prtDCH , p_MAC_Igch_prt: MAC_LogicalChannelPriority; p_DI_IgchId: LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```

{
  rb_Identity p_RB_Id,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_AM_RLC_Mode: cd_UL_AM_RLC_SRB ,
    dl_RLC_Mode dl_AM_RLC_Mode: cd_DL_AM_RLC_SRB
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach: NULL,
        logicalChannelIdentity p_UI_IgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1 } },
        mac_LogicalChannelPriority p_MAC_Igch_prt
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType fach: NULL,
        logicalChannelIdentity p_DI_IgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_UI_IgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_Igch_prtDCH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType dch: tsc_DL_DCH5,
        logicalChannelIdentity p_DI_IgchId
      }}
    }
  }
}

```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupUM_DCH (p_UL_IgchId : LogicalChannelIdentity ; p_MAC_Igch_prtDCH,
 p_MAC_Igch_prtRACH : MAC_LogicalChannelPriority ; p_DL_IgchId : LogicalChannelIdentity)
Group :
ASN1 Type : SRB_InformationSetup
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  rb_Identity OMIT,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_UM_RLC_Mode:
    {
      transmissionRLC_Discard OMIT
    },
    dl_RLC_Mode dl_UM_RLC_Mode: NULL
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_UL_IgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_Igch_prtDCH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType dch: tsc_DL_DCH5,
        logicalChannelIdentity p_DL_IgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_UL_IgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1 } },
        mac_LogicalChannelPriority p_MAC_Igch_prtRACH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType fach: NULL,
        logicalChannelIdentity p_DL_IgchId
      }}
    }
  }
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupUM_FACH (p_RB_Id: RB_Identity; p_UI_IgchId: LogicalChannelIdentity; p_MAC_Igch_prtDCH , p_MAC_Igch_prt: MAC_LogicalChannelPriority; p_DL_IgchId: LogicalChannelIdentity)
Group :
ASN1 Type : SRB_InformationSetup
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  rb_Identity p_RB_Id,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_UM_RLC_Mode:
    {
      transmissionRLC_Discard timerBasedNoExplicit : dt50
    },
    dl_RLC_Mode dl_UM_RLC_Mode: NULL
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_UI_IgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1 } },
        mac_LogicalChannelPriority p_MAC_Igch_prt
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType fach: NULL,
        logicalChannelIdentity p_DL_IgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_UI_IgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_Igch_prtDCH
      },
      dl_LogicalChannelMappingList{{
        dl_TransportChannelType dch: tsc_DL_DCH5,
        logicalChannelIdentity p_DL_IgchId
      }}
    }
  }
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_StartListCS
Group	:
ASN1 Type	: STARTList
Derivation Path	:
Encoding Variation	:
Comments	: Start list with CS_Domain only
Constraint Value	
<pre> {{ cn_DomainIdentity cs_domain, start_Value '00000000000000000000'B }} </pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_Cmpl0 (p_PowerOffsetInformation : PowerOffsetInformation)
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> normalTFCl_Signalling: complete: { cfcSize cfc2Bit:{ { cfc2 0, powerOffsetInformation p_PowerOffsetInformation } } } </pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
normalTFCI_Signalling: complete: {  
  ctfcSize ctfc4Bit:{  
    {  
      ctfc4 0,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 1,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 2,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 3,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 4,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 5,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 6,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 7,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 8,  
      powerOffsetInformation OMIT  
    },  
    {  
      ctfc4 9,  
      powerOffsetInformation OMIT  
    }  
  }  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 4,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 5,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 6,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 7,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 8,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 9,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information – for receiver

Constraint Value

```
normalTFCI_Signalling: complete: {  
  cffcSize cffc4Bit:{  
    {  
      cffc4 0,  
      powerOffsetInformation OMIT  
    },  
    {  
      cffc4 1,  
      powerOffsetInformation OMIT  
    },  
    {  
      cffc4 2,  
      powerOffsetInformation OMIT  
    },  
    {  
      cffc4 3,  
      powerOffsetInformation OMIT  
    }  
  }  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_Cmpl0_1_2_3_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	: TFCS information with power offset information – for transmitter
Constraint Value	
<pre> normalTFCl_Signalling: complete: { ctfcSize ctfc4Bit:{ { ctfc4 0, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 1, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 2, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 3, powerOffsetInformation p_PowerOffsetInformation } } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_Cmpl0_1_Rx
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	: TFCS information without power offset information – for receiver
Constraint Value	
<pre> normalTFCl_Signalling: complete: { ctfcSize ctfc2Bit:{ { ctfc2 0, powerOffsetInformation OMIT }, { ctfc2 1, powerOffsetInformation OMIT } } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {  
  cfcSize cfc2Bit:{  
    {  
      cfc2 0,  
      powerOffsetInformation c_PowerOffsetInfoComputed  
    },  
    {  
      cfc2 1,  
      powerOffsetInformation p_PowerOffsetInformation  
    }  
  }  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TFCS_CmplFACH_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group	:
ASN1 Type	: TFCS
Derivation Path	:
Encoding Variation	:
Comments	: TFCS information with power offset information – for transmitter
Constraint Value	
<pre> normalTFCI_Signalling: complete: { ctfcSize ctfc4Bit:{ { ctfc4 0, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 1, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 2, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 3, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 4, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 5, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 6, powerOffsetInformation c_PowerOffsetInfoComputed }, { ctfc4 8, powerOffsetInformation p_PowerOffsetInformation } } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChConfigTypeDCH_NoSHO
Group	:
ASN1 Type	: TrChConfigType
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
dch : normal	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoBCH1
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { dlconnectedTrCHList { { trchid tsc_BCH1, transportChannelInfo { tti tti20 : {{tb_Size 246, numberOfTbSizeList {one : NULL}, logicalChannelList configured : NULL}}, semistaticTF_Information { channelCodingType convolutional :half, rateMatchingAttribute 1, crc_Size crc16 } } } }, dlTFCS c_TFCS_Cmpl0 (c_PowerOffsetInfoBelow64k) } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoDL_13_6_StandAlone
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { dlconnectedTrCHList { { trchid tsc_DL_DCH5, transportChannelInfo c_DCH_148_TTI_10_TFS } }, dlTFCS c_TFCS_Cmpl0_1_Tx (c_PowerOffsetInfoBelow64k) } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoPCH_FACH
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: For FDD mode only
Constraint Value	
<pre> { dlconnectedTrCHList { { trchid tsc_PCH1, transportChannelInfo c_PCH_TFS }, { trchid tsc_FACH1, transportChannelInfo c_FACH_TFS }, { trchid tsc_FACH2, transportChannelInfo c_FACH_TFS_PS } }, dlTFCS c_TFCS_CmplFACH_Tx (c_PowerOffsetInfoBelow64k) -- sent to SS } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoPCH_FACH_PS
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	: For FDD mode only (PS)
Constraint Value	
<pre> { dlconnectedTrCHList { { trchid tsc_PCH1, transportChannelInfo c_PCH_TFS }, { trchid tsc_FACH1, transportChannelInfo c_FACH_TFS }, { trchid tsc_FACH2, transportChannelInfo c_FACH_TFS_PS } }, dlTFCS c_TFCS_CmplFACH_Tx (c_PowerOffsetInfoBelow64k) -- sent to SS } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrChInfoUL_13_6_StandAlone
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { ulconnectedTrCHList { { trchid tsc_UL_DCH5, transportChannelInfo c_DCH_148_TTI_10_TFS }}, ulTFCS c_TFCS_Cmpl0_1_Rx -- sent to SS } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_TrLogMappingBCH1
Group	:
ASN1 Type	: TrCH_LogCHMappingList1
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { ulconnectedTrCHList OMIT, dlconnectedTrCHList { { trchid tsc_BCH1, trCH_LogCHMappingList {{ logicalChannel_Mapping dl_LogicalChannelMapping: { macHeaderManipulation normalMacHeader, dl_TransportChannelType bch, logicalChannelIdentity tsc_BCCH1, logicalChannelType bCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 1 }, rB_Identity tsc_RB_BCCH }} } } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_4DCCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH1,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH2,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 2
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH3,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 3
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH4,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 4
          },
          rB_Identity tsc_RB4
        }
      }
    }
  }
}
    
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingPCH_FACH_CellDCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments : For FDD mode only. map PCCH to PCH and CCCH and BCCH(for BCCH_FACH)
 To be used for the Cell DCH configuration

Constraint Value

```

{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_PCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType pch,
            logicalChannelIdentity tsc_PCCH1,
            logicalChannelType pCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB_PCCH
        }
      }
    },
    {
      trchid tsc_FACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_CCCH5,
            logicalChannelType cCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB0
        }
      }
    }
  }
}

```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingPCH_FACH_PS
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments : For FDD mode only (PS). map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH2, and DTCH to FACH1

Constraint Value

```

{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_PCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType pch,
            logicalChannelIdentity tsc_PCCH1,
            logicalChannelType pCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB_PCCH
        }
      },
    },
    {
      trchid tsc_FACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_BCCH6,
            logicalChannelType bCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB_BCCH_FACH
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_CCCH5,
            logicalChannelType cCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB0
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_DCCH1,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
        },
      },
    }
  }
}
    
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>rB_Identity tsc_RB1 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType fach, logicalChannelIdentity tsc_DL_DCCH2, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 2 }, rB_Identity tsc_RB2 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType fach, logicalChannelIdentity tsc_DL_DCCH3, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 3 }, rB_Identity tsc_RB3 }, { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType fach, logicalChannelIdentity tsc_DL_DCCH4, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } },{ trchid tsc_FACH2, trCH_LogCHMappingList { { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType fach, logicalChannelIdentity tsc_DL_DTCH1, logicalChannelType dTCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 8 }, rB_Identity tsc_RB20 } } } } }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingRACH_DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList {
    {
      trchid tsc_RACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_CCCH5,
            logicalChannelType cCCH
          },
          rB_Identity tsc_RB0
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH2,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH3,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH4,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB4
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DTCH1,
    
```

Continued on next page

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre>logicalChannelType dTCH }, rB_Identity tsc_RB20 } } }, dlconnectedTrCHList OMIT }</pre>
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH2,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH3,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH4,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB4
        }
      }
    }
  },
  dlconnectedTrCHList OMIT
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UE_IdDefIMSI
Group	:
ASN1 Type	: InitialUE_Identity
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
imsi : o_ConvertIMSI(px_IMSI_Def)	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UE_Info (p_U_RNTI : U_RNTI ; p_CRNTI : BITSTRING)
Group	:
ASN1 Type	: UE_Info
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ u_RNTI p_U_RNTI, c_RNTI p_CRNTI }</pre>	
Detailed Comments	: p_SRNCId: BITSTRING (SIZE (12)) p_SRNTI: BITSTRING (SIZE (20)) p_CRNTI: BITSTRING (SIZE (16))

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UL_AddReconfTransChInfoListDCCH_13_6k
Group	:
ASN1 Type	: UL_AddReconfTransChInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{{ ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH5, transportFormatSet dedicatedTransChTFS: c_DCH_148_TTI_10_TFS_UE }}</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UL_AddReconfTransChInfoListDCCH_3_4k
Group	:
ASN1 Type	: UL_AddReconfTransChInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> {{ ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH5, transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL }} </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UL_CommTrChInfoDCCH_13_6k
Group	:
ASN1 Type	: UL_CommonTransChInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { tfc_Subset OMIT, prach_TFCS OMIT, modeSpecificInfo fdd:{ ul_TFCS c_TFCS_Cmpl0_1_Tx (c_PowerOffsetInfoBelow64k) } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_UL_DPCH_13_6_StandAlone (p_UL_ScramblingCode : UL_ScramblingCode)
Group	:
ASN1 Type	: UL_DPCH_Info
Derivation Path	:
Encoding Variation	:
Comments	: this DPCH is the same as stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH. Used for RLC AM and UM mode testing.
Constraint Value	
<pre> { ul_DPCH_PowerControlInfo fdd:{ dpccch_PowerOffset tsc_DPCCH_PowerOffset, pc_Preamble 1, sRB_delay 7, powerControlAlgorithm algorithm1: tsc_TpcStepSize }, modeSpecificInfo fdd :{ scramblingCodeType longSC , scramblingCode p_UL_ScramblingCode, numberOfDPDCH OMIT, spreadingFactor tsc_UL_DPDCH_SF_SRB, tfci_Existence TRUE, numberOfFBI_Bits OMIT, puncturingLimit pl1 } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_U_RNTI
Group	:
ASN1 Type	: U_RNTI
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { srnc_Identity '000000000001'B, s_RNTI '00000000000000000001'B } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: c_U_RNTI_Def
Group	:
ASN1 Type	: U_RNTI
Derivation Path	:
Encoding Variation	:
Comments	: Default U_RNTI identity
Constraint Value	
<pre>{ srcn_Identity px_SRNC_Id, s_RNTI px_SRNTI }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cb_DL_AM_RLC
Group	:
ASN1 Type	: DL_AM_RLC_Mode
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ inSequenceDelivery TRUE, receivingWindowSize rw128, dl_RLC_StatusInfo { timerStatusProhibit tsp200, --timerEPC OMIT missingPDU_Indicator TRUE, timerStatusPeriodic OMIT } }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_64K_CS (p_DL_CommonInformation : DL_CommonInformation;
 p_SecondaryScramblingCode : SecondaryScramblingCode)
Group :
ASN1 Type : DL_DPCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  dl_CommonInformation p_DL_CommonInformation,
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { {secondaryScramblingCode p_SecondaryScramblingCode ,
      sf_AndCodeNumber tsc_DL_DPCH1_ChC_64k_CS
    }},
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCl_PO1 tsc_DPCH_PowerOffsetTFCl,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_SRB_StandAloneDPCH_Offset (p_SecondaryScramblingCode :
 SecondaryScramblingCode)
Group :
ASN1 Type : DL_DPCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset ( tsc_DL_DPCH1_SFP_SRB),
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode ,
      sf_AndCodeNumber tsc_DL_DPCH1_ChC_SRB
    }},
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCl_PO1 tsc_DPCH_PowerOffsetTFCl,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB1_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

{
  cn_CommonGSM_MAP_NAS_SysInfo p_CellInfo.lac,
  cn_DomainSysInfoList {{cn_DomainIdentity ps_domain,
    cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.rac, p_CellInfo.nmo ),
    cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength.cN_PS_DRX_CycleLength
  }},
  {cn_DomainIdentity cs_domain,
    cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.t3212, o_IntToOct ( p_CellInfo.attFlag,1) ),
    cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength
  }
},
ue_ConnTimersAndConstants {
  t_301 OMIT,
  n_301 OMIT,
  t_302 OMIT,
  n_302 OMIT,
  t_304 OMIT,
  n_304 OMIT,
  t_305 OMIT,
  t_307 OMIT,
  t_308 OMIT,
  t_309 OMIT,
  t_310 OMIT,
  n_310 OMIT,
  t_311 OMIT,
  t_312 OMIT,
  n_312 OMIT,
  t_313 OMIT,
  n_313 OMIT,
  t_314 OMIT,
  t_315 OMIT,
  n_315 OMIT,
  t_316 OMIT,
  t_317 OMIT
},
ue_IdleTimersAndConstants {
  t_300 ms4000,
  n_300 tsc_N300,
  t_312 10,
  n_312 s1
},
v3a0NonCriticalExtensions OMIT
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB3_DefUTRAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType3
Derivation Path :
Encoding Variation :
Comments : Default system information block type 3 for UTRAN only

Constraint Value

```

{
  sib4indicator TRUE,
  cellIdentity INT_TO_BIT ( p_CellInfoCfg.cellId , 28 ) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP: NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8, -- IE value * 2
      s_Intersearch 8, -- IE value * 2
      s_SearchHCS OMIT,
      rat_List OMIT,
      q_QualMin -24,
      q_RxlevMin -40 -- (IE value * 2) + 1
    },
    q_Hyst_I_S 1, -- (IE value*2)
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList { notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred
    }
  }
  -- nonCriticalExtensions OMIT
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB3_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType3
Derivation Path :
Encoding Variation :
Comments : Default system information block type 3 for UTRAN/GERAN

Constraint Value

```

{
  sib4indicator TRUE,
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8, -- IE value * 2
      s_Intersearch 8, -- IE value * 2
      s_SearchHCS OMIT,
      rat_List {{
        rat_Identifier gsm,
        s_SearchRAT -16,
        s_HCS_RAT OMIT,
        s_Limit_SearchRAT 0
      }},
      q_QualMin -24,
      q_RxlevMin -40 -- (IE value * 2) + 1
    },
    q_Hyst_I_S 1, -- (IE value*2)
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList { notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred
    }
  }
  -- nonCriticalExtensions OMIT
}
    
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType4
Derivation Path :
Encoding Variation :
Comments : Default system information block type 4 for UTRAN only, used in connected mode.

Constraint Value

```
{
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8, -- IE value * 2
      s_Intersearch 8, -- IE value * 2
      s_SearchHCS OMIT,
      rat_List OMIT,
      q_QualMin -24,
      q_RxlevMin -40 -- (IE value * 2) + 1
    },
    q_Hyst_I_S 1, -- (IE value*2)
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList OMIT
  }
  -- nonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType4
Derivation Path :
Encoding Variation :
Comments : Default system information block type 4 for UTRAN/GERAN, used in connected mode.

Constraint Value

```

{
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8, -- IE value * 2
      s_Intersearch 8, -- IE value * 2
      s_SearchHCS OMIT,
      rat_List {{
        rat_Identifier gsm,
        s_SearchRAT -16,
        s_HCS_RAT OMIT,
        s_Limit_SearchRAT 0
      }},
      q_QualMin -24,
      q_RxlevMin -40 -- (IE value * 2) + 1
    },
    q_Hyst_I_S 1, -- (IE value*2)
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList OMIT
  }
  -- nonCriticalExtensions OMIT
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB5_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType5
Derivation Path :
Encoding Variation :
Comments : Default system information block type 5

Constraint Value

```

{
  sib6indicator TRUE,
  pich_PowerOffset p_CellInfo.powerPICH,
  modeSpecificInfo fdd : {
    aich_PowerOffset p_CellInfo.powerAICH
  },
  primaryCCPCH_Info OMIT,
  prach_SystemInformationList {{
    prach_RACH_Info {
      modeSpecificInfo fdd : {
        availableSignatures tsc_PRACH1_Signatures,
        availableSF tsc_PRACH1_SF,
        preambleScramblingCodeWordNumber tsc_PRACH1_ScrC,
        puncturingLimit pl1,
        availableSubChannelNumbers '111111111111'B
      }
    },
    transportChannelIdentity tsc_RACH1,
    rach_TransportFormatSet commonTransChTFS : c_RACH_TFS_UE,
    rach_TFCS normalTFCSI_Signalling : complete : {
      ctfcSize ctfc2Bit : {{
        ctfc2 0,
        powerOffsetInformation { gainFactorInformation computedGainFactors : 0,
          powerOffsetPp_m 0
        }
      },
      { ctfc2 1,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : {
              gainFactorBetaC 11
            },
            gainFactorBetaD 15,
            referenceTFC_ID 0 },
          powerOffsetPp_m 0
        }
      }
    },
    prach_Partitioning fdd : {{
      accessServiceClass_FDD OMIT
    },
    {
      accessServiceClass_FDD {
        availableSignatureStartIndex 0,
        availableSignatureEndIndex 7,
        assignedSubChannelNumber '1111'B
      }
    },
    {
      accessServiceClass_FDD OMIT
    },
    {
      accessServiceClass_FDD {
        availableSignatureStartIndex 0,
        availableSignatureEndIndex 7,
  
```

Continued on next page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> assignedSubChannelNumber '1111'B } }, { accessServiceClass_FDD OMIT }, { accessServiceClass_FDD { availableSignatureStartIndex 0, availableSignatureEndIndex 7, assignedSubChannelNumber '1111'B } }, { accessServiceClass_FDD OMIT }, { accessServiceClass_FDD { availableSignatureStartIndex 0, availableSignatureEndIndex 7, assignedSubChannelNumber '1111'B } }}, persistenceScalingFactorList { psf0_9, psf0_9, psf0_9, psf0_9, psf0_9, psf0_9 }, ac_To_ASC_MappingTable { 6, 5, 4, 3, 2, 1, 0 }, modeSpecificInfo fdd : { primaryCPICH_TX_Power 31, constantValue -10, prach_PowerOffset { powerRampStep 3, -- db preambleRetransMax 4 }, rach_TransmissionParameters { mmax 2, nb01Min 3, nb01Max 10 }, aich_Info { channelisationCode256 tsc_AICH1_ChC, sttd_Indicator FALSE, aich_TransmissionTiming e0 } } }}, sCCPCH_SystemInformationList {{ secondaryCCPCH_Info { modeSpecificInfo fdd : { dummy1 mayBeUsed, -- mandatory ie secondaryScramblingCode OMIT, sttd_Indicator FALSE, sf_AndCodeNumber tsc_S_CCPCH1_ChC, pilotSymbolExistence FALSE, tfc_Existence TRUE, positionFixedOrFlexible flexible, timingOffset 0 } }, tfc normalTFCI_Signalling : complete: {ctfcSize ctfc4Bit : { {ctfc4 0 }, {ctfc4 1 }, {ctfc4 2 }, {ctfc4 3 }, {ctfc4 4 }, {ctfc4 5 }, {ctfc4 6 }, {ctfc4 8}}}, fach_PCH_InformationList { { transportFormatSet commonTransChTFS : c_PCH_TFS_UE, transportChannelIdentity tsc_PCH1, -- PCH </pre>

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> ctch_Indicator FALSE }, { transportFormatSet commonTransChTFS : c_FACH_TFS_UE, transportChannelIdentity tsc_FACH1, -- FACH ctch_Indicator FALSE }, { transportFormatSet commonTransChTFS : c_FACH_TFS_PS_UE, transportChannelIdentity tsc_FACH2, -- FACH ctch_Indicator FALSE } }, pich_Info fdd :{ channelisationCode256 tsc_PICH1_ChC, pi_CountPerFrame e18, sttd_Indicator FALSE } }}, cbs_DRX_Level1Information OMIT -- nonCriticalExtensions OMIT } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration
<p>Constraint Name : cb_TrChInfoRACH1</p> <p>Group :</p> <p>ASN1 Type : TrCHInfo</p> <p>Derivation Path :</p> <p>Encoding Variation :</p> <p>Comments :</p>
Constraint Value
<pre> { ulconnectedTrCHList { { trchid tsc_RACH1, transportChannelInfo c_RACH_TFS } }, ulTFCS c_TFCS_Cmpl0_1_Rx, -- sent to SS dlconnectedTrCHList OMIT, dlTFCS OMIT } </pre>
Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: cb_TrLogMappingRACH2
Group	:
ASN1 Type	: TrCH_LogCHMappingList1
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { ulconnectedTrCHList { { trchid tsc_RACH1, trCH_LogCHMappingList { { logicalChannel_Mapping ul_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, ul_TransportChannelType rach, logicalChannelIdentity tsc_UL_CCCH5, logicalChannelType cCCH }, rB_Identity tsc_RB0 } } } }, dlconnectedTrCHList OMIT } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cb_UL_AM_RLC
Group	:
ASN1 Type	: UL_AM_RLC_Mode
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { transmissionRLC_Discard noDiscard : dat15, transmissionWindowSize tw128, timerRST tr500, max_RST rst4, pollingInfo { timerPollProhibit tpp200, timerPoll tp200, poll_PDU OMIT, poll_SDU sdu1, lastTransmissionPDU_Poll TRUE, lastRetransmissionPDU_Poll TRUE, pollWindow pw99, timerPollPeriodic OMIT } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cb_UL_DPCH_Info (p_SprdFct: SpreadingFactor; p_PuncLimit: PuncturingLimit; p_UL_ScramblingCode : UL_ScramblingCode)
Group	:
ASN1 Type	: UL_DPCH_Info
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { ul_DPCH_PowerControlInfo fdd:{ dpcch_PowerOffset tsc_DPCCH_PowerOffset, pc_Preamble 1, sRB_delay 7, powerControlAlgorithm algorithm1: tsc_TpcStepSize }, modeSpecificInfo fdd :{ scramblingCodeType longSC , scramblingCode p_UL_ScramblingCode , numberOfDPDCH OMIT, spreadingFactor p_SprdFct, tpci_Existence TRUE, numberOfFBI_Bits OMIT, puncturingLimit p_PuncLimit } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_AM_RLC_SRB
Group	:
ASN1 Type	: DL_AM_RLC_Mode
Derivation Path	: cb_DL_AM_RLC.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE receivingWindowSize BY rw32	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)
Group	:
ASN1 Type	: DL_CommonInformation
Derivation Path	: c_DL_CommonInformationDCH_DPCH_Offset.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.positionFixedOrFlexible BY fixed, REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.tfc_Existence BY FALSE	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_UL_AM_RLC_SRB
Group	:
ASN1 Type	: UL_AM_RLC_Mode
Derivation Path	: cb_UL_AM_RLC.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE transmissionWindowSize BY tw32, REPLACE max_RST BY rst1	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_CipheringModeCmdOn (p_CipheringAlgorithm : CipheringAlgorithm)
Group	:
ASN1 Type	: CipheringModeCommand
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
startRestart : p_CipheringAlgorithm	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_IntegrityCheckInfo0
Group	:
ASN1 Type	: IntegrityCheckInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ messageAuthenticationCode tsc_MessAuthCode, rrc_MessageSequenceNumber tsc_MSN }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_IntegrityProtectModify_P(p1,p2,p3,p4,p5 : RRC_MessageSequenceNumber)
Group	:
ASN1 Type	: IntegrityProtectionModelInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityProtectionModeCommand modify : { dl_IntegrityProtActivationInfo { rrc_MessageSequenceNumberList {p1,p2,p3,p4,p5 } --- fixed reasonable value } }, integrityProtectionAlgorithm uia1 }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_IntegrityProtectStart (p_Integrityprotnumber: BITSTRING)
Group	:
ASN1 Type	: IntegrityProtectionModelInfo
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityProtectionModeCommand startIntegrityProtection :{ integrityProtInitNumber p_Integrityprotnumber }, integrityProtectionAlgorithm uia1 }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_Null_CipheringModeCommand
Group	:
ASN1 Type	: CipheringModeCommand
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
dummy : NULL	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RB_ActTimeInfoListSRBs (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4 : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1) , c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2) , c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3) , c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4) }</pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RB_ActTimeInfoListSRBs_20 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20 : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1) , c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2) , c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3) , c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4) , c_RB_ActTimeInfo (tsc_RB20, p_RLC_SN20) }</pre>	
Detailed Comments :	

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RB_ActTimeInfoListSRBs_20_21 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20, p_RLC_SN21 : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1), c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2), c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3), c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4), c_RB_ActTimeInfo (tsc_RB20, p_RLC_SN20), c_RB_ActTimeInfo (tsc_RB21, p_RLC_SN21) }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RB_ActTimeInfoListSRBs_20_22 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20, p_RLC_SN22 : RLC_SequenceNumber)
Group	:
ASN1 Type	: RB_ActivationTimeInfoList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1), c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2), c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3), c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4), c_RB_ActTimeInfo (tsc_RB20, p_RLC_SN20), c_RB_ActTimeInfo (tsc_RB22, p_RLC_SN22) }</pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_21 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4,
p_RLC_SN21 : RLC_SequenceNumber)
Group :
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{  
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,  
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,  
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ) ,  
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ) ,  
  c_RB_ActTimeInfo ( tsc_RB21, p_RLC_SN21 )  
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RRC_SecModeCmdCiphInt (
 p_RRC_Ti : RRC_TransactionIdentifier;
 p_CipheringModeCommand : CipheringModeCommand;
 p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList ;
 p_ActTimeDPCH : INTEGER;
 p_cn_domain : CN_DomainIdentity;
 p_integrityMode : IntegrityProtectionModelInfo;
 p_SecurityCapability:BITSTRING;
 p_SystemSpecCap: InterRAT_UE_SecurityCapList)
Group :
ASN1 Type : SecurityModeCommand
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```

r3
:
{
  securityModeCommand_r3
  {
    rrc_TransactionIdentifier p_RRC_Ti,
    securityCapability
    {
      cipheringAlgorithmCap p_SecurityCapability,
      integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap
    },
    cipheringModelInfo
    {
      cipheringModeCommand p_CipheringModeCommand,
      activationTimeForDPCH p_ActTimeDPCH,
      rb_DL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList
    },
    integrityProtectionModelInfo p_integrityMode,
    cn_DomainIdentity p_cn_domain,
    ue_SystemSpecificSecurityCap p_SystemSpecCap
  },
  laterNonCriticalExtensions OMIT
}
  
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_RRC_SecModeCmdInt (p_RRC_Ti: RRC_TransactionIdentifier; p_cn_domain: CN_DomainIdentity; p_integrityMode : IntegrityProtectionModelInfo; p_SecurityCapability: BITSTRING; p_SystemSpecCap: InterRAT_UE_SecurityCapList)
Group	:
ASN1 Type	: SecurityModeCommand
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> r3 : { securityModeCommand_r3 { rrc_TransactionIdentifier p_RRC_Ti, securityCapability { cipheringAlgorithmCap p_SecurityCapability, integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap }, cipheringModelInfo OMIT, integrityProtectionModelInfo p_integrityMode, cn_DomainIdentity p_cn_domain, ue_SystemSpecificSecurityCap p_SystemSpecCap }, laterNonCriticalExtensions OMIT } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cs_UE_SysSpecCap(p_SysSpecCap : BITSTRING)
Group	:
ASN1 Type	: InterRAT_UE_SecurityCapList
Derivation Path	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre> { gsm : { gsmSecurityCapability p_SysSpecCap } } </pre>	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
dl_DPCH_InfoCommon{
  cfnHandling initialise : {
    -- cfnTargetsfnframeoffset OMIT
  },
modeSpecificInfo fdd:{
  dl_DPCH_PowerControlInfo {
    modeSpecificInfo fdd:{
      dpc_Mode singleTPC
    }
  },
powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
dl_rate_matching_restriction OMIT,
spreadingFactorAndPilot p_Sf,
positionFixedOrFlexible flexible,
tfc_Existence TRUE
}
},
modeSpecificInfo fdd:{
  defaultDPCH_OffsetValue tsc_DefaultDPCH_OffsetValue,
  dpch_CompressedModeInfo OMIT,
  tx_DiversityMode noDiversity
  -- ssdt_Information OMIT
}
}
```

Detailed Comments : NOTE : not aligned with 34.108. Reason:The value 'inactive' in 34.018 is not valid with asn.1 definition v360

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationRB_SetUp (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dl_DPCH_InfoCommon{
    cfnHandling maintain :NULL,
    modeSpecificInfo fdd:{
      dl_DPCH_PowerControlInfo {
        modeSpecificInfo fdd:{
          dpc_Mode singleTPC
        }
      },
      powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
      dl_rate_matching_restriction OMIT,
      spreadingFactorAndPilot p_Sf,
      positionFixedOrFlexible flexible,
      tpci_Existence TRUE
    }
  },
  modeSpecificInfo fdd:{
    defaultDPCH_OffsetValue OMIT,
    dpch_CompressedModeInfo OMIT ,
    tx_DiversityMode noDiversity
    -- ssdt_Information OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_InfoPerRL_DPCH_Offset (

 p_ScrambCode : PrimaryScramblingCode ;

 p_SecScrambCode : SecondaryScramblingCode ;

 p_Sf : SF512_AndCodeNumber

)

Group :

ASN1 Type : DL_InformationPerRL_List

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```

{{
modeSpecificInfo fdd : {
  primaryCPICH_Info { primaryScramblingCode p_ScrambCode }
  -- pdsch_SHO_DCH_Info OMIT,
  -- pdsch_CodeMapping OMIT
},
dl_DPCH_InfoPerRL fdd : {
  pCPICH_UsageForChannelEst mayBeUsed,
  dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
  -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
  -- Actual value DPCH-FrameOffset = IE value * 256
  -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512
  secondaryCPICH_Info OMIT,
  dl_ChannelisationCodeList {{
    secondaryScramblingCode p_SecScrambCode,
    sf_AndCodeNumber p_Sf,
    scramblingCodeChange noCodeChange
  }},
  tpc_CombinationIndex tsc_TPC_CombinationIndex,
  -- ssdt_CellIdentity OMIT,
  closedLoopTimingAdjMode OMIT
}
-- sccpch_InfoforFACH OMIT
}}
    
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_3_Intra3_Inter2_InterRAT_Def (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg ; p_InterRAT_1, p_InterRAT_2 : G_CellConfigInfo)

Group :

ASN1 Type : SysInfoType11

Derivation Path :

Encoding Variation :

Comments : Default system information block type 11. To be used by cell A,B,C,G and H (3 intra, 3 inter, 3InterRAT)

Constraint Value

```

{
  sib12indicator TRUE,
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
      cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo {
          intraFreqMeasurementID OMIT, -- default value
          intraFreqCellInfoSI_List {
            removedIntraFreqCellList OMIT, -- removeNoIntraFreqCells in SIB11 is not used and ignored by the UE
            newIntraFreqCellList {{
              intraFreqCellID p_ActiveCellInfo.cellId,
              cellInfo {
                cellIndividualOffset OMIT, -- default value
                referenceTimeDifferenceToCell OMIT,
                modeSpecificInfo fdd : {
                  primaryCPICH_Info { primaryScramblingCode p_ActiveCellInfo.priScrmCode },
                  readSFN_Indicator FALSE,
                  tx_DiversityIndicator FALSE
                },
                cellSelectionReselectionInfo OMIT
              }
            },
          },
        },
      },
      {
        intraFreqCellID p_IntraCellInfo2.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
            readSFN_Indicator TRUE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      },
      {
        intraFreqCellID p_IntraCellInfo3.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo3.priScrmCode },
            readSFN_Indicator TRUE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      }
    }
  },
  intraFreqMeasQuantity {
    filterCoefficient OMIT, -- default value
    modeSpecificInfo fdd : {

```

Continued on next page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> intraFreqMeasQuantity_FDD cpich_RSCP } }, reportingInfoForCellDCH { intraFreqReportingQuantity { activeSetReportingQuantities { dummy noReport, cellIdentity_reportingIndicator TRUE, cellSynchronisationInfoReportingIndicator FALSE, modeSpecificInfo fdd : { cpich_Ec_NO_reportingIndicator FALSE, cpich_RSCP_reportingIndicator TRUE, pathloss_reportingIndicator FALSE } }, monitoredSetReportingQuantities { dummy noReport, cellIdentity_reportingIndicator TRUE, cellSynchronisationInfoReportingIndicator TRUE, modeSpecificInfo fdd : { cpich_Ec_NO_reportingIndicator FALSE, cpich_RSCP_reportingIndicator TRUE, pathloss_reportingIndicator FALSE } } }, measurementReportingMode { measurementReportTransferMode acknowledgedModeRLC, periodicalOrEventTrigger eventTrigger }, reportCriteria intraFreqReportingCriteria : { eventCriteriaList {{ event e1a : { triggeringCondition monitoredSetCellsOnly, reportingRange 10, w 1, reportDeactivationThreshold t2, reportingAmount ra4, reportingInterval ri4 }, hysteresis 0, timeToTrigger ttt640, reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3 }, { event e1b : { triggeringCondition activeSetCellsOnly, reportingRange 10, forbiddenAffectCellList OMIT, w 1}, hysteresis 0, timeToTrigger ttt640, reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3 }, { event e1c : { replacementActivationThreshold t3, reportingAmount ra4, reportingInterval ri4 }, hysteresis 0, timeToTrigger ttt640, reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3 } } </pre>

Continued from previous page

ASN.1 Type Constraint Declaration
Constraint Value
<pre> }} } }, interFreqMeasurementSysInfo { interFreqCellInfoSI_List { removedInterFreqCellList OMIT, newInterFreqCellList { { interFreqCellID p_InterCellInfo6.cellId, frequencyInfo p_InterCellInfo6.frequencyInfo, cellInfo { cellIndividualOffset OMIT, -- default value referenceTimeDifferenceToCell OMIT, modeSpecificInfo fdd : { primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode }, readSFN_Indicator FALSE, tx_DiversityIndicator FALSE }, cellSelectionReselectionInfo OMIT -- value same as the serving cell } }, } { interFreqCellID p_InterCellInfo7.cellId, frequencyInfo OMIT, cellInfo { cellIndividualOffset OMIT, -- default value referenceTimeDifferenceToCell OMIT, modeSpecificInfo fdd : { primaryCPICH_Info { primaryScramblingCode p_InterCellInfo7.priScrmCode }, readSFN_Indicator FALSE, tx_DiversityIndicator FALSE }, cellSelectionReselectionInfo OMIT -- value same as the serving cell } }, { interFreqCellID p_InterCellInfo8.cellId, frequencyInfo OMIT, cellInfo { cellIndividualOffset OMIT, -- default value referenceTimeDifferenceToCell OMIT, modeSpecificInfo fdd : { primaryCPICH_Info { primaryScramblingCode p_InterCellInfo8.priScrmCode }, readSFN_Indicator FALSE, tx_DiversityIndicator FALSE }, cellSelectionReselectionInfo OMIT -- value same as the serving cell } } } }} }, interRATMeasurementSysInfo { interRATCellInfoList { removedInterRATCellList removeNoInterRATCells : NULL, newInterRATCellList { { interRATCellID o_OctToInt (p_InterRAT_1.cellIdentity), technologySpecificInfo gsm : { cellSelectionReselectionInfo OMIT, interRATCellIndividualOffset 0, bsic { ncc BIT_TO_INT (p_InterRAT_1.ncc), bcc BIT_TO_INT (p_InterRAT_1.bcc) }, </pre>

Continued on next page

ASP Constraint Declaration

Constraint Name : cas_G_RLC_ControlMsg_REQ_PACCH(p_CellId : CellId; p_PhychId:PhysicalChId; p_dir : INTEGER; p_TFI : B5; p_msg: PDU)
Group :
ASP Type : G_RLC_ControlMsg_REQ
Derivation Path :
Comments : The constraint is used to transmitt the down link RLC/MAC control message to the UE/MS on PCCCH channel.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhychId	
g_LogicChType	tsc_PACCH_F	PACCH
tBF_Direction	p_dir	0 --- downlink; 1 --- uplink
tFI	p_TFI	
rRBP	'00'B	relative reserved block period
s_P_Bit	'0'B	supplementary/polling bit
rfrn	c_G_RFN_Omit	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	OMIT	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	tsc_NormalPaging	0 --- normal paging;1--- exteded paging;3 --- paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	p_msg	Signalling message or user data to be sent

Detailed Comments :

ASP Constraint Declaration		
Constraint Name : car_HandoverFailureInd (p_CellId : CellId ; p_SAPI:SAPI; p_PhysicalChId : PhysicalChId; p_G_LogicChType: G_LogicChType ; p_subcn : SubChannelNumber ; p_rfn : RFN ; p_Msg : PDU) Group : ASP Type : G_L2_DATA_IND Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	0 Channel identifier
sAPI	p_SAPI	
physicalChId	p_PhysicalChId	
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	
rfn	p_rfn	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_GSM_CL1_ComingFN_REQ(p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType; p_SubChannel : SubChannelNumber) Group : ASP Type : G_CL1_ComingFN_REQ Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
physicalChId	p_PhysicalChId	
g_LogicChType	p_G_LogicChType	
subChannel	p_SubChannel	
		Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL2_Release_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId)		
Group :		
ASP Type : G_CL2_Release_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL2_Release_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId)		
Group :		
ASP Type : G_CL2_Release_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : cas_G_L2_Release_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubchNo : SubChannelNumber)		
Group :		
ASP Type : G_L2_Release_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0 or 3
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogCh	
subChannel	p_SubchNo	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	'1'B	0–normal release, 1–local release
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_L2_Release_CNF		
Group :		
ASP Type : G_L2_Release_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	?	
sAPI	?	0 or 3
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	?	0-normal release, 1-local release
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_AT_CmdCnfWithString		
Group :		
ASP Type : AT_CmdCnf		
Derivation Path :		
Comments : The ASP is used get a positive result only for a requested command to the UT (UT ->LT).		
Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	
resultString	?	
sMS_BlockMode	-	Defined for future development
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_MMI_CmdCnfNeg		
Group :		
ASP Type : MMI_CmdCnf		
Derivation Path :		
Comments : The ASP is used get the negative result of a requested MMI command to the UT (UT ->LT).		
Parameter Name	Parameter Value	Comments
result	FALSE	
resultString	*	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_AT_CmdCnf		
Group :		
ASP Type : AT_CmdCnf		
Derivation Path :		
Comments : The ASP is used get a positive result only for a requested command to the UT (UT ->LT).		
Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	Defined for future development
resultString	tsc_AT_ResultOK IF_PRESENT	
sMS_BlockMode	-	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_AT_CmdReq (p_Cmd : IA5String)		
Group :		
ASP Type : AT_CmdReq		
Derivation Path :		
Comments : The ASP is used to request a command to the UT (LT ->UT).		
Parameter Name	Parameter Value	Comments
cmd	p_Cmd	Defined for future development
sMS_BlockMode	-	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_DataReq (p_CellId : INTEGER; p_Rb : SS_RB_Identity ; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataReq		
Derivation Path :		
Comments : The ASP is used to request the transmission of the NAS PDU message using acknowledged operation (NAS -> RRC).		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	GERAN only
rB_Id	p_Rb	
ch	-	
sapId	-	
cN_Domain	tsc_SS_CS_Domain	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_MMI_CmdCnf		
Group :		
ASP Type : MMI_CmdCnf		
Derivation Path :		
Comments : The ASP is used get the result of a requested MMI command to the UT (UT ->LT).		
Parameter Name	Parameter Value	Comments
result	TRUE	
resultString	*	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_MMI_CmdReq (p_Cmd : IA5String)		
Group :		
ASP Type : MMI_CmdReq		
Derivation Path :		
Comments : The ASP is used to request a MMI command to the UT (LT ->UT).		
Parameter Name	Parameter Value	Comments
cmd	p_Cmd	command line
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_PS_DataReq (p_CellId : INTEGER; p_Rb : SS_RB_Identity ; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataReq		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	-	GERAN only
sapId	-	GERAN only
cN_Domain	tsc_SS_PS_Domain	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_InitDirectTransfer (p_CellId: INTEGER; p_Rb : SS_RB_Identity; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataInd		
Derivation Path :		
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <- RRC).		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	-	GERAN only
sapId	-	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	?	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_PS_InitDirectTransfer (p_CellId: INTEGER; p_Rb :SS_RB_Identity; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataInd		
Derivation Path :		
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <- RRC).		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	-	GERAN only
sapId	-	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	?	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_PS_UplinkDirectTransfer (p_CellId: INTEGER; p_Rb :SS_RB_Identity; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataInd		
Derivation Path :		
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <- RRC).		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	-	GERAN only
sapId	-	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	-	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_StatusInd (p_RB_Id: SS_RB_Identity)		
Group :		
ASP Type : RLC_TR_TestDataInd		
Derivation Path :		
Comments : This constraint is used to receive a STATUS PDU with the given super fields, and using the given RB Id. Any padding octets present are ignored. Parameters: p_RB_Id: The identifier for the RB to be used for reception of data. This is expected to be one of the following values, depending on the RLC configuration being tested. tsc_RB_AM_7_RLC, tsc_RB_UM_7_RLC, tsc_RB_AM_15_RLC, tsc_RB_UM_15_RLC p_SuperFields: The super fields expected to be included in the STATUS PDU.		
Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_RB_Id	
data	cr_StatusAny	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_UplinkDirectTransfer (p_CellId: INTEGER; p_Rb : SS_RB_Identity; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataInd		
Derivation Path :		
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <- RRC).		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	-	GERAN only
sapId	-	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	-	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_G_CL1_ChangePowerLevel_CNF (p_CellId : CellId ; p_PhychId : PhysicalChId)		
Group :		
ASP Type : G_CL1_ChangePowerLevel_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhychId	Channel identifier
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_G_CL1_ChangePowerLevel_REQ (p_CellId : CellId ; p_PhychId : PhysicalChId ; p_txPow : TX_Power)		
Group :		
ASP Type : G_CL1_ChangePowerLevel_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhychId	Channel identifier
txPower	p_txPow	the new transmission power level. in dBuVemf()
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCnf(p_CellId : CellId; p_PhyChId :PhysicalChId)		
Group :		
ASP Type : G_CL1_CreateBasicPhyCh_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId physicalChId	p_CellId p_PhyChId	identifier of the physical channel created
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType1(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode; p_CipherKey : B64)		
Group :		
ASP Type : G_CL1_CreateBasicPhyCh_REQ		
Derivation Path :		
Comments : TCH/F + FACCH/F + SACCH/F		
Parameter Name	Parameter Value	Comments
cellId physicalChId	p_CellId p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType1	logical channels combined onto the basic physical channel
freqInfo timeSlot	p_CellCfgInfo.tCH_Freq p_TimeSlot	the time slot number of the physical channel
tSC channelSpecificPara	p_CellCfgInfo.tSC c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower bandIndicator	p_CellCfgInfo.downlinkPowerLevel p_CellCfgInfo.bandIndicator	
Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4, TCH/AFS, TCH/EFS, TCH/FS and signalling only are allowed for p_ChMode		

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType10(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_REQ
Derivation Path :
Comments : TCH/F + SACCH/MD

Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType10	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT, OMIT, OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode.

This is downlink only channel, used to form a multislot configuration with type 8 channel.

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType11(p_CellId : CellId; p_PhyChId : PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC; p_PCCHParams : PCCCH_OrganisationParameters; p_PBCCHInfo : PBCCH_Info) Group : ASP Type : G_CL1_CreateBasicPhyCh_REQ Derivation Path : Comments : PBCCH + PCCCH + PDTCH/F + PACCH/F + PTCCH/F		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType11	logical channels combined onto the basic physical channel
freqInfo	p_FreqInfo	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_Tsc	
channelSpecificPara	c_ChSpecificPara(OMIT, OMIT, c_PCCCH_Info(p_PCCHParams.bs_PBCCH_BLKs, p_PCCHParams.bs_PAG_BLKs_RES , p_PCCHParams.bs_PRACH_BLKs), p_PBCCHInfo)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType13(p_CellId : CellId; p_PhyChId : PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC) Group : ASP Type : G_CL1_CreateBasicPhyCh_REQ Derivation Path : Comments : PDTCH/F + PACCH/F + PTCCH/F		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType13	logical channels combined onto the basic physical channel
freqInfo	p_FreqInfo	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_Tsc	
channelSpecificPara	OMIT	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType18(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode) Group : ASP Type : G_CL1_CreateBasicPhyCh_REQ Derivation Path : Comments : E-TCH/F +E-IACCH/F + E-FACCH/F + E-SACCH/TF		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType18	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	
Detailed Comments : Only E-TCH/F43.2, E-TCH/F32.0 and E-TCH/F28.8 are allowed for p_ChMode		

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType19(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode) Group : ASP Type : G_CL1_CreateBasicPhyCh_REQ Derivation Path : Comments : E-TCH/F +E-IACCH/F + E-FACCH/F + E-SACCH/M		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType19	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	
Detailed Comments : Only E-TCH/F43.2, E-TCH/F32.0 and E-TCH/F28.8 are allowed for p_ChMode		

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType2(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode; p_CipherKey : B64)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1)

Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType2	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments : Only TCH/H2.4, TCH/H4.8, TCH/AHS, TCH/HS and signalling only are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType20(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_REQ
Derivation Path :
Comments : E-TCH/F + E-IACCH/F + E-SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType20	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments : Only E-TCH/F43.2, E-TCH/F32.0 and E-TCH/F28.8 are allowed for p_ChMode. This type of channel is used as additional channel in the multislot configuration.

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType21(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_REQ
Derivation Path :
Comments : E-TCH/F + E-IACCH/F + E-SACCH/MD

Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType21	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments : Only E-TCH/F43.2, E-TCH/F32.0 and E-TCH/F28.8 are allowed for p_ChMode.
This is dwonlink only channel, it is used to form a multislot configuration with one type 8 channel.

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType5(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_CipherKey : B64)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_REQ
Derivation Path :
Comments : FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)

Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType5	logical channels combined onto the basic physical channel
freqInfo	c_FreqInfoBCCH(p_CellCfgInfo.bCCH_H_Freq)	the time slot number of the physical channel
timeSlot	tsc_TNO	
tSC	p_CellCfgInfo.bcc	
channelSpecificPara	c_ChSpecificPara(c_SDCCH4_Ch(p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), c_CCCH_Info(p_CellCfgInfo.bS_PA_MFRMS, p_CellCfgInfo.bS_AG_BLKRES), OMIT, OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType8(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_REQ
Derivation Path :
Comments : TCH/F + FACCH/F + SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType8	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT, OMIT, OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode

ASP Constraint Declaration		
Constraint Name : ca_BasicPhyChCombType9(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode) Group : ASP Type : G_CL1_CreateBasicPhyCh_REQ Derivation Path : Comments : TCH/F + SACCH/M		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	identifier of the physical channel created
physicalChId	p_PhyChId	
channelCombination	tsc_BasicPhyChCombType9	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	the time slot number of the physical channel
timeSlot	p_TimeSlot	
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	
Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode. This type of channels are used with type 8 channel to form a multislot configuration.		

ASP Constraint Declaration		
Constraint Name : ca_CellId(p_CellId : CellId; p_NCC, p_BCC : B3; p_TA :O1) Group : ASP Type : G_CL1_CreateCell_REQ Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
baselId	o_BitstringConcat(p_NCC,p_BCC,3,3)	
timingAdvance	o_OctToBit(p_TA)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_CellIdCnf(p_CellId : CellId)		
Group :		
ASP Type : G_CL1_CreateCell_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_CipheringControl_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_CiphMode : B1)		
Group :		
ASP Type : G_CL1_CipheringControl_REQ		
Derivation Path :		
Comments : The ASP is used to set the ciphering mode of the physical channel in the receiving direction, the kc and ciphering algorithm were set by the G_CL1CreateBasicPhyCh_REQ for the physical channel before calling the ASP.		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel Identifier Ciphering Mode in SS receiving direction: 0 -> not ciphered 1 -> ciphered
physicalChId	p_PhyCh	
rcvCipherMode	p_CiphMode	
Detailed Comments : For GSM dedicated physical channels, the ciphering mode of the SS shall be changed in three steps: (3GPP TS 44.018, clause 3.4.7) Before the SS sends CIPHERING MODE COMMAND the SS is transmitting and receiving in the old ciphering mode (e.g. not ciphered), after the SS sends the CIPHERING MODE COMMAND the SS changes its receiving ciphering mode to the new ciphering mode (e.g. ciphered) and keeps transmitting in the old ciphering mode; then after receiving the CIPHERING MODE COMPLETE, or any correct L2 frame in the new ciphering mode, the SS changes the transmitting ciphering mode to the new mode. The TTCN writer shall use the ASP before sending the CIPHERING MODE COMMAND to ensure the ciphering mode of the physical channel is changed in sufficient time, according to the 3 step procedure outlined above.		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_CipheringControl_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId)		
Group :		
ASP Type : G_CL1_CipheringControl_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel Identifier
physicalChId	p_PhyCh	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_CipherModeModify_CNF		
Group :		
ASP Type : G_CL1_CipherModeModify_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	?	Channel identifier
physicalChId	?	
g_LogicChType	?	
subChannel	?	
Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.		
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_CipherModeModify_REQ(p_CellId: CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubCh : SubChannelNumber; p_CipherMode : CipherModeSetting)		
Group :		
ASP Type : G_CL1_CipherModeModify_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
physicalChId	p_PhyCh	
g_LogicChType	p_LogCh	
subChannel	p_SubCh	
Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.		
cipherMode	p_CipherMode	the new cipher mode. definition see 3GPP TS 44.018 section 10.5.2.9
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteCell_CNF (p_CellId : CellId)		
Group :		
ASP Type : G_CL1_DeleteCell_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteCell_REQ (p_CellId : CellId)		
Group :		
ASP Type : G_CL1_DeleteCell_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteChannel_CNF (p_CellId : CellId; p_PhyChId : PhysicalChId)		
Group :		
ASP Type : G_CL1_DeleteChannel_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel or the multi-slot configuration to be deleted
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteChannel_REQ (p_CellId : CellId; p_PhyChId : PhysicalChId)		
Group :		
ASP Type : G_CL1_DeleteChannel_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId physicalChId	p_CellId p_PhyChId	identifier of the physical channel or the multi-slot configuration to be deleted
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_L2_UnitDataInd_MeasReport(p_CellID:CellId ; p_PhyChId : PhysicalChId ; p_Logch : G_LogicChType ; p_SubChNum :SubChannelNumber ; p_RFN :RFN; p_msg :PDU)		
Group :		
ASP Type : G_L2_UNITDATA_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId sAPI physicalChId g_LogicChType subChannel	p_CellID 0 p_PhyChId p_Logch p_SubChNum	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame carrying the message
msg	p_msg	Signalling message or user data received
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_L2_Unitdata_Ind_ChannelReq(p_CellId: CellId; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_RFN : RFN; p_Msg : PDU)		
Group :		
ASP Type : G_L2_UNITDATA_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
sAPI	0	
physicalChId	p_PhyId	
g_LogicChType	p_LogType	
subChannel	OMIT	
rfn	p_RFN	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
msg	p_Msg	The reduced frame number of the first frame carrying the message
Signalling message or user data received		
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_Paging_REQ_PCH (p_CellId : CellId ;p_IMSI : HEXSTRING;p_CCCH_Conf : B3; p_N : INTEGER ; p_msg : PDU)		
Group :		
ASP Type : G_L2_Paging_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	0
sAPI	0	
physicalChId	0	
g_LogicChType	2	Channel identifier of the right CCCH_GROUP or PCCCH_GROUP PCH
pAGING_GROUP	o_PagingGroupCalculate(p_IMSI, p_CCCH_Conf , p_N)	INTEGER
pagingMode	0	0 -- normal paging; 1-- exteded paging; 3 -- paging reorganization
msg	p_msg	paging message to be sent
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo1(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_CellAlloc : CellChDescr; p_RACHControlParam: RACHControlParam; p_BandInd : B1)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType1	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType1(p_CellAlloc, p_RACHControlParam, p_BandInd)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo13(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_BCCHExt : B1; p_SI13RO: SI13RO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType13	
bCCHExt	p_BCCHExt	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType13(p_SI13RO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo15(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_BCCHExt : B1; p_SI15RO: SI15RO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType15	
bCCHExt	p_BCCHExt	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType15(p_SI15RO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo2(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_NeighBCCHs: NeighCellDescr;p_NCC_Permitted: O1;p_RACHControlParam: RACHControlParam)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType2	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType2(p_NeighBCCHs, p_NCC_Permitted, p_RACHControlParam)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo2bis(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_InstanceIndex : INTEGER; p_XneighCellFreqList :NeighCellDescr; p_RACHControlParam: RACHControlParam)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	p_InstanceIndex	
sysInfoType	tsc_SysInfoType2bis	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType2bis(p_XneighCellFreqList, p_RACHControlParam)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo2quater(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_InstanceIndex : INTEGER; p_BCCHExt : B1; p_SI2quaterRO: SI2quaterRO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	p_InstanceIndex	
sysInfoType	tsc_SysInfoType2quater	
bCCHExt	p_BCCHExt	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType2quater(p_SI2quaterRO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo3(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_CellIdentity : O2; p_LAI: LocAreald_v ;p_ControlChDescr:ControlChDescr; p_CellOption: CellOptionBCCH; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI3RO: SI3RO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType3	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType3(p_CellIdentity, p_LAI, p_ControlChDescr, p_CellOption, p_CellSelParam, p_RACHControlParam, p_SI3RO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo4(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LAI: LocAreald_v; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI4RO: SI4RO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType4	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType4(p_LAI, p_CellSelParam, p_RACHControlParam, p_SI4RO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo5(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LogicChType: G_LogicChType; p_NeighCellFreqList :NeighCellDescr)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogicChType	SACCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType5	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType5(p_NeighCellFreqList)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo5bis(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LogicChType: G_LogicChType; p_XneighCellFreqList :NeighCellDescr)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogicChType	SACCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType5bis	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType5bis(p_XneighCellFreqList)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_SysInfo6(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LogicChType: G_LogicChType; p_CellIdentity : O2; p_LAI:LocAreald_v; p_CellOptionSACCH: CellOptionSACCH; p_NCCPermitted : NCCPermitted; p_SI6RO: SI6RO)		
Group :		
ASP Type : G_L2_SYSINFO_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogicChType	SACCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType6	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'.
msg	c_SysInfoType6(p_CellIdentity, p_LAI, p_CellOptionSACCH, p_NCCPermitted, p_SI6RO)	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : cabr_G_L2_ACCESS_IND (p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType ; p_subcn : SubChannelNumber ; p_rfn : RFN ; p_burst : PDU)		
Group :		
ASP Type : G_L2_ACCESS_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4. This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn	p_rfn	The reduced frame number of the frame carrying the burst
burst	p_burst	random access burst or handover access burst
Detailed Comments :		

ASP Constraint Declaration

Constraint Name : car_G_L2_L2Estab_IND (p_CellId : CellId; p_Msg : PDU)
Group :
ASP Type : G_L2_L2Estab_IND
Derivation Path :
Comments : The ASP is used to receive an indication of that L2 multiple frame operation on the specified channel has been established.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
physicalChId	?	
g_LogicChType	?	
subChannel	?	
sAPI	?	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field shall be coded as 15 if it is not applicable.
establish_mode	?	0, 3
rfrn	?	Norm
msg	p_Msg	The reduced frame number of the first frame carries the L2 SABM frame this field is present only when the establish mode is CoRes (collision resolution)

Detailed Comments : see 3GPP TS 44.006 clause 7.1.1 and 7.1.3

ASP Constraint Declaration

Constraint Name : cas_G_L2_DATA_REQ (p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType : G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_DATA_REQ

Derivation Path :

Comments : The ASP is used to send L3 signalling message on the signalling channels or user data on the traffic channels to the UE/MS in acknowledged mode.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	p_SAPI	0
physicalChId	p_PhyId	Channel identifier
g_LogicChType	p_LogType	
subChannel	p_SubchNo	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	p_Msg	Signalling message or user data to be sent

Detailed Comments : Parameter fn is only used in the test cases which requires specific L3 message to be sent on specified frame number

ASP Constraint Declaration		
Constraint Name : cas_G_L2_UNITDATA_REQ (p_CellId:CellId;p_PhysicalChId : PhysicalChId;p_G_LogicChType: G_LogicChType; p_subcn : SubChannelNumber;p_RFN : RFN; p_Msg : PDU) Group : ASP Type : G_L2_UNITDATA_REQ Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
sAPI	0	
physicalChId	p_PhysicalChId	
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	
rfn	p_RFN	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	p_Msg	Signalling message or user data to be sent
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : cr_G_L2_Release_IND (p_CellId : INTEGER) Group : ASP Type : G_L2_Release_IND Derivation Path : Comments : The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt.		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
sAPI	?	
physicalChId	?	
g_LogicChType	?	
subChannel	?	
release_Mode	?	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). 0 = normal release; 1 = local end release
outstanding_Indicator	?	whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : cr_G_L2_DATA_IND (p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU) Group : ASP Type : G_L2_DATA_IND Derivation Path : Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
sAPI	p_SAPI	
physicalChId	p_PhyId	
g_LogicChType	p_LogType	
subChannel	p_SubchNo	
rfn	p_RFN	The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL2_MeasRptControl_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId) Group : ASP Type : G_CL2_MeasRptControl_CNF Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
physicalChId	p_PhyCh	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL2_MeasRptControl_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubCh : SubChannelNumber; p_OnOff : BOOLEAN)		
Group :		
ASP Type : G_CL2_MeasRptControl_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier Valid only for logical channel types: SACCH/TF, SACCH/TH, SACCH/C8 and SACCH/C4
physicalChId	p_PhyCh	
g_LogicChType	p_LogCh	
subChannel	p_SubCh	For SACCH/TH value is (0..1), for SACCH/C8 value is (0..7) and for SACCH/C4 value is (0..3)
sendMeasRpts	p_OnOff	Whether or not to report received Measurement Reports to the TTCN
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_G_RLC_ControlMsg_IND(p_CellId : CellId; p_PhyChId:PhysicalChId; p_msg: PDU)		
Group :		
ASP Type : G_RLC_ControlMsg_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier PCCCH or PACCH or PTCCCH
physicalChId	p_PhyChId	
g_LogicChType	tsc_PACCH_F	
tBF_Direction	?	0 -- downlink; 1 -- uplink
tFI	?	temporary flow identity
rfrn	?	the reduced frame number of the frame carrying this message
msg	p_msg	uplink RLC/MAC control message
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CRLC_CreateRLC_MAC_REQ(p_cellId: CellId)		
Group :		
ASP Type : G_CRLC_CreateRLC_MAC_REQ		
Derivation Path :		
Comments : The ASP is used to create a RLC/MAC entity in GERAN RLC/MAC emulation module.		
Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell
Detailed Comments : One RLC/MAC entity per cell can exist, cellId will be used for coupling LLC layer module to the RLC/MAC emulation module.. The packet channel description given in the ChannelSpecificInfo of G_CL1_CreateBasicPhyCh_REQ shall be used to configure this layer. This ASP shall be called after the G_CL1_CreateBasicPhyCh_REQ ASP.		

ASP Constraint Declaration		
Constraint Name : ca_G_CRLC_CreateRLC_MAC_CNF(p_cellId: CellId)		
Group :		
ASP Type : G_CRLC_CreateRLC_MAC_CNF		
Derivation Path :		
Comments : The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ		
Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CRLC_DeleteRLC_MAC_REQ(p_cellId: CellId)		
Group :		
ASP Type : G_CRLC_DeleteRLC_MAC_REQ		
Derivation Path :		
Comments : The ASP is used to delete a RLC/MAC entity in GERAN RLC/MAC emulation module.		
Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell
Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.		

ASP Constraint Declaration		
Constraint Name : ca_G_CRLC_DeleteRLC_MAC_CNF		
Group :		
ASP Type : G_CRLC_DeleteRLC_MAC_CNF		
Derivation Path :		
Comments : The ASP is used to delete a RLC/MAC entity in GERAN RLC/MAC emulation module.		
Parameter Name	Parameter Value	Comments
cellId	?	The identifier of the cell
Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.		

ASP Constraint Declaration

Constraint Name : ca_G_RLC_PSI_REQ(p_cellId:CellId; p_physicalChId:PhysicalChId; p_PSIcategory:PSI_Category; p_PosInList: PositionInList; p_PSIMessage:PDU)

Group :

ASP Type : G_RLC_PSI_REQ

Derivation Path :

Comments : The ASP is used to send packet system information messages to the lower layer emulator.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	
physicalChId	p_physicalChId	Channel identifier
g_LogicChType	tsc_PBCCH_LogicalType	PBCCH or PACCH or PCCCH
packetSysInfoCategory	p_PSIcategory	PSI1 or high repetition rate or low repetition rate
positionInList	p_PosInList	Position in the high repetition rate list or the low repetition rate list, for PSI1 this field has no meaning.
msg	p_PSIMessage	This field contains PACKET SYSTEM INFORMATION message. See 3GPP TS 44.060 section 11.2.18 to section 11.2.25 for PACKET SYSTEM INFORMATION message definitions.

Detailed Comments : On BCCH, the lower layer emulator shall store the PACKET SYSTEM INFORMATION's, and transmit them according to the rules specified in section 6.3.2.4 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator.

Multiple instances of a PSI shall be put in the same list and in ascending order of the message instance number.

ASP Constraint Declaration		
Constraint Name : c_G_L2_DATA_IND (p_cellId : CellId ; p_msg : PDU) Group : ASP Type : G_L2_DATA_IND Derivation Path : Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.		
Parameter Name	Parameter Value	Comments
cellId	p_cellId	0 Channel identifier Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
sAPI	?	
physicalChId	?	
g_LogicChType	?	
subChannel	?	
rfr	*	The reduced frame number of the first frame on which this message is received
msg	p_msg	Signalling message or user data received
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : cabr_G_L2_L2Estab_IND (p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType : G_LogicChType ; p_subcn : SubChannelNumber ; p_msg : PDU) Group : ASP Type : G_L2_L2Estab_IND Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field shall be coded as 15 if it is not applicable.
physicalChId	p_PhysicalChId	
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	
sAPI	0	0
establish_mode	?	Norm
rfr	*	this field is present only when the establish mode is CoRes (collision resolution)
msg	p_msg	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_G_LLC_UnitData_IND (p_LLMEID : LLMEID ; p_Msg : PDU)		
Group :		
ASP Type : G_LLC_UNITDATA_IND		
Derivation Path :		
Comments : The ASP is used to receive an L3 PDU from the UE/MS in LLC unconfirmed transmission.		
Parameter Name	Parameter Value	Comments
ILMEId	p_LLMEID	temporary logical link identifier
tLLI	?	
sAPI	?	
msg	p_Msg	L3 PDU
Detailed Comments : 3GPP TS 44.064 clause 8.4.2		

ASP Constraint Declaration		
Constraint Name : cas_G_LLC_UnitData_Req (p_LLMEID : LLMEID ; p_TLLI : TLLI ; p_Sapi : SAPI ; p_ProtectMode : B1 ; p_CipherMode : B1 ; p_Msg : PDU)		
Group :		
ASP Type : G_LLC_UNITDATA_REQ		
Derivation Path :		
Comments : The ASP is used to transmit an L3 PDU to the UE/MS in LLC unconfirmed transmission.		
Parameter Name	Parameter Value	Comments
ILMEId	p_LLMEID	temporary logical link identifier
tLLI	p_TLLI	
sAPI	p_Sapi	
protectMode	p_ProtectMode	0 -- unprotected; 1 -- protected
cipherMode	p_CipherMode	0 -- no encryption; 1 -- encrypted
msg	p_Msg	L3 PDU
Detailed Comments : 3GPP TS 44.064 clause 8.4.1		

ASP Constraint Declaration		
Constraint Name : c_G_LLC_XID_IndAny		
Group :		
ASP Type : G_LLC_XID_IND		
Derivation Path :		
Comments : The ASP is used to receive the XID requested by the UE/MS.		
Parameter Name	Parameter Value	Comments
ILMEId	?	temporary logical link identifier
tLLI	?	
sAPI	?	
xID_Info	?	the XID parameters requested by the UE/MS
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_G_LLC_XID_Res(p_LLMEId : LLMEID; p_TLLI : TLLI; p_SAPI : SAPI; p_XID_Info : XID_Info)		
Group :		
ASP Type : G_LLC_XID_RES		
Derivation Path :		
Comments : The ASP is used to send to the UE/MS the negotiated XID parameters agreed by the SS.		
Parameter Name	Parameter Value	Comments
lLMEId tLLI sAPI xID_Info	p_LLMEId p_TLLI p_SAPI p_XID_Info	temporary logical link identifier the negotiated XID parameters agreed by the SS
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_PRACH(p_CellId : CellId; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType ; p_retry : B1; p_rfn : RFN ; p_data : PDU)		
Group :		
ASP Type : G_RLC_ACCESS_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId physicalChId g_LogicChType rfn retryBit burst	p_CellId p_PhysicalChId p_G_LogicChType p_rfn p_retry p_data	Isn't there only one channel?? PRACH or PACCH or PTCCH The reduced frame number of the frame carrying the burst For access bursts on PRACH, RACH. For PACCH, this field is no meaning 8-bit or 11-bit access burst
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_ActivateTBF_UplinkDyn (p_CellId : CellId ; p_rLC_Mode : BITSTRING; p_USFRate : INTEGER)		
Group :		
ASP Type : G_CRLC_UL_TBF_Config_REQ		
Derivation Path :		
Comments : the ASP is used to configure a TBF used for uplink data transfer		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
tFI	tsc_uplinkTFI	
tBF_Mode	'0'B	0 – GPRS; 1 – EGPRS
channelCoding	1	CS-1
tLLI_BlockChannelCoding	'1'B	0 – CS-1 or MCS-1(EGPRS); 1 – same as channelCoding
rLC_Mode	p_rLC_Mode	0 – acknowledged mode; 1 – unacknowledged mode
startingTime	c_G_RFN_Omit	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
uSF_Rate	p_USFRate	This parameter controls the speed of the UL TBF transferring data blocks by controlling the USF rate: 1----> implementation dependent. TTCN does not specify the USF generating rate; 2----> 10 USF's per second; 3----> 5 USF's per second; 4----> 1 USF per second; 5----> 1 USF per 2 seconds; 6----> 1 USF per 3 seconds; 7----> 1 USF per 4 seconds
dynamicAllocation	cs_DynamicAllocation	
Detailed Comments : For GPRS channel coding can be: CS-1, CS-2, CS-3 and CS-4;For EGPRS channel coding can be : MCS-1, MCS-2, MCS-3, MCS-4, MCS-5, MCS-6, MCS-7, MCS-8, MCS-9, MCS-5-7 and MCS-6-9.		

ASP Constraint Declaration		
Constraint Name : ca_Activate_UL_TBF_CNF		
Group :		
ASP Type : G_CRLC_UL_TBF_Config_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	?	
tFI	?	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_Activate_DL_TBF_CNF		
Group :		
ASP Type : G_CRLC_DL_TBF_Config_CNF		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	?	
tFI	?	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_Assign_Req(p_cellId : CellId; p_oldTLLI, p_newTLLI: TLLI; p_CipherAlg : GPRS_CipherAlg; p_CipherKey : B64)		
Group :		
ASP Type : G_CLLC_Assign_REQ		
Derivation Path :		
Comments : The constraint is used to assign the TLLI, the cipher key (Kc) and the cipher algorithm of GERAN LLC emulator module.		
Parameter Name	Parameter Value	Comments
cellId	p_cellId	
oldTLLI	p_oldTLLI	OCTETSTRING[4]
newTLLI	p_newTLLI	
cipherKey	p_CipherKey	
cipherAlgorithm	p_CipherAlg	BITSTRING[3], 3GPP TS 24.008 section 10.5.5.3
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_Assign_CNF(p_LLMEId :LLMEId)		
Group :		
ASP Type : G_CLLC_Assign_CNF		
Derivation Path :		
Comments : The constraint is used to get confirmation of G_CLLC_Assign_REQ		
Parameter Name	Parameter Value	Comments
ILMEId	p_LLMEId	Logical Layer Management Entity Id
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_CreateLLE_REQ(p_LLMEId: LLMEId ; p_CellId : CellId)		
Group :		
ASP Type : G_CLLC_CreateLLE_REQ		
Derivation Path :		
Comments : The ASP is used to create an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	Parameter Value	Comments
ILMEId rLC_MAC_MappingInfo	p_LLMEId p_CellId	Logical Layer Management Entity Id This parameter indicates the RLC/MAC emulation module in the cell, not the cell itself.
Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_CreateLLE_CNF(p_LLMEId: LLMEId)		
Group :		
ASP Type : G_CLLC_CreateLLE_CNF		
Derivation Path :		
Comments : The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ		
Parameter Name	Parameter Value	Comments
ILMEId	p_LLMEId	The identifier of the cell Logical Layer Management Entity Id
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_DeleteLLE_REQ(p_LLMEId: LLMEId)		
Group :		
ASP Type : G_CLLC_DeleteLLE_REQ		
Derivation Path :		
Comments : The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	Parameter Value	Comments
ILMEId	p_LLMEId	Logical Layer Management Entity Id
Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.		

ASP Constraint Declaration		
Constraint Name : ca_G_CLLC_DeleteLLE_CNF		
Group :		
ASP Type : G_CLLC_DeleteLLE_CNF		
Derivation Path :		
Comments : The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	Parameter Value	Comments
ILMEId	?	Logical Layer Management Entity Id
Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.		

ASP Constraint Declaration		
Constraint Name : ca_ActivateTBF_Downlink(p_CellId : CellId; p_PhyChId : PhysicalChId; p_rLC_Mode : BITSTRING; p_USFRate : INTEGER)		
Group :		
ASP Type : G_CRLC_DL_TBF_Config_REQ		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
tFI	tsc_downlinkTFI	
tBF_Mode	'0'B	0 – GPRS; 1 – EGPRS
channelCoding	1	
rLC_Mode	p_rLC_Mode	0 – acknowledged mode; 1 – unacknowledged mode
timeSlotAllocation	c_TimeSlotAllocation_TN4(p_PhyChId)	Downlink TBF time slot allocation
startingTime	c_G_RFN_Omit	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
dataBlockRate	p_USFRate	This parameter controls the speed of the DL TBF transferring data blocks by controlling the USF rate: 1----> implementation dependent. TTCN does not specify the USF generating rate; 2----> 10 data blocks per second; 3----> 5 data blocks per second; 4----> 1 data block per second; 5----> 1 data block 2 seconds; 6----> 1 data block 3 seconds; 7----> 1 data block 4 seconds
Detailed Comments :		

ASP Constraint Declaration

Constraint Name : cas_G_RLC_ControlMsg_REQ_PAGCH(p_CellId : CellId; p_PhyChId:PhysicalChId; p_TFI : B5; p_SP : B1; p_RFN : RFN; p_msg : PDU)

Group :

ASP Type : G_RLC_ControlMsg_REQ

Derivation Path :

Comments : The constraint is used to transmitt the down link RLC/MAC control message to the UE/MS on PAGCH channel.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	
g_LogicChType	tsc_PAGCH_LogicalType	PACCH
tBF_Direction	1	0 --- downlink; 1 --- uplink
tFI	p_TFI	
rRBP	'00'B	relative reserved block period
s_P_Bit	p_SP	supplementary/polling bit
rfn	p_RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	-	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	-	0 --- normal paging;1--- exteded paging;3 --- paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	p_msg	Signalling message or user data to be sent

Detailed Comments :

ASP Constraint Declaration		
Constraint Name : cas_G_RLC_ControlMsg_REQ_Paging(p_CellId : CellId; p_PhyChId:PhysicalChId; p_TFI : B5; p_SP : B1; p_IMSI : HEXSTRING; p_KC_Conf, p_M, p_N, p_PagingMode : INTEGER; p_SplitPGCycle : B8; p_msg : PDU) Group : ASP Type : G_RLC_ControlMsg_REQ Derivation Path : Comments : The constraint is used to transmitt the down link RLC/MAC control message to the UE/MS on PPCH channel.		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	
g_LogicChType	tsc_PPCH_LogicalType	PCCCH
tBF_Direction	0	0 --- downlink; 1 --- uplink
tFI	p_TFI	
rRBP	'00'B	relative reserved block period
s_P_Bit	p_SP	supplementary/polling bit
rfn	c_G_RFN_Omit	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	o_PacketPagingGroupCalculate(p_IMSI, p_KC_Conf, p_M, p_N, p_SplitPGCycle)	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	p_PagingMode	0 --- normal paging;1--- exteded paging;3 --- paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	p_msg	Signalling message or user data to be sent
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_Paging_REQ (p_CellId : CellId ; p_PG : INTEGER ; p_msg : PDU) Group : ASP Type : G_L2_Paging_REQ Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0
physicalChId	0	Channel identifier of the right CCCH_GROUP or PCCCH_GROUP
g_LogicChType	2	PCH
pAGING_GROUP	p_PG	INTEGER
pagingMode	0	0 --- normal paging; 1--- exteded paging; 3 --- paging reorganization
msg	p_msg	paging message to be sent
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_G_CL1_ComingFN_CNF Group : ASP Type : G_CL1_ComingFN_CNF Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	?	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15
physicalChId	?	
g_LogicChType	?	
subChannel	*	
rfn	?	the reduced frame number (FN modulo 42432) which is about 5 seconds later than current frame number and is able to carry L3 message on the channel specified by "physicalChId"+"G_LogicChType"+"sub Channel"
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : c_G_CL1_ComingFN_REQ(p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType : G_LogicChType) Group : ASP Type : G_CL1_ComingFN_REQ Derivation Path : Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	Channel identifier
physicalChId	p_PhysicalChId	
g_LogicChType	p_G_LogicChType	
subChannel	OMIT	
Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15		
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : car_G_L2_DATA_IND_Gen(p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU)		
Group :		
ASP Type : G_L2_DATA_IND		
Derivation Path :		
Comments :		
Parameter Name	Parameter Value	Comments
cellId	p_CellId	0 Channel identifier
sAPI	p_SAPI	
physicalChId	p_PhyId	
g_LogicChType	p_LogType	
subChannel	p_SubchNo	
rfn	p_RFN	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received
Detailed Comments :		

ASN.1 ASP Constraint Declaration	
Constraint Name : cd_2_DCH_0_To3_DL_Info_IR_G (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)	
Group :	
ASP Type : CPHY_TrCH_Config_REQ	
Derivation Path : ca_2_DCH_0_To3_DL_Info.	
Comments : For FDD mode only, used in aknowledged mode RLC testing	
Constraint Value	
REPLACE configMessage.dITFCS BY c_TFCS_Cmpl0_1_2_3_Tx (c_PowerOffsetInfoBelow64k)	
Detailed Comments :	

ASN.1 ASP Constraint Declaration

Constraint Name : ca_4DCH_DL_Info_RM160 (p_CellId : INTEGER; p_PhyChId : INTEGER; p_Type : TrChConfigType;p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in acknowledged mode RLC testing
This constraint is same as ca_4DCH_DL_Info except for RM 160 for DCH5

Constraint Value

```

{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType p_Type,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    dlconnectedTrCHList {
      trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_81_TFS_DL
    },
    {
      trchid tsc_DL_DCH2,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_103_TFS
    },
    {
      trchid tsc_DL_DCH3,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_60_TFS
    },
    {
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_DL_RM160
    }
  },
  dlTFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
}
}

```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):

- TTI = 40 ms;
- two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
- coding = convolutional;
- coding rate = 1/3;
- CRCsize = 16;
- RateMatching = 155

ASN.1 ASP Constraint Declaration

Constraint Name : ca_4DCH_UL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_Type : TrChConfigType; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in acknowledged mode RLC testing
This Constraint is Same as ca_4DCH_UL_Info, aexcept for RM160 for DCH5

Constraint Value

```

{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType p_Type,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    ulconnectedTrCHList {
      trchid tsc_UL_DCH1,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_81_TFS
    },
    {
      trchid tsc_UL_DCH2,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_103_TFS
    },
    {
      trchid tsc_UL_DCH3,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_60_TFS
    },
    {
      trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_UL_RM160
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx
}

```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 155

ASN.1 ASP Constraint Declaration	
Constraint Name	: cd_DCH_148_TTI_10_DL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)
Group	:
ASP Type	: CPHY_TrCH_Config_REQ
Derivation Path	: ca_DCH_148_TTI_10_DL_Info.
Comments	:
Constraint Value	
REPLACE configMessage.dlconnectedTrCHList.[0].transportChannellInfo BY cd_DCH_148_TTI_10_TFS_RM160	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: cd_DCH_148_TTI_10_UL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)
Group	:
ASP Type	: CPHY_TrCH_Config_REQ
Derivation Path	: ca_DCH_148_TTI_10_UL_Info.
Comments	:
Constraint Value	
REPLACE configMessage.ulconnectedTrCHList.[0].transportChannellInfo BY cd_DCH_148_TTI_10_TFS_RM160	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_InterSystemHandoverComplete (p_CellId : INTEGER; p_routingInfo: INTEGER; p_PDU: UL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity : p_routingInfo, integrityResult ?, aM_message uL_DCCH_Message : p_PDU } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_AM_ReconfInfoSS_SRB_IR_G (p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	: This is required for 60.x test cases. The RLC params are specified in 25.331 sec 13.7 for default configuration id 3.
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage reconfigure : { sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode : cd_DL_AM_RLC_SRB_IR_G, sS_dl_RLC_Mode { dl_PayloadSize p_PayLoad, dl_RLCModelInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB_IR_G } }, rB_LogCH_Mapping p_LogChMapping } } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_AM_ReconfInfoSS_SRB_DefCfg1(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	: This is required for 60.4. The RLC params are specified in 25.331 sec 13.7 for default configuration id 1.
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage reconfigure : { sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode : cd_DL_AM_RLC_SRB_DefCfg1, sS_dl_RLC_Mode { dl_PayloadSize p_PayLoad, dl_RLCModelInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB_DefCfg1 } }, rB_LogCH_Mapping p_LogChMapping } } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To3_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 ,
p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only, used in acknowledged mode RLC testing

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    dlconnectedTrCHList {{
      trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo p_DchTFS1
    }},
    {
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo p_DchTFS5
    }},
    dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k )
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To3_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 ,
p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only, used in acknowledged mode RLC testing. With cffc from 0 to 3.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList { {
      trchid tsc_UL_DCH1,
      ul_TransportChannelType dch,
      transportChannelInfo p_DchTFS1
    },
    {
      trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo p_DchTFS5
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_2_3_Rx -- sent to SS
}
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To5_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 ,
p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only, used in acknowledged mode RLC testing

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    dlconnectedTrCHList { {
      trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo p_DchTFS1
    },
    {
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo p_DchTFS5
    }
  },
  dlTFCS c_TFCS_Cmpl0_To5_Tx ( c_PowerOffsetInfoBelow64k )
}
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_2_DCH_0_To5_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)
Group	:
ASP Type	: CPHY_TrCH_Config_REQ
Derivation Path	:
Comments	: For FDD mode only, used in acknowledged mode RLC testing. With cffc from 0 to 5.
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, trchConfigType c_TrChConfigTypeDCH_NoSHO, configMessage { activationTime activationCFN : p_ActTime, ulconnectedTrCHList {{ trchid tsc_UL_DCH1, ul_TransportChannelType dch, transportChannelInfo p_DchTFS1 }}, { trchid tsc_UL_DCH5, ul_TransportChannelType dch, transportChannelInfo p_DchTFS5 }}, ulTFCS c_TFCS_Cmpl0_To5_Rx -- sent to SS } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_UTRAN_MobilityInfoCnfInd(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PDU: UL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, integrityResult ?, aM_message ul_DCCH_Message : p_PDU } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : cas_RRC_UtranMobilityInfo(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PDU: DL_DCCH_Message) Group : ASP Type : RLC_AM_DATA_REQ Derivation Path : Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, confirmationRequest noConfirmationRequest: NULL, aM_message dL_DCCH_Message : p_PDU }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : cas_RRC_ConnRej (p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_CCCH_Message) Group : ASP Type : RLC_UM_DATA_REQ Derivation Path : Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, uM_message dL_CCCH_Message : p_Pdu, specialLI TRUE }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration

Constraint Name : ca_AichInfo(
 p_CellId: INTEGER;
 p_PhyChId: INTEGER;
 p_AICH_Info: AICH_Info;
 p_TxPower: AICH_PowerOffset)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments :

Constraint Value

```
{  
  cellId p_CellId,  
  routingInfo physicalChannelIdentity: p_PhyChId,  
  ratType fdd,  
  setupMessage {  
    physicalChannelInfo aICHInfo : {  
      aichinfo p_AICH_Info,  
      dl_TxPower p_TxPower  
    }  
  }  
}
```

Detailed Comments : The following are fixed in this constraint (34.108):
 transmission diversity is off,
 spreading factor is set to 256,
 AICH timing scheme is 0

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_BCH_InfoActNow (p_CellId : INTEGER) Group : ASP Type : CPHY_TrCH_Config_REQ Derivation Path : Comments : For FDD mode only	
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: tsc_P_CCPCCH, ratType fdd, trchConfigType nonDch: NULL, configMessage { activationTime activateNow : NULL, ulconnectedTrCHList OMIT, ulTFCS OMIT, dlconnectedTrCHList {{ trchid tsc_BCH1, dl_TransportChannelType bch, transportChannelInfo { tti tti20 : {{tb_Size 246, numberOfTbSizeList {one : NULL}, logicalChannelList configured : NULL}}, semistaticTF_Information { channelCodingType convolutional :half, rateMatchingAttribute 1, crc_Size crc16 } } } } }, dlTFCS c_TFCS_Cmpl0 (c_PowerOffsetInfoBelow64k) } </pre>	
Detailed Comments : For BCH transport channel the following parameters are fixed by core spec.(25.212 and 25.302): TTI = 20 ms; TransportBlocks = 1; transport block size = 246 bits; coding = convolutional; coding rate = 1/2; CRCsize = 16; RateMatching = 1 (this parameter is not relevant to BCH, value can be any number between 1 to hiRM)	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_CMAC_CfgCnf (p_CellId: INTEGER; p_PhyChId : INTEGER) Group : ASP Type : CMAC_Config_CNF Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity : p_PhyChId } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_CfgInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, configMessage setup: { activationTime activateNow : NULL, uE_Info p_UEInfo, trCHInfo p_TrCHInfo, trCH_LogCHMapping p_TrCH_LogCHMapping } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_CipherActCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CMAC_Ciphering_Activate_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMACE_DL_CipherActReq (p_CellId: INTEGER; p_PhyChId: INTEGER; p_CipherMode: CipheringModeCommand; p_ActTimeDPCH: INTEGER;p_IncrDcr : Increment_Mode)
Group	:
ASP Type	: CMAC_Ciphering_Activate_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, cn_DomainIdentity cs_domain, --the domain is hard coded as no TM RAB in PS domain cipheringModeInfo { cipheringModeCommand p_CipherMode, activationTimeForDPCH p_ActTimeDPCH, rb_DL_CiphActivationTimeInfo OMIT }, incHFN p_IncrDcr } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMACE_ReconfigInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1; p_ActivationTime : ActivationTime)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, configMessage reconfigure: { activationTime activationCFN : p_ActivationTime, uE_Info p_UEInfo, trCHInfo p_TrCHInfo, trCH_LogCHMapping p_TrCH_LogCHMapping } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_ReconfigInfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, configMessage reconfigure: { activationTime activateNow : NULL, uE_Info p_UEInfo, trCHInfo p_TrCHInfo, trCH_LogCHMapping p_TrCH_LogCHMapping } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_SecurityModeCfgCnf (p_CellId: INTEGER)
Group	:
ASP Type	: CMAC_SecurityMode_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMACE_SecurityModeCfgReq (p_CellId: INTEGER; p_Domain : CN_DomainIdentity; p_Hfn: HyperFrameNumber; p_KC: KeyCiphering; p_IK: IntegrityKey; p_GSM_ck : GSM_CipheringKey)
Group	:
ASP Type	: CMACE_SecurityMode_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, macCipheringInfo { cn_DomainIdentity p_Domain , startValue p_Hfn, cipheringKey p_KC, integrityKey p_IK, gsmCipheringKey p_GSM_ck } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMACE_UL_CipherActReq (p_CellId: INTEGER; p_PhyChId: INTEGER; p_CipherMode: CipheringModeCommand; p_ActTimeDPCH: INTEGER; p_IncrDcr : Increment_Mode)
Group	:
ASP Type	: CMACE_Ciphering_Activate_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, cn_DomainIdentity cs_domain, -- domain hard coded as no TM RAB in PS Domain cipheringModelInfo { cipheringModeCommand p_CipherMode, activationTimeForDPCH p_ActTimeDPCH, rb_DL_CiphActivationTimeInfo OMIT }, incHFN p_IncrDcr } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_CPHY_Cell_Release_CNF(p_CellId: INTEGER)	
Group :	
ASP Type :	CPHY_Cell_Release_CNF
Derivation Path :	
Comments :	1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE. 2. Releases the associated Memory Buffers (if any). 3. Cancels all active timers (if any) With "Soft_Reset" flag OFF: 1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any) 2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List 3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.
Constraint Value	
<pre>{ soft_Reset FALSE, cell_ID_List { p_CellId } }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_CPHY_Cell_Release_REQ(p_CellId: INTEGER)	
Group :	
ASP Type :	CPHY_Cell_Release_REQ
Derivation Path :	
Comments :	1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE. 2. Releases the associated Memory Buffers (if any). 3. Cancels all active timers (if any) With "Soft_Reset" flag OFF: 1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any) 2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List 3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.
Constraint Value	
<pre>{ soft_Reset FALSE, cell_ID_List { p_CellId } }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_CfgCnf(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_CipherActCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_Ciphering_Activate_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_CRLC_DL_CipherActReq(p_CellId: INTEGER; p_CN_Domain : CN_DomainIdentity; p_RB_Id : INTEGER; p_CipherMode: CipheringModeCommand; p_N: RLC_SequenceNumber ;p_IncMode : RLC_IncMode) Group : ASP Type : CRLC_Ciphering_Activate_REQ Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, ratType fdd, cn_DomainIdentity p_CN_Domain, ciphActivationInfo cipheringModelInfo : { cipheringModeCommand p_CipherMode, activationTimeForDPCH OMIT, rb_DL_CiphActivationTimeInfo { c_RB_ActTimeInfo(p_RB_Id, p_N) } }, incHFN p_IncMode } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_CRLC_DL_IntegrityActivateReq(p_CellId: INTEGER; p_Domain : CN_DomainIdentity;p_IntegrityProtectionModelInfo : IntegrityProtectionModelInfo) Group : ASP Type : CRLC_Integrity_Activate_REQ Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, cn_DomainIdentity p_Domain, integrityActivationInfo integrityProtectionModelInfo : p_IntegrityProtectionModelInfo } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_IntegrityActivateCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_Integrity_Activate_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_RB_RelReq (p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage release : NULL }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SecurityModeCfgCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_SecurityMode_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SecurityModeCfgReq(p_CellId: INTEGER; p_Domain : CN_DomainIdentity; p_Hfn: HyperFrameNumber; p_KC: KeyCiphering; p_lk: IntegrityKey; p_GSM_ck: GSM_CipheringKey)
Group	:
ASP Type	: CRLC_SecurityMode_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, rlcSecurityInfo { cn_DomainIdentity p_Domain , startValue p_Hfn, cipheringKey p_KC, integrityKey p_lk, gsmCipheringKey p_GSM_ck } }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SetRRC_MSN_CNF (p_CellID :INTEGER ; p_RBID : INTEGER)
Group	:
ASP Type	: CRLC_SetRRC_MessageSN_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellID, routingInfo rB_Identity : p_RBID }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_UL_CipherActReq (p_CellId: INTEGER; p_CN_Domain : CN_DomainIdentity; p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList;p_IncMode : RLC_IncMode)
Group	:
ASP Type	: CRLC_Ciphering_Activate_REQ
Derivation Path	:
Comments	:
Constraint Value	
	{ cellId p_CellId, ratType fdd, cn_DomainIdentity p_CN_Domain, ciphActivationInfo rb_UL_CipheringActivationTimeInfo : p_RB_ActivationTimeInfoList, incHFN p_IncMode }
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_UL_IntegrityActivateReq (p_CellId: INTEGER ; p_Domain : CN_DomainIdentity; p_IntegrityProtActivationInfo : IntegrityProtActivationInfoList)
Group	:
ASP Type	: CRLC_Integrity_Activate_REQ
Derivation Path	:
Comments	:
Constraint Value	
	{ cellId p_CellId, cn_DomainIdentity p_Domain , integrityActivationInfo ul_IntegProtActivationInfo : p_IntegrityProtActivationInfo }
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CellCfgCnf(p_CellId : INTEGER)
Group	:
ASP Type	: CPHY_Cell_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
	{ cellId p_CellId }
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CellCfgReq(p_CellId : INTEGER; p_Tcell: INTEGER; p_FreqInfo : FrequencyInfo; p_PriScmCode : INTEGER; p_DL_TxAttenLevel: INTEGER; p_SfnOffset : INTEGER; p_totalCellPower : CellTxPowerLevel; p_FrequencyBandFDD : FrequencyBandFDD)
Group	:
ASP Type	: CPHY_Cell_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, tcell p_Tcell, sfnOffset p_SfnOffset, frequencyInfo p_FreqInfo, primaryScramblingCode_SS p_PriScmCode, cellTxPowerLevel p_totalCellPower, dLtxAttenuationLevel p_DL_TxAttenLevel, frequencyBandIndicator p_FrequencyBandFDD }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CellTxPowerModiCnf(p_CellId : INTEGER)
Group	:
ASP Type	: CPHY_Cell_TxPower_Modify_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CellTxPowerModiReq(p_CellId : INTEGER; p_DL_TxAttenLevel: INTEGER)
Group	:
ASP Type	: CPHY_Cell_TxPower_Modify_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, dLtxAttenuationLevel p_DL_TxAttenLevel }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    dlconnectedTrCHList {{
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spe:
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU SIZE = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activateNow : NULL,
    dlconnectedTrCHList {{
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TransportBlock = 0, Size = 148.
rlc_Size = RLC PDU SIZE = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3

Constraint Value

```

{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    ulconnectedTrCHList {{
      trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    ulTFCS c_TFCS_Cmpl0_1_Rx
  }
}
    
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.
 TTI = 10 ms;
 two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
 rlc_Size = RLC PDU Size = 144 bits.
 coding = convolutional;
 coding rate = 1/3;
 CRCsize = 16;
 RateMatching = 192

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)
Group	:
ASP Type	: CPHY_TrCH_Config_REQ
Derivation Path	:
Comments	: For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, trchConfigType c_TrchConfigTypeDCH_NoSHO, configMessage { activationTime activateNow : NULL, ulconnectedTrCHList {{ trchid tsc_UL_DCH5, ul_TransportChannelType dch, transportChannelInfo c_DCH_148_TTI_10_TFS }}, ulTFCS c_TFCS_Cmpl0_1_Rx } } </pre>	
Detailed Comments	: For DCH1 transport channel the following parameters are fixed by core spec.: TTI = 10 ms; two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU Size = 144 bits. coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 192

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_DL_CRLC_SetRRC_MSN_REQ (p_CellID :INTEGER ; p_RBID : INTEGER; p_DL_MSN : RRC_SequenceNumber)
Group	:
ASP Type	: CRLC_SetRRC_MessageSN_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellID, routingInfo rB_Identity : p_RBID, count_I_LSB_UL OMIT, count_I_LSB_DL p_DL_MSN } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_DL_DPCH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo: DL_DPCHInfo)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: To setup down link physical channel DPCH.
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, setupMessage { physicalChannelInfo dPCHInfo : { dl_DPCHInfo p_DL_DPCHInfo } } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_DL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo: DL_DPCHInfo; p_ActivationTime : ActivationTime)
Group	:
ASP Type	: CPHY_RL_Modify_REQ
Derivation Path	:
Comments	: To modify down link physical channel DPCH.
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, modifyMessage { activationTime activationCFN : p_ActivationTime, physicalChannelInfo dPCHInfo : { dl_DPCHInfo p_DL_DPCHInfo } } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration

Constraint Name : ca_OutOfSyncInd (p_PhysicalChannelIdentity : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_Out_of_Sync_IND
Derivation Path :
Comments :

Constraint Value

```
{  
  cellId ?,  
  routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity  
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PCH_2_FACH_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only (PS)

Constraint Value

```

{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType nonDch: NULL,
  configMessage {
    activationTime activateNow : NULL,
    ulconnectedTrCHList OMIT,
    ulTFCS OMIT,
    dlconnectedTrCHList {
      { trchid tsc_PCH1,
        dl_TransportChannelType pch,
        transportChannelInfo c_PCH_TFS},
      { trchid tsc_FACH1,
        dl_TransportChannelType fach,
        transportChannelInfo c_FACH_TFS},
      { trchid tsc_FACH2,
        dl_TransportChannelType fach,
        transportChannelInfo c_FACH_TFS_PS } },
    dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
  
```

Detailed Comments : For PCH transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3):
 TTI = 10 ms;
 two transport formats: TransportBlocks = 0, TB size = 240 bits; and TransportBlocks = 1, TB size = 240 bits;
 coding = convolutional;
 coding rate = 1/2;
 CRCsize = 16;
 RateMatching = 210
 For FACH1 transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3.2):
 TTI = 10 ms;
 two transport formats: TransportBlocks = 0, TB size = 360 bits; TransportBlocks = 1, TB size = 360 bits;
 coding = turbo;
 CRCsize = 16;
 RateMatching = 110
 For FACH2 transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3):
 TTI = 10 ms;
 three transport formats: TransportBlocks = 0, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits;and TransportBlocks = 2, TB size = 168 bits
 coding = convolutional;
 coding rate = 1/2;
 CRCsize = 16;
 RateMatching = 210

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_PHY_RelCnf (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CPHY_TrCH_Release_CNF
Derivation Path	:
Comments	: To confirm to release tthe Radio Link
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_PHY_RelReqDCH_NoSHO (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CPHY_TrCH_Release_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, trchConfigType dch : normal }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_PHY_RelReqNonDch (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CPHY_TrCH_Release_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, trchConfigType nonDch: NULL }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_PICH_Info(p_CellId: INTEGER; p_PICH_Info: PICH_Info; p_TxPower : PICH_PowerOffset;p_SCCPCH_Ass: INTEGER)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: For FDD mode only
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity : tsc_PICH1, ratType fdd, setupMessage { physicalChannelInfo pICHInfo : { pichinfo p_PICH_Info, dl_TxPower p_TxPower, sccpchId_associated p_SCCPCH_Ass } } } </pre>	
Detailed Comments	: Value of PI per frame is fixed to 18 (34.108) Value of sndScramCode can be 2 (34.108)

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_PRACH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_Signatures: AvailableSignatures; p_PreScramCodeWord: PreambleScramblingCodeWordNumber; p_PuncLimit: PuncturingLimit; p_SF_PRACH: SF_PRACH; p_SubChNum: AvailableSubChannelNumbers)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd , setupMessage { physicalChannelInfo pRACHInfo :{ fdd_tdd fdd : { preambleSignature p_Signatures, spreadingFactorForDataPart p_SF_PRACH, preambleScramblingCode p_PreScramCodeWord, puncturingLimit p_PuncLimit, accessSlot p_SubChNum } } } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_AM_Info_RAB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt :TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	: Used to setup AM RLC entity
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cb_DL_AM_RLC, sS_dl_RLC_Mode { dl_PayloadSize p_PayLoad, dl_RLCModelInfo ul_AM_RLC_Mode : cb_UL_AM_RLC } }, rB_LogCH_Mapping p_LogChMapping } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_AM_Info_SRB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt :TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	: Used to setup AM RLC entity
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cd_DL_AM_RLC_SRB, sS_dl_RLC_Mode { dl_PayloadSize p_PayLoad, dl_RLCModelInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB } }, rB_LogCH_Mapping p_LogChMapping } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_RB_BCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping) Group : ASP Type : CRLC_Config_REQ Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_dl_RLC_Mode { dl_PayloadSize 246, dl_RLCModelInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments : dl_PayloadSize = TB_Size	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_RB_PCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping) Group : ASP Type : CRLC_Config_REQ Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_dl_RLC_Mode { dl_PayloadSize 240, dl_RLCModelInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments : dl_PayloadSize = TB_Size	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_TM_DL_InfoNoSeg(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_dl_RLC_Mode { dl_PayloadSize p_PayloadSize, dl_RLCModelInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_TM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{ segmentationIndication FALSE }, sS_dl_RLC_Mode { dl_PayloadSize p_PayloadSize, dl_RLCModelInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_TM_UL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{ segmentationIndication FALSE }, sS_dl_RLC_Mode { dl_PayloadSize p_PayloadSize, dl_RLCModelInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RB_UM_DL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_dl_RLC_Mode { dl_PayloadSize 152, dl_RLCModelInfo ul_UM_RLC_Mode : { transmissionRLC_Discard timerBasedNoExplicit : dt100 } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_RB_UM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping) Group : ASP Type : CRLC_Config_REQ Derivation Path : Comments : Used to setup UM RLC entity	
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_UM_RLC_Mode :NULL, sS_dl_RLC_Mode{ dl_PayloadSize 136, dl_RLCModelInfo ul_UM_RLC_Mode : { transmissionRLC_Discard timerBasedNoExplicit : dt100 } } } }, rB_LogCH_Mapping p_LogChMapping } </pre>	
Detailed Comments : dl_PayloadSize = TB_Size – 12 = 136	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_RL_ModifyCnf(p_CellId : INTEGER; p_PhyChId: INTEGER) Group : ASP Type : CPHY_RL_Modify_CNF Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity : p_PhyChId } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RL_RelCnf (p_CellId : INTEGER; p_Phych : PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_RL_Release_CNF
Derivation Path	:
Comments	: To confirm that a specified physical channel has been released
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity : p_Phych }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RL_RelReq(p_CellId : INTEGER; p_Phych : PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_RL_Release_REQ
Derivation Path	:
Comments	: To release the specified physical channel.
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity : p_Phych }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_RL_SetupCnf(p_CellId : INTEGER; p_PhychId : INTEGER)
Group	:
ASP Type	: CPHY_RL_Setup_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity : p_PhychId }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_SchedulLater(p_CellId: INTEGER;p_REP : INTEGER; p_POS : INTEGER; p_Timing : BCCH_ModificationTime)
Group	:
ASP Type	: CMAC_SYSINFO_Config_REQ
Derivation Path	:
Comments	: scheduling information for system information change at the frame = p_Timing.
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity : tsc_RB_BCCH, ratType fdd, configMessage { sg_REP p_REP, sg_POS p_POS, bcch_ModificationTime p_Timing } } </pre>	
Detailed Comments	: ?? for MIB

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_SchedulNow(p_CellId: INTEGER; p_REP : INTEGER; p_POS : INTEGER)
Group	:
ASP Type	: CMAC_SYSINFO_Config_REQ
Derivation Path	:
Comments	: scheduling information for immediately change
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity : tsc_RB_BCCH, ratType fdd, configMessage { sg_REP p_REP, sg_POS p_POS, bcch_ModificationTime OMIT } } </pre>	
Detailed Comments	: ?? for MIB

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_SyncInd (p_PhysicalChannelIdentity : PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_Sync_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId ?, routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_SysInfoCfgCnf(p_CellId: INTEGER; p_RB_Identity: SS_RB_Identity)
Group	:
ASP Type	: CMAC_SYSINFO_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RB_Identity }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_TR_DataReq(p_CellId : INTEGER; p_RB : SS_RB_Identity ; p_Message : BCCH_BCH_Message)
Group	:
ASP Type	: RLC_TR_DATA_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RB , tM_message bCCH_BCH_Message : p_Message }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_TrChCfgCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CPHY_TrCH_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_TrChCfgInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_Type : TrChConfigType;p_TrChConfig: CphyTrchConfigReq)
Group	:
ASP Type	: CPHY_TrCH_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, trchConfigType p_Type, configMessage p_TrChConfig }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_UL_DPCH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UL_DPCHInfo: UL_DPCH_Info)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: To setup uplink physical channel DPCH.
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, setupMessage { physicalChannelInfo dPCHInfo : { ul_DPCHInfo p_UL_DPCHInfo } } }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_UL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UL_DPCHInfo: UL_DPCH_Info; p_ActivationTime : ActivationTime)
Group	:
ASP Type	: CPHY_RL_Modify_REQ
Derivation Path	:
Comments	: To setup uplink physical channel DPDCH.
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, modifyMessage { activationTime activationCFN : p_ActivationTime, physicalChannelInfo dPCHInfo : { ul_DPCHInfo p_UL_DPCHInfo } } } </pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_pCCPCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: For FDD mode only
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: tsc_P_CCPCH, ratType fdd, setupMessage { physicalChannelInfo primaryCCPCHInfo : { sttd_Indicator FALSE, dl_TxPower p_TxPower } } } </pre>	
Detailed Comments	: PhysicalChannelIdentity for p-CCPCH is fixed as tsc_pCCPCH;

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_pCPICH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower_PCPICH)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: For FDD mode only
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: tsc_P_CPICH, ratType fdd, setupMessage { physicalChannelInfo primaryCPICHInfo:{ dl_TxPower_PCPICH p_TxPower, txdiversityIndicator FALSE } } } </pre>	
Detailed Comments	: PhysicalChannelIdentity for p-CPICH is fixed as tsc_pCPICH;

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_pSCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)
Group	:
ASP Type	: CPHY_RL_Setup_REQ
Derivation Path	:
Comments	: For FDD mode only
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: tsc_P_SCH, ratType fdd, setupMessage { physicalChannelInfo primarySCHInfo : { tstdIndicator FALSE, dl_TxPower p_TxPower } } } </pre>	
Detailed Comments	: PhysicalChannelIdentity for p-SCH is fixed as tsc_pSCH;

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_sCCPCH_Info (p_CellId: INTEGER; p_PhyChId: INTEGER; p_SndScramCode : INTEGER; p_ChannelizationCode: SF256_AndCodeNumber; p_SlotFormat: SCCPCHSlotFormat; p_TxPower : DL_TxPower; p_Timing: INTEGER)	
Group :	
ASP Type :	CPHY_RL_Setup_REQ
Derivation Path :	
Comments :	For FDD mode only,
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, setupMessage { physicalChannelInfo secondaryCCPCHInfo : { scramblingCode p_SndScramCode, dl_ChannelizationCode p_ChannelizationCode, sCCPCHSlotFormat p_SlotFormat, timingOffset p_Timing, positionFixedOrFlexible flexible, sttd_Indicator FALSE, dl_TxPower p_TxPower, powerOffsetOfTFCI_PO1 tsc_sCCPCH_PowerOffsetTFCI, powerOffsetOfPILOT_PO3 tsc_sCCPCH_PowerOffsetPILOT } } } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : ca_sSCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)	
Group :	
ASP Type :	CPHY_RL_Setup_REQ
Derivation Path :	
Comments :	For FDD mode only
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: tsc_S_SCH, ratType fdd, setupMessage { physicalChannelInfo secondarySCHInfo : { tstdIndicator FALSE, dl_TxPower p_TxPower } } } </pre>	
Detailed Comments : PhysycalChannelIdentity for s-SCH is fixed as tsc_sSCH;	

ASN.1 ASP Constraint Declaration	
Constraint Name : cab_RACH_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER) Group : ASP Type : CPHY_TrCH_Config_REQ Derivation Path : Comments : For FDD mode only	
Constraint Value	
<pre> { cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, trchConfigType nonDch: NULL, configMessage { activationTime activateNow : NULL, ulconnectedTrCHList {{ trchid tsc_RACH1, ul_TransportChannelType rach, transportChannelInfo c_RACH_TFS }}, ulTFCS c_TFCS_Cmpl0_1_Rx, dlconnectedTrCHList OMIT, dlTFCS OMIT } } </pre>	
Detailed Comments : For RACH transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.4): TTI = 20 ms; two transport format: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits; coding = convolutional; coding rate = 1/2; CRCsize = 16; RateMatching = 1	

ASN.1 ASP Constraint Declaration	
Constraint Name : car_AM_DataCnf(p_CellId: INTEGER; p_RB : INTEGER) Group : ASP Type : RLC_AM_DATA_CNF Derivation Path : Comments :	
Constraint Value	
<pre> { cellId p_CellId, routingInfo rB_Identity : p_RB , mui ? } </pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_CRLC_IntegrityFail
Group	:
ASP Type	: CRLC_Integrity_Failure_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId ?, routingInfo ?, failureCause codeNotMatched }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_CRLC_RRC_MessageSN_CNF(p_CellId, p_RBID : INTEGER)
Group	:
ASP Type	: CRLC_RRC_MessageSN_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RBID, count_I_MSB_UL ?, count_I_LSB_UL ?, count_I_MSB_DL ?, count_I_LSB_DL ? }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_Frame_Number_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity : p_PhysicalChannelIdentity, frameNumber ? }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_SequenceNumber_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, count_C_MSB_UL ?, count_C_LSB_UL ?, count_C_MSB_DL ?, count_C_LSB_DL ? }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_IniCnf
Group	:
ASP Type	: CPHY_Ini_CNF
Derivation Path	:
Comments	: Confirm the test initialisation
Constraint Value	
<pre>{ confirmation NULL }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_MeasRepAM (p_CellId : INTEGER; p_RB : INTEGER; p_Pdu: UL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RB , integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : car_MeasRepUM(p_CellId : INTEGER; p_RB : INTEGER ; p_Pdu: UL_DCCH_Message) Group : ASP Type : RLC_UM_DATA_IND Derivation Path : Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RB , integrityResult ?, uM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : car_RRC_ConnRelCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message) Group : ASP Type : RLC_AM_DATA_IND Derivation Path : Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : car_RRC_ConnRelCmplUM(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu:UL_DCCH_Message) Group : ASP Type : RLC_UM_DATA_IND Derivation Path : Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, integrityResult ?, uM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_RRC_ConnReq(p_CellId: INTEGER; p_RB_Id: SS_RB_Identity; p_Pdu: UL_CCCH_Message)
Group	:
ASP Type	: RLC_TR_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, tM_message uL_CCCH_Message : p_Pdu }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_RRC_ConnSetupCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_RRC_SecModeCmpl(p_CellId: INTEGER; p_RB : INTEGER ; p_Pdu: UL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_IND
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RB , integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name : car_RRC_SecModeFail(p_CellId: INTEGER; p_RB : INTEGER; p_Pdu: UL_DCCH_Message)	
Group :	
ASP Type :	RLC_AM_DATA_IND
Derivation Path :	
Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB , integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : car_RRC_Status(p_CellId: INTEGER; p_RBId :INTEGER; p_Pdu: UL_DCCH_Message)	
Group :	
ASP Type :	RLC_AM_DATA_IND
Derivation Path :	
Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RBId, integrityResult ?, aM_message uL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name : car_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)	
Group :	
ASP Type :	CRLC_Resume_CNF
Derivation Path :	
Comments :	
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id }</pre>	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: car_SuspendRB (p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Suspend_CNF
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, vt ? }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_CRLC_RRC_MessageSN_REQ(p_CellId, p_RBID : INTEGER)
Group	:
ASP Type	: CRLC_RRC_MessageSN_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity : p_RBID }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_Frame_Number_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_SequenceNumber_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_InitReqDef
Group	:
ASP Type	: CPHY_Ini_REQ
Derivation Path	:
Comments	: Request to initialise the test
Constraint Value	
defaultRadioEnvironment	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_InitReqNonDef
Group	:
ASP Type	: CPHY_Ini_REQ
Derivation Path	:
Comments	: Request to initialise the test
Constraint Value	
nonDefaultMultiCell	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_MAC_Rel (p_CellId: INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChId, ratType fdd, configMessage release : NULL }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_RLC_SuspendRB(p_CellId: INTEGER; p_RB_Id: INTEGER; p_RLC_SeqNum: RLC_SequenceNumber)
Group	:
ASP Type	: CRLC_Suspend_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, n p_RLC_SeqNum }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_RRC_ConnRelCCCH(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_CCCH_Message)
Group	:
ASP Type	: RLC_UM_DATA_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, uM_message dL_CCCH_Message : p_Pdu, specialLI TRUE }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_RRC_ConnRelDCCH(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu : DL_DCCH_Message)
Group	:
ASP Type	: RLC_UM_DATA_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, uM_message dL_DCCH_Message : p_Pdu, specialLI FALSE }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_RRC_ConnSetup(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_CCCH_Message)
Group	:
ASP Type	: RLC_UM_DATA_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, uM_message dL_CCCH_Message : p_Pdu, specialLI TRUE }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_RRC_SecModeCmd(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_DCCH_Message)
Group	:
ASP Type	: RLC_AM_DATA_REQ
Derivation Path	:
Comments	:
Constraint Value	
<pre>{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id, confirmationRequest noConfirmationRequest : NULL, aM_message dL_DCCH_Message : p_Pdu }</pre>	
Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Resume_REQ
Derivation Path	:
Comments	:
Constraint Value	
	{ cellId p_CellId, routingInfo rB_Identity: p_RB_Id }
Detailed Comments	:

PDU Constraint Declaration			
Constraint Name : cr_G_HandoverFailure (p_RRCau : RR_Cause)			
Group :			
PDU Type : HANDOVERFAILURE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR HANDOVER FAILURE ue/ms -> ntw 3GPP TS 44.018 clause 9.1.17			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'28'O		message type M BITSTRING [8]
rRCau	p_RRCau		RR cause M OCTETSTRING [1] without IEI
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_G_InterSystemToUTRAN_HandoverCommand (p_HandoverToUTRANCmd : HandoverToUTRANCmd)			
Group :			
PDU Type : INTERSYSTEMTOUTRANHANDOVERCOMMAND			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR INTER SYSTEM TO UTRAN HANDOVER COMMAND ntw -> ue/ms 3GPP TS 44.018 clause 9.1.15a			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'63'O		message type M O1
handoverToUTRANCommand	p_HandoverToUTRANCmd		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_G_MeasurementInformation(p_neighCellDescr3G : NeighCellDescr3G_MI;
 p_measParamDescr3G : MeasParamDescr3GMI)
Group :
PDU Type : MEASUREMENTINFORMATION
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
rR_ShortPD	'0'B		see 3GPP TS 24.007
msgType	'00101'B		message type.
shortL2Header	'00'B		short layer 2 header
bA_IND	'0'B		BCCH allocation sequence number indication
bA_IND3G	'0'B		3G sequence number
mP_CHANGE_MARK	'0'B		measurement parameters change mark
mI_INDEX	'0000'B		MEASUREMENT INFORMATION index
mI_COUNT	'0000'B		MEASUREMENT INFORMATION count
pWRC	'0'B		power control indicator
rEPORT_TYPE	'1'B		
rEPORT_RATE	'0'B		
iINVALID_BSIC_REPORTING	'0'B		
maskBit1	'0'B		
realTimeDiff	-		not present if maskBit1 = 0
maskBit2	'0'B		
bSIC_Descr	-		not present if maskBit2 = 0
maskBit3	'0'B		
reportPriorityDescr	-		not present if maskBit3 = 0
maskBit4	'0'B		
measParamDescr	-		not present if maskBit4 = 0
maskBit5	'0'B		
extensionLength	-		not present if maskBit5 = 0
maskBit6	'1'B		
neighCellDescr3G	p_neighCellDescr3G		not present if maskBit6 = 0
MaskBit7	'1'B		not present if maskBit1 = 0
measParamDescr3G	p_measParamDescr3G		not present if maskBit7 = 0
maskR5	'0'B		
maskBit8	-		not present if maskR5 = 0
maskBit9	-		not present if maskR5 = 0 and maskBit8 = 0
fDDRRepThreshold2	-		not present if maskR5 = 0, maskBit8 = 0 and maskBit9 = 0

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : cr_G_MeasReport(p_MeasResults : MeasResults)			
Group :			
PDU Type : MEASUREMENTREPORT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'15'O		message type M BITSTRING [8]
measResults	p_MeasResults		measurement results M OCTETSTRING [16]
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_G_ClassmarkEnquiry(p_CEMask : ClassmarkEnquiryMask)			
Group :			
PDU Type : CLASSMARKENQUIRY			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CLASSMARK ENQUIRY ntw -> ue/ms 3GPP TS 44.018 clause 9.1.12			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'13'O		message type M BITSTRING [8]
mask	p_CEMask		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_G_ClassmarkChange
Group :
PDU Type : CLASSMARKCHANGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK CHANGE ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.11

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'16'O		message type M BITSTRING [8]
msclsmk	c_MS_Clsmk2_Def_lv		mobile station classmark M OCTETSTRING [4]
additionalMsclsmk	cr_MSCLSMK3_Any		additional mobile station classmark information C OCTETSTRING [14]

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_PacketMeasOrder(p_TLLI : O4; p_NCMeas : NC_MeasParams; p_NCFreqMask : B1; p_NCFreq : NC_FreqList; p_ENHMeas : ENH_MeasParam)
Group :
PDU Type : PACKETMEASUREMENTORDER
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'000011'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal paging
globalTFImask	'1'B		
gLOBAL_TFI	-		not present if globalTFImask=1
mask2	'0'B		not present if globalTFImask=0
tLLI	p_TLLI		not present if globalTFImask=0 and mask2=1
pMOIndex	'000'B		
pMOCCount	'000'B		
ncMask	'1'B		
nCMeasParams	p_NCMeas		not present if ncMask = 0
ncFreqMask	p_NCFreqMask		not present if ncMask = 0
nCFreqList	p_NCFreq		not present if ncMask = 0 or nCFreqMask = 0
spareBit	'0'B		set to '0'
r98Mask	'1'B		
IsaMask	'0'B		not present if r98Mask = 0
ISAParams	-		not present if r98Mask = 0 or IsaMask = 0
r99Mask	'1'B		not present if r98Mask = 0
enhMask	'1'B		not present if r98Mask = 0 or r99Mask = 0
eNHMeasParams	p_ENHMeas		not present if r98Mask = 0 or r99Mask=0 or enhMask = 0
r4Mask	'0'B		not present if r98Mask = 0 or r99Mask = 0
cCNActive	-		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0
ccnMask	-		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0
cCNSupportDescr	-		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or ccnMask = 0
r5Mask	-		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0

Continued on next page

Continued from previous page

PDU Constraint Declaration			
Field Name	Field Value	Field Encoding	Comments
grntiXMask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
gRNTIExtension	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or grntiXMask = 0
iuMask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
iuModeNeighCellParams	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or iuMask = 0
ncluMask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
nCluModeCapCellList	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or ncluMask = 0
gprs3GAddMeasParam2Mask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
rptThresMask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or gprs3GAddMeasParam2Mask = 0
fddReportThreshold	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or gprs3GAddMeasParam2Mask = 0 or rptThresMask = 0
r6Mask	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0
cCN3GActive	–		not present if r98Mask = 0 or r99Mask = 0 or r4Mask = 0 or r5Mask = 0 or r6Mask = 0
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_PacketData(p_Data : OCTETSTRING)			
Group :			
PDU Type : PacketData			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
data	p_Data		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_DTM_Request			
Group :			
PDU Type : DTMREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : DTM INFORMATION ue/ms -> ntw 3GPP TS 44.018 clause 9.1.12i			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	'4A'O		message type M BITSTRING [8]
tLLI	?		
chReqDescr	c_ChReqDescr2		channel request description M LV OCTETSTRING [5-n]
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_CallConfAny
Group :
PDU Type : CALLCONFIRMED
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CALL CONFIRMED – receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	?		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??001000'B		
repeatInd	c_RepeatIndAny IF_PRESENT		
bcap1	cr_BcapAnyMO IF_PRESENT		
bcap2	cr_BcapAnyMO IF_PRESENT		
cau	cr_CauAny IF_PRESENT		
cC_Capabilities	cr_CC_CapabilitiesAny IF_PRESENT		
streamId	cr_StreamIdAny IF_PRESENT		
supportedCodecs	cr_CodecListAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_PDPContextAccept(p_ti: TI;
 p_LLC_SAPI_v: LLC_SAPI_v;
 p_qos_lv: QualityOfService_lv;
 p_pdp_addr_tlv: PktDataProtoAddr; p_ProtoCfgOpt : ProtoCfgOpt)
Group :
PDU Type : ACTIVATEPDPCONTEXTACCEPTdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Activate PDP Context Accept Type 2
 51.010 v5.8.0 Table 40.5

Field Name	Field Value	Field Encoding	Comments
ti	p_ti		This will be overwritten in the test case with the received ti
sM_ProtocolDiscriminator	tsc_SMPD		PD for SM
msgType	'01000010'B		Msg type for PDP Context Accept
negotiatedLLC_SAPI	p_LLC_SAPI_v		Mobile in UMTS should neglect this IE. If in GSM domain, will use this SAPI.
negotiatedQoS	p_qos_lv		
spare	'0000'B		
radioPriority	c_RadioPriorityLow_v		
pDP_Address	p_pdp_addr_tlv		
protocolConfOpts	p_ProtoCfgOpt		
pktFlowID	-		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_AttachAcc (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature;
 p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)
Group :
PDU Type : ATTACHACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : As per default message in 51.010, clause 40.2.4

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000010'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v('111'B, '00000'B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2('000'B)		
radioPrioSMS	c_RadioPriority('011'B)		3
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	c_GPRS_Timer_tlv('000'B, '10000'B)		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	-		
t3302Value	-		
cellNotification	-		
equivalentPLMN	-		
ntwFeatureSupport	-		O TV 1 octet
emergNumList	-		O TLV 5-50 octets
requestedMS_Info	-		O TV 1 octet

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_AuthAndCiphReq(p_rand : AuthenticationParamterRAND; p_ckNo : CiphKeySeqNum_tv;
 p_CipherAlg : GPRS_CipherAlg; p_autn : GMM_AUTN)
Group :
PDU Type : AUTHENTICATIONANDCIPHERINGREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Used in the GERAN cell

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010010'B		
imeisvReq	cb_IMEISV_Request('000'B)		IMEISV not requested
ciphAlgorithm	c_CiphAlgorithm(p_CipherA lg)		GPRS encryption algorithm
acRefNo	c_AC_RefNum3		Use any reference value
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
authRand	p_rand		Authentication paramter RAND
gprsCiphKeySeqNo	p_ckNo		GPRS ciphering key sequence number
aUTN	p_autn		AUTN parameter

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_RA_UpdAcc3
 (p_updateResult : UpdateResult_v; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature;
 p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)
Group :
PDU Type : ROUTINGAREAUPDATEACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001001'B		
updateResult	p_updateResult		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
periodicRAupdateTimer	c_GPRS_Timer_v('010'B, '01001'B)		T3312 (default value 54 minutes or 9 decihours, see 3GPP 24.008 clause 11.2.2)
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		
listNPDUnumbers	-		
readyTimer	-		
gmmCause	-		
t3302Value	-		
cellNotification	-		
equivalentPLMN	-		
pDP_ContextStatus	-		
ntwFeatureSupport	-		
emergNumList	-		
mBMS_ContextStatus	-		
requestedMS_Info	-		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : cs_DeactPDP_ContextReqMT(p_ti: TI ; p_smcause: SM_Cause_v) Group : PDU Type : DEACTIVATEPDPCONTEXTREQUEST Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Deactivate PDP Context Request n <=> ue 24.008, 9.5.14			
Field Name	Field Value	Field Encoding	Comments
ti	p_ti		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_smcause		
tearDwnInd	cs_TearDwnInd_tv		
protocolConfOpts	-		
mBMS_ProtocolConfOpts	-		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_RA_UpdComplete Group : PDU Type : ROUTING_AREA_UPDATE_COMPLETE Derivation Path : Encoding Rule Name : Encoding Variation : Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001010'B		
listNPDUnumbers	cr_ReceiveN_PDU_Number sAny_tlv IF_PRESENT		
interRAT_HO_Info	cr_InterRAT_HO_InfoAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_DeactPDP_ContextAcpMO Group : PDU Type : DEACTIVATEPDPCONTEXTACCEPT Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Deactivate PDP Context Accept n <=> ue 3GPP 24.008, 9.5.15			
Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000111'B		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
mBMS_ProtocolConfOpts	cr_MBMS_ProtoCfgOptAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cbs_Deact_PDP_ContextAcp_MT(p_ti: TI) Group : PDU Type : DEACTIVATEPDPCONTEXTACCEPT Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Deactivate PDP Context Accept n <=> ue 3GPP 24.008, 9.5.15			
Field Name	Field Value	Field Encoding	Comments
ti	p_ti		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000111'B		
protocolConfOpts	-		
mBMS_ProtocolConfOpts	-		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_CM_ServAcp			
Group :			
PDU Type : CMSERVICEACCEPT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00100001'B		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_IMSI_DetachInd			
Group :			
PDU Type : IMSIDETACHINDICATION			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??000001'B		
mSClsmk1	c_MS_Clsmk1_Def		
mobileId	c_MobileIdTMSI_lv		
			IMSI DETACH INDICATION message carries TMSI information element
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_LocUpdReqAny_IMSI (p_KeySeq : KeySeq)			
Group :			
PDU Type : LOCATIONUPDATINGREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Any Location Updating Request with IMSI			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??001000'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
locUpdType	c_LocUpdTypeAny		
locAreald	c_LocArealdAny_v		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdIMSI_lv		
mSClsmk2	c_MS_Clsmk2_Any IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cb_CM_ServReqAny (p_KeySeq : KeySeq)			
Group :			
PDU Type : CMSERVICEREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??100100'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
cMServType	?		
mSClsmk2	c_MS_Clsmk2_Any_lv		
mobileId	c_MobileIdAny_lv		
priorityLvl	c_PriorityLvlAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cbr_Modify_PDP_ContextAcp_MO Group : PDU Type : MODIFYPDPCONTEXTACCEPT_ul Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Modify PDP Context Accept ue -> n 3GPP 24.008, 9.5.11			
Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01001001'B		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cbs_Modify_PDP_ContextReq_MT(p_Ti: TI; p_LLC_SAPI_v: LLC_SAPI_v; p_qos_lv: QualityOfService_lv) Group : PDU Type : MODIFYPDPCONTEXTREQUEST_dl Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Modify PDP Context for an UE supporting UMTS only n -> ue 3GPP 24.008, 9.5.9			
Field Name	Field Value	Field Encoding	Comments
ti	p_Ti		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01001000'B		
spare	'0000'B		
radioPriority	cs_RadioPriorityHigh_v		
requestedLLC_SAPI	p_LLC_SAPI_v		
newQoS	p_qos_lv		
pDP_Addr	-		
pKT_FlowIdentifier	-		
protocolConfOpts	-		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_Alert (p_TI : TI)			
Group :			
PDU Type : ALERTINGul			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : ALERTING – receive constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000001'B		
facility	cr_FacAny IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_Connect (p_TI : TI)			
Group :			
PDU Type : CONNECTul			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : CONNECT – receive constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000111'B		
facility	cr_FacAny IF_PRESENT		
connectedSubAdrs	cr_ConnectedSubAdrs_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
streamId	cr_StreamIdAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_DetachReq (p_type : DetachType; p_ptmsi : GMM_MS_IdentityPTMSI; p_signature : PTMSI_Signature_tlv)			
Group :			
PDU Type : DETACHREQUESTMO			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000101'B		
spare4	?		
detachType	p_type		
ptmsi	p_ptmsi		
ptmsiSignature	p_signature		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_Disc (p_TI : TI)			
Group :			
PDU Type : DISCONNECTul			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : DISCONNECT – receive constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??100101'B		
cau	cr_CauAny_lv		
facility	–		
userUser	–		
sS_VersionInd	–		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_Rel (p_TI : TI)			
Group :			
PDU Type : RELEASEul			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RELEASE – receive constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101101'B		
cau	cr_CauAny IF_PRESENT		
cau2	cr_CauAny IF_PRESENT		
facility	cr_FacAny IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_RelCmpl (p_TI : TI)			
Group :			
PDU Type : RELEASECOMPLETEul			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RELEASE COMPLETE – receive constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101010'B		
cau	cr_CauAny IF_PRESENT		
facility	cr_Facility_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_ConnAck (p_TI : TI)			
Group :			
PDU Type : CONNECTACKNOWLEDGE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : CONNECT ACKNOWLEDGE – send constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00001111'B		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_DetachAcc			
Group :			
PDU Type : DETACHACCEPTMO			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000110'B		
spare	'0000'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_Disc (p_TI : TI)			
Group :			
PDU Type : DISCONNECTdl			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : DISCONNECT – send constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		cause
cC_ProtocolDiscriminator	'0011'B		
msgType	'00100101'B		
cau	cs_CauNormCallClear_lv		
facility	–		
progInd	–		
userUser	–		
allowedAction	–		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_LocUpdAcpTMSI_2 (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_TMSI : OCTETSTRING)			
Group :			
PDU Type : LOCATIONUPDATINGACCEPT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00000010'B		
locAreald	c_LocAreald_v(p_MCC, p_MNC, p_LAC)		
mobileId	c_MobileIdTMSILoc(p_TMSI)		
followOnProceed	'10100001'B		
cTSPerm	'10100010'B		
equivalentPLMN	–		
emergNumList	–		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_Rel (p_TI : TI)			
Group :			
PDU Type : RELEASEdI			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RELEASE – send constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101101'B		
cau	–		
cau2	–		
facility	–		
userUser	–		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_RelCmpl (p_TI : TI)			
Group :			
PDU Type : RELEASECOMPLETEdI			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RELEASE COMPLETE – send constraint			
Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101010'B		
cau	–		
facility	–		
userUser	–		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_SetupMT(p_Bcap : Bcap)
Group :
PDU Type : SETUPdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP – sent constraint

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00000101'B		
repeatInd	-		
bcap1	p_Bcap		
bcap2	-		
facility	-		
progInd	-		
signal	-		
cgpn	-		
cgps	-		
cdpn	-		
cdps	-		
redirectingPN	-		
redirectingPSubadrs	-		
llcRepeatInd	-		
llc1	-		
llc2	-		
hlcRepeatInd	-		
hlc1	-		
hlc2	-		
userUser	-		
priority	-		
alert	-		
ntwCCCapabilities	-		
cauNoCLI	-		
buBcap	-		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_SetupMT_2_Bcap (p_Bcap1, p_Bcap2 : Bcap)
Group :
PDU Type : SETUPdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP – sent constraint

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00000101'B		
repeatInd	c_RepeatInd1		Bcap repeat indicator for alternate (circular selection)
bcap1	p_Bcap1		
bcap2	p_Bcap2		
facility	-		
progInd	-		
signal	-		
cgpn	-		
cgps	-		
cdpn	-		
cdps	-		
redirectingPN	-		
redirectingPSubadrs	-		
llcRepeatInd	-		
llc1	-		
llc2	-		
hlcRepeatInd	-		
hlc1	-		
hlc2	-		
userUser	-		
priority	-		
alert	-		
ntwCCCapabilities	-		
cauNoCLI	-		
buBcap	-		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : c_AuthFailAny			
Group :			
PDU Type : AUTHENTICATIONFAILURE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??011100'B		
rejCau	?		
authFailParam	c_AuthFailParamAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_AuthReq(p_KeySeq: KeySeq; p_RAND: MM_RAND; p_AUTN: AUTN)			
Group :			
PDU Type : AUTHENTICATIONREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00010010'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeySeq)		
rAND	p_RAND		
aUTN	p_AUTN		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_AuthRspAnyExt			
Group :			
PDU Type : AUTHENTICATIONRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Any Authentication Response containing the Authentication Response Extension IE			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	c_AuthRspExtAny		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_AuthRspAnyNoExt			
Group :			
PDU Type : AUTHENTICATIONRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Any Authentication Response NOT containing the Authentication Response Extension IE			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	-		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_PagRsp (p_KeySeq: KeySeq; p_MobileId: MS_Identity_Iv)			
Group :			
PDU Type : PAGINGRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		
msgType	'??100111'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeySeq)		
mSClsmk2	c_MS_Clsmk2_Any_Iv		
mobileId	p_MobileId		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_TMSI_ReallocCmpl			
Group :			
PDU Type : TMSIREALLOCATIONCOMPLETE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
mMProtocolDiscriminator	'0101'B		MM Protocol Discriminator
msgType	'??011011'B		Message Type
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cb_LocUpdReqAny (p_KeySeq : KeySeq)			
Group :			
PDU Type : LOCATIONUPDATINGREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??001000'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
locUpdType	c_LocUpdTypeAny		
locAreald	c_LocArealdAny_v		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdAny_lv		
mSClsmk2	c_MS_Clsmk2_Any IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cbr_Deact_PDP_ContextReq_MO(p_SM_Cause: SM_Cause_v)			
Group :			
PDU Type : DEACTIVATEPDPCONTEXTREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Deactivate PDP Context Request n <=> ue 24.008, 9.5.14			
Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_SM_Cause		
tearDwnInd	cr_TearDwnInd_tv IF_PRESENT		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
mBMS_ProtocolConfOpts	cr_MBMS_ProtoCfgOptAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cbr_RA_UpdReqAny
 (p_UpdateType : UpdateType_v; p_RAI : RAI_v; p_KeySeq : KeySeq)
Group :
PDU Type : ROUTINGAREAUPDATEREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001000'B		
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
updateType	p_UpdateType		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny_lv		
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		
readyTimer	cr_GPRS_TimerAny IF_PRESENT		
drxParameter	cr_DRXparameter_tv_Any IF_PRESENT		
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		
msnetworkcap	cr_MS_NetworkCap_tlv_Any IF_PRESENT		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		
mBMS_ContextStatus	cr_MBMS_ContextStatusAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : cr_ActPDP_ContextReqMO_Any Group : PDU Type : ACTIVATEPDPCONTEXTREQUESTul Derivation Path : Encoding Rule Name : Encoding Variation : Comments : Activate PDP Context Request ue -> n 3GPP 24.008, 9.5.1			
Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000001'B		
requestedNSAPI	cr_NSAPI_v		
requestedLLC_SAPI	cr_LLC_SAPI_v		
requestedQoS	cr_QualityOfService_lv_Any		
pDP_Address	cr_StaticPDP_AddressAny		
accessPtName	cr_AccessPtNameAny IF_PRESENT		This has to be set to Not Assigned by UE in UMTS domain. The GGSN logical name or the external packet data network logical name
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_AttachComplete Group : PDU Type : ATTACHCOMPLETE Derivation Path : Encoding Rule Name : Encoding Variation : Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000011'B		
interRAT_HO_Info	cr_InterRAT_HO_InfoAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_AttachReq (p_AttachType : AttachType; p_MobId : MS_Identity_lv; p_RAI : RAI_v; p_KeySeq : KeySeq)			
Group :			
PDU Type : ATTACHREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000001'B		
msNetworkCap	cr_MS_NetworkCapAss_lv		
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
attachType	p_AttachType		
drxParameter	c_DRX_ParamterAny		
ptmsiORimsi	p_MobId		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny_lv		
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		
readyTimer	c_GPRS_TimerAny IF_PRESENT		
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_AuthAndCiphFailureAny			
Group :			
PDU Type : AUTHENTICATION_AND_CIPHERING_FAILURE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00011100'B		
gmmCause	?		
authFailurePar	c_AuthFailParamGmmAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_AuthAndCiphRsp(p_authRsp : AuthRsp_tv; p_authRspExt :AuthRspExt)			
Group :			
PDU Type : AUTHENTICATIONANDCIPHERINGRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010011'B		
spare4	'0000'B		
acRefNo	?		Should be the one sent in the auth request
authRsp	p_authRsp		Authentication RES
imeisv	-		No IMEISV requested
authRspExt	p_authRspExt		Authentication paramter AUTN, a UMTS challenge is requested
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_DetachRequest_MO			
Group :			
PDU Type : DETACHREQUESTMO			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
gMMProtocolDiscriminator	tsc_GMM_PD		GMM Protocol Discriminator
msgType	'00000101'B		Message Type
spare4	'0000'B		M
detachType	c_DetachTypeReAttNotRequiredGPRS		M
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		O
ptmsiSignature	c_PTMSI_Signature_tlv(?) IF_PRESENT		O
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_ServiceRequest (p_sType : ServiceType_v; p_PTMSI : MS_Identity_Iv; p_KeySeq : KeySeq)			
Group :			
PDU Type : SERVICEREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001100'B		
serviceType	p_sType		
ciphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
ptmsi	p_PTMSI		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		
mBMS_ContextStatus	cr_MBMS_ContextStatusAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_StatusAny			
Group :			
PDU Type : STATUS_PDU			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : This constraint is used to receive an AM STATUS PDU containing the given SUFI list. Any padding included is ignored.			
Field Name	Field Value	Field Encoding	Comments
dC_Field	tsc_DC_ControlPDU		
type	tsc_PDU_TypeStatus		
superFieldsTx	OMIT		
superFieldsAndPadRx	?		
paddingTx	OMIT		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_AttachAcc (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature;
 p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)
Group :
PDU Type : ATTACHACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000010'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v('111'B, '00000'B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2('000'B)		Lowest
radioPrioSMS	c_RadioPriority('100'B)		Lowest
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	-		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	-		
t3302Value	-		
cellNotification	-		
equivalentPLMN	-		
ntwFeatureSupport	-		
emergNumList	-		
requestedMS_Info	-		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : cs_AttachRej(p_cause : RejCau)			
Group :			
PDU Type : ATTACHREJECT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000100'B		
gmmCause	p_cause		
t3302Value	-		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_AuthAndCiphReq(p_rand : AuthenticationParamterRAND; p_ckNo : CiphKeySeqNum_tv; p_authn : GMM_AUTN)			
Group :			
PDU Type : AUTHENTICATIONANDCIPHERINGREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010010'B		
imeisvReq	cb_IMEISV_Request('000'B)		IMEISV not requested
ciphAlgorithm	c_CiphAlgorithm(px_Cipher Alg)		GPRS encryption algorithm GEA/1
acRefNo	c_AC_RefNum3		Use any reference value
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
authRand	p_rand		Authentication paramter RAND
gprsCiphKeySeqNo	p_ckNo		GPRS ciphering key sequence number
aUTN	p_authn		Authentication paramter AUTN, an UMTS challenge is requested
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_GPRS_SUSPENSIONREQ(p_TLLI:TLLI;p_RAI:RAI_v;p_Cause:O1)
Group :
PDU Type : GPRS_SUSPENSIONREQ
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR GPRS Suspension Request ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.13b

Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		skip indicator
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator
msgType	'34'O		'00110100'B
tlli	p_TLLI		Temporary Logical Link Identity
raldentification	p_RAI		Routeing Area Identification
cause	p_Cause		SuspensionCause
serviceSupport	?		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_G_ChReleaseNormal
Group :
PDU Type : CHANNELRELEASE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : A CHANNEL RELEASE message with RR cause = normal event

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		
msgType	'0D'O		'00001101'B
rRCau	c_G_RR_CauNormalevent		normal event
bA_Range	-		BA range O OCTETSTRING minimum 6 octets no up limit
groupChannelDescr	-		group channel description O
groupCipherKey	-		OCTETSTRING[4..13] group cipher key number C
gPRS_Resumption	-		OCTETSTRING[1] GPRS resumption O
bA_ListPref	-		OCTETSTRING[1] BA list pref O OCTETSTRING at least 3 octets no up limit
uTRAN_FreqList	-		UTRAN frequency list O
cellChannelDescr	-		OCTETSTRING[3.. Cell Channel Descr O OCTETSTRING [17]
cellSelInd	-		CellSelection indicator after release of all TCH and SDCCH O OCTETSTRING [4..]
enhDTMCSRelInd	-		Enhanced DTM CS Release Indication O OCTETSTRING [1]
vgCSCiphParam	-		VGCS Cipherring Params O OCTETSTRING [3-15]
grpChDescr2	-		Group Channel Descr 2 O OCTETSTRING [13]

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : c_G_ChannelReq_Any			
Group :			
PDU Type : CHANNELREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : To match any received CHANNEL REQUEST message			
Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	?		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_G_MeasReport_Any			
Group :			
PDU Type : MEASUREMENTREPORT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : A measurement report match any received MSR_RPT_PDU.			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		RR protocol discriminator measurement message type containing any value
rRProtocolDiscriminator	'0110'B		
msgType	'15'O		
measResults	c_G_MeasResults_Any		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType1(p_CellAlloc : CellChDescr; p_RACHControlParam: RACHControlParam; p_BandInd : B1)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE1			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'55'O		L2 pseudo length = 21
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011001'B		message type
cellChDescr	p_CellAlloc		cell channel description, with IEI omitted
rACHControlParam	p_RACHControlParam		rach control parameters, without IEI
SI1RO	c_SI1_RO(p_BandInd)		SI1 rest octets
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType13(p_SI13RO: SI13RO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE13			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'01'O		L2 pseudo length = 0
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000000'B		message type
SI13roct	p_SI13RO		SI13 rest octets
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType15(p_SI15RO: SI15RO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE15			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'01'O		L2 pseudo length = 0
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'01000011'B		message type
si15roct	p_SI15RO		SI15 rest octets
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType2(p_NeighBCCHs: NeighCellDescr;p_NCC_Permitted: O1;p_RACHControlParam: RACHControlParam)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE2			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'59'O		L2 pseudo length = 22
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011010'B		message type
neighBCCHFreqList	p_NeighBCCHs		bch frequency list of neighbour cells with IEI omitted
nCCPermitted	p_NCC_Permitted		ncc permitted
rACHControlParam	p_RACHControlParam		rach control parameters
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType2bis(p_ExtBCCHs : NeighCellIDDescr; p_RACHControlParam: RACHControlParam)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE2bis			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'55'O		L2 pseudo length = 21
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000010'B		message type
extNeighBCCHFreqList	p_ExtBCCHs		extended bcch frequency list of neighbour cells
rACHControlParam	p_RACHControlParam		rach control parameters
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType2quarter(p_SI2quarterRO : SI2quarterRO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE2quarter			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'05'O		L2 pseudo length = 1
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000111'B		message type
sl2quarterRO	p_SI2quarterRO		UTRAN parameters
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType3(p_CellIdentity : O2; p_LAI: LocAreald_v; p_ControlChDescr:ControlChDescr; p_CellOption: CellOptionBCCH; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI3RO: SI3RO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE3			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'49'O		L2 pseudo length = 18
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011011'B		message type
cellId	p_CellIdentity		cell identity
lai	p_LAI		location area identification
controlChDescr	p_ControlChDescr		control channel description
cellOption	p_CellOption		cell options/BCCH
cellSelParam	p_CellSelParam		cell selection parameters
rACHControlParam	p_RACHControlParam		rach control parameters
si3RO	p_SI3RO		SI3 rest octets
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType4(p_LAI: LocAreald_v; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI4RO: SI4RO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE4			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'31'O		L2 pseudo length = 12
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011100'B		message type
lai	p_LAI		location area identification
cellSelParam	p_CellSelParam		cell selection parameters
rACHControlParam	p_RACHControlParam		rach control parameters
cbchd	OMIT		cbch channel description
cbchmobileAlloc	OMIT		mobile allocation
si4roct	p_SI4RO		SI4 rest octets OCTETSTRING [10]
Detailed Comments : no cell broadcast channel description IE, no cell broadcast channel mobile allocation IE.			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType5(p_NeighCellFreqList :NeighCellDescr)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE5			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'49'O		L2 pseudo length =18
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011101'B		message type
bCCHFreqList	p_NeighCellFreqList		bcch frequency list
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType5bis(p_ExtBCCHs : NeighCellDescr)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE5bis			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
I2PseudoLength	'49'O		L2 pseudo length = 18
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000101'B		message type
extNeighBCCHFreqList	p_ExtBCCHs		extended bcch frequency list of neighbour cells
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_SysInfoType6(p_CellIdentity : O2; p_LAI: LocAreald_v;p_CellOptionSACCH : CellOptionSACCH; p_NCCPermitted : NCCPermitted; p_SI6RO: SI6RO)			
Group :			
PDU Type : SYSTEMINFORMATIONTYPE6			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length = 11
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011110'B		message type
ci	p_CellIdentity		cell identity
lai	p_LAI		location area identification
co	p_CellOptionSACCH		cell options /SACCH
nCCPermitted	p_NCCPermitted		ncc permitted
si6roct	p_SI6RO		SI6 Rest Octets
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_G_CipheringModeComplete			
Group :			
PDU Type : CIPHERINGMODECOMPLETE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CIPHERING MODE COMPLETE ue/ms -> ntw/ue 3GPP TS 44.018 clause 9.1.10			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	?		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_CipheringModeComplete_Msg_Type		message type M BITSTRING [8]
mobileEquipId	OMIT		mobile equipment identity O OCTETSTRING [10], 15 digits, BCD
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_G_CipheringModeCommand(p_StartCiph : B1)			
Group :			
PDU Type : CIPHERINGMODECOMMAND			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CIPHERING MODE COMMAND ntw -> ue/ms 3GPP TS 44.018 clause 9.1.9			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_CipheringModeCommand_Msg_Type		message type M BITSTRING [8]
cipherResponse	c_CipherResponse		cipher response M BITSTRING [4]
cipherModeSetting	c_CipherModeSetting(p_StartCiph)		cipher mode setting M BITSTRING [4]
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_G_ClassmarkChangeAny			
Group :			
PDU Type : CLASSMARKCHANGE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR CLASSMARK CHANGE ue/ms -> ntw 3GPP TS 44.018 clause 9.1.11			
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'16'O		message type M BITSTRING [8]
msclsmk	c_MS_Clsmk2_Any_lv		mobile station classmark M OCTETSTRING [4]
additionalMsclsmk	cr_MSCLSMK3_Any		additional mobile station classmark information C OCTETSTRING [14]
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_G_LocationUpdatingAccept (p_G_CellConfigInfo : G_CellConfigInfo;p_MS_Id : MM_MS_Identity)
Group :
PDU Type : LOCATIONUPDATINGACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : MM LOCATION UPDATING ACCEPT n -> ms
 3G TS 24.008 V3.4.0 cl. 9.2.13

Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	tsc_MM_Msgs_Proto_Disc		MM Protocol Discriminator M BITSTRING [4]
msgType	tsc_LocationUpdatingAccept_Msg_Type		Message Type (1) M BITSTRING [8]
locAreald	c_LocAreald_v_UpdateAccept (p_G_CellConfigInfo)		Location Area Id. V M LocAreald_v (5 octets)
mobileId	p_MS_Id		Mobile Identity O MobileId (3–11 octets)
followOnProceed	OMIT		Follow on proceed O BITSTRING [8]
cTSPerm	OMIT		CTS Permission O BITSTRING [8]
equivalentPLMN	OMIT		O 17 octets
emergNumList	OMIT		O TLV 5–50 octets

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Constraint Declaration

Constraint Name : cr_G_UtranClassmarkChange
Group :
PDU Type : UTRANCLASSMARKCHANGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR UTRAN CLASSMARK CHANGE ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.11a

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'60'O		message type M BITSTRING [8]
uTRANPreConfigInfo	c_UtranPreConfigInfo		UTRAN predefined configuration status information M OCTETSTRING [2..n]

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_ImmediateAssignment (p_ARFCN : B10 ; p_TSC : B3; p_RR_RA : INTEGER ; p_RR_RFN : RFN)
Group :
PDU Type : IMMEDIATEASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR IMMEDIATE ASSIGNMENT ntw -> ue/ms
 3GPP TS 44.018 clause 9.1.18

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_ImmediateAssignmentMsg_Type		message type M BITSTRING [8]
dedicatedModeOrTBF	c_G_DedicatedModeOrTBF		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	c_G_PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	c_G_ChannelDescr (p_ARFCN, p_TSC)		channel description C OCTETSTRING [3]
packetChDescr	OMIT		packet channel description C OCTETSTRING [3]
reqRef	c_G_ReqRef (p_RR_RA , p_RR_RFN)		request reference M OCTETSTRING [3]
ta	c_G_TA		timing advance M OCTETSTRING [1]
mobileAlloc	c_G_MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	OMIT		starting time O OCTETSTRING [3]
iaroct	c_G_IARO		IA rest octets / frequency parameter, before time M

Detailed Comments : The message has a fixed length of 23 octets.

PDU Constraint Declaration			
Constraint Name	: c_IMSI_DetachIndAny		
Group	:		
PDU Type	: IMSIDETACHINDICATION		
Derivation Path	:		
Encoding Rule Name	:		
Encoding Variation	:		
Comments	: Used only in postamble, so don't care about the contents, only the message type		
Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??000001'B		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdAny_lv		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name	: cr_8BitPRACH_MMProc		
Group	:		
PDU Type	: PACKETCHANNELREQUEST		
Derivation Path	:		
Encoding Rule Name	:		
Encoding Variation	:		
Comments	:		
Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	'01011???'B		BITSTRING
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name	: cr_11BitPRACH_MMProc		
Group	:		
PDU Type	: PACKETCHANNELREQUEST		
Derivation Path	:		
Encoding Rule Name	:		
Encoding Variation	:		
Comments	:		
Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	'110011?????'B		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_ChanReqOtherProc			
Group :			
PDU Type : CHANNELREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	('111?????'B, '0001????'B)		value depends on NECI bit
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_PacketEnhancedMeasRpt(p_TLLI : O4; p_NCMeasRpt : NC_MeasRpt)			
Group :			
PDU Type : PACKETENHANCEDMEASUREMENTREPORT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Includes NC Measurement Report			
Field Name	Field Value	Field Encoding	Comments
msgType	'001010'B		Message type
tLLI	p_TLLI		
nCMeasRep	p_NCMeasRpt		
r5Mask	?		
grntiXMask	*		not present if r5Mask = 0
gRNTIExtension	*		not present if r5Mask = 0 or grntiXMask = 0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PacketUplinkAssignment_Dynamic_OnePhase(p_packetRequestReference : PacketRequestReference)

Group :

PDU Type : PACKETUPLINKASSIGNMENT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign uplink resources for One phase TBF.

TS 3GPP 44.046 clause 11.2.29
Values are taken from 51010 clause 40.2.3.4

Field Name	Field Value	Field Encoding	Comments
msgType	'001010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal paging
persistenceLevelMask	'0'B		
persistenceLevel1	OMIT		not Present if persistenceLevelMask=0
persistenceLevel2	OMIT		not Present if persistenceLevelMask=0
persistenceLevel3	OMIT		not Present if persistenceLevelMask=0
persistenceLevel4	OMIT		not Present if persistenceLevelMask=0
referenceAddress	c_ReferenceAddress_PRR(p_packetRequestReference)		
eGPRPSmask	'0'B		
channelCodingCommand	INT_TO_BIT(tsc_CS1,2)		not present of EGPRPSmask=1
tLLIBlockChannelCoding	'0'B		0 – the mobile station shall use CS–1 in GPRS TBF mode and MCS–1 in EGPRS TBF mode. 1 – the mobile station shall use the value commanded in the CHANNEL_CODING_COMMAND or EGPRS_CHANNEL_CODING_COMMAND field.
packetTimingAdvance	c_PacketTimingAdvance		
freqParamMask	'1'B		
freqParam	c_FreqParam_PBBCH		not present if freqParamMask=0
allocationMask	'01'B		
dynamicAllocation	c_DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	OMIT		present if allocationMask=10
r99Mask	'1'B		
packetExtTAmask	'0'B		not present if r99Mask=0
packetExtendedTA	OMIT		not present if r99Mask=0 and packetExtTImask=0
r5Mask	OMIT		

Continued on next page

Continued from previous page

PDU Constraint Declaration			
Field Name	Field Value	Field Encoding	Comments
gRNTIMask	OMIT		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	OMIT		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBldMask	OMIT		not present if r99Mask=0 and r5Mask=0
rBld	OMIT		not present if r99Mask=0, r5Mask=0 and rBldMask=0
r6Mask	OMIT		not present if r99Mask=0, r5Mask=0
pfiMask	OMIT		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
pFI	OMIT		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and pfiMask = 0
rlcModeMask	OMIT		not present if r99Mask=0, r5Mask=0 and r6Mask = 0
rlcMode	OMIT		not present if r99Mask=0, r5Mask=0, r6Mask = 0 and rlcModeMask = 0
eGPRSMmessage	OMIT		not present of EGPRPSmask=0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PacketDownlinkAssignment(p_TLLI : OCTETSTRING; p_DLTFI, p_Gamma : B5)
Group :
PDU Type : PACKETDOWNLINKASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'000010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal paging
persistenceLevelMask	'0'B		
persistenceLevel1	-		not Present if persistenceLevelMask=0
persistenceLevel2	-		not Present if persistenceLevelMask=0
persistenceLevel3	-		not Present if persistenceLevelMask=0
persistenceLevel4	-		not Present if persistenceLevelMask=0
globalTFImask	'1'B		
gLOBAL_TFI	OMIT		not present if globalTFImask=1
mask2	'0'B		not present if globalTFImask=0
tLLI	p_TLLI		not present if globalTFImask=0 and mask2=1
spareBit1	'0'B		set to '0'B
mACMode	'00'B		
rLCMode	'0'B		
controlAck	'0'B		
timeslotAllocation	'00010000'B		
pktTimingAdvance	c_PacketTimingAdvance		
mask1	'0'B		
p0	-		not present if mask1 = 0
spareBit2	-		not present if mask1 = 0. set to '0'B if present
pRMode	-		not present if mask1 = 0
freqParamMask	'0'B		
freqParams	-		not present if freqParamMask = 0
tfiMask	'1'B		
dTFIAssignment	p_DLTFI		not present if tfiMask = 0
pcMask	'1'B		
powerCtrlParams	c_PowerControlParams(p_Gamma)		not present if pcMask = 0
startTimeMask	'0'B		
tbfStartTime	-		not present if startTimeMask = 0
spareBit3	'0'B		set to '0'B
r99Mask	'1'B		

Continued on next page

Continued from previous page

PDU Constraint Declaration			
Field Name	Field Value	Field Encoding	Comments
egprsMask	'0'B		not present if r99mask = 0
egprsWindowSize	-		not present if r99mask = 0 or if egprsMask=0
linkQualMeasMode	-		not present if r99mask = 0 or if egprsMask=0
bepMask	-		not present if r99mask = 0 or if egprsMask=0
bepPeriod2	-		not present if r99mask = 0 or if egprsMask=0 or if bepMask=0
pktXTAMask	'0'B		not present if r99mask = 0
pktExtendedTA	-		not present if r99mask = 0 or if pktXTAMask=0
compactMask	'0'B		not present if r99mask = 0
compactReducedMA	-		not present if r99mask = 0 or if compactMask=0
r5Mask	'0'B		not present if r99mask = 0
rBldMask	-		not present if r99mask = 0 or if r5Mask=0
rBld	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0
grntiXMask	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0
gRNTIExtension	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0 or if grntiXMask=0
ulCtrlMask	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0
ulCtrlTimeslot	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0 or if ulCtrlMask=0
hfnMask	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0
hfnLSB	-		not present if r99mask = 0 or if r5Mask=0 or if rBldMask=0 or if hfnMask=0
r6Mask	-		not present if r99mask = 0
pfiMask	-		not present if r99mask = 0 or if r6Mask = 0
pFI	-		not present if r99mask = 0 or if r6Mask = 0 or if pfiMask = 0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_PacketControlAcknowledgement
Group :
PDU Type : PACKETCONTROLACKNOWLEDGEMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'000001'B		Message type
iLLI	?		
ctrlAck	?		
mask	*		
rRBPMask	*		not present if mask=0
tn_RRBP	*		not present if mask=0 or if rRBPMask=0
gRNTIMask	*		not present if mask=0
gRNTIExt	*		not present if mask=0 or if gRNTIMask=0
rel6mask	*		
extMask	*		not present if rel6mask = 0
ctrlAckExt	*		not present if rel6mask or extMask = 0
paddingBits	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_P_ImmediateAssignment(p_downlink : B1; p_ARFCN : B10 ; p_RR_RA : INTEGER ;
 p_RR_RFN : RFN; p_RO : IARO)
Group :
PDU Type : IMMEDIATEASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_ImmediateAssignmentMsg_Type		message type M BITSTRING [8]
dedicatedModeOrTBF	c_G_TBFFMode(p_downlink)		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	c_G_PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	OMIT		channel description C
packetChDescr	c_PacketChDescr(p_ARFCN)		packet channel description C OCTETSTRING [3]
reqRef	c_G_ReqRef (p_RR_RA, p_RR_RFN)		request reference M OCTETSTRING [3]
ta	c_G_TA		timing advance M OCTETSTRING [1]
mobileAlloc	c_G_MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	OMIT		starting time O OCTETSTRING [3]
iaroct	p_RO		IA rest octets / frequency parameter, before time M

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_P_ImmediateAssignmentHopping(p_downlink : B1; p_Timeslot : B3 ; p_CellCfgInfo : G_CellConfigInfo; p_RR_RA : INTEGER ; p_RR_RFN : RFN; p_RO : IARO)
Group :
PDU Type : IMMEDIATEASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'39'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_ImmediateAssignmentMsg_Type		message type M BITSTRING [8]
dedicatedModeOrTBF	c_G_TBFFMode(p_downlink)		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	c_G_PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	OMIT		channel description C OCTETSTRING [3]
packetChDescr	c_PacketChDescrHopping(p_Timeslot, p_CellCfgInfo)		packet channel description C OCTETSTRING [3]
reqRef	c_G_ReqRef (p_RR_RA, p_RR_RFN)		request reference M OCTETSTRING [3]
ta	c_G_TA		timing advance M OCTETSTRING [1]
mobileAlloc	c_G_MobileAlloc_DTM		mobile allocation, M OCTETSTRING [1..9]
startingTime	OMIT		starting time O OCTETSTRING [3]
iaroct	p_RO		IA rest octets / frequency parameter, before time M

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_PacketSIStatusAny
Group :
PDU Type : PACKETSISTATUS
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'001101'B		Message type
globalTFI	?		
bCCHChangeMark	?		
rcvdSIList	?		
rcvdUnknownSIList	?		
rel6Mask	?		
pSCSI_Support	*		not present if rel6Mask = 0
ps_RelReq	*		not present if rel6Mask = 0
paddingBits	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType1(p_PBCCHInfo : PBCCH_Info; p_PCCCHParams : PCCCH_OrganisationParameters; p_CellCnfgInfo : G_CellConfigInfo; p_NMO : B2; p_MeasOrder : B1)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE1
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Default PSI 1 defined in 51.010 40.2.2.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	'110001'B		Message type
pageMode	'00'B		
pBCCH_CHANGE_MARK	'000'B		
pSI_CHANGE_FIELD	'0000'B		
pSI1_REPEAT_PERIOD	p_PBCCHInfo.pSI1_REPEAT_PERIOD		
pSI_COUNT_LR	p_PBCCHInfo.pSI_COUNT_LR		
pSI_COUNT_HR_Mask	'1'B		
pSI_COUNT_HR	p_PBCCHInfo.pSI_COUNT_HR		not present if pSI_COUNT_HR_Mask = 0
MEASUREMENT_ORDER	p_MeasOrder		
gPRS_CellOptions	c_GPRS_CellOptionsPSI1(p_NMO)		
pRACH_ControlParameters	c_PRACHCtrlParams		
pCCCH_OrganisationParameters	p_PCCCHParams		
globalPowerControlParameters	c_GlobalPowerCtrlParams		
pSI_STATUS_IND	'0'B		
spareMask	'1'B		fields below are added in R99
mSCR	'1'B		present if spareMask = 1
sGSNR	'1'B		present if spareMask = 1
bandIndicator	p_CellCnfgInfo.bandIndicator		present if spareMask = 1
r6Mask	'0'B		not present if spareMask = 0
txPwrMask	-		not present if spareMask = 0 or r6Mask = 0
lbMSTxPwrMaxCCH	-		not present if spareMask = 0 or r6Mask = 0 or txPwrMask = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_1st(p_MCC, p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_RAC : O1; p_AddPSIMask : B1; p_AddPSI : AdditionalPSIMessages)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE2
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : ist Instance of Default PSI 2

Field Name	Field Value	Field Encoding	Comments
msgType	'110010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		
pSI2_CHANGE_MARK	'01'B		
pSI2_INDEX	'000'B		
pSI2_COUNT	'010'B		
cellIdentificationMask	'1'B		
cellIdentification	c_CellIdentification(p_MCC, p_MNC, p_LAC, p_RAC)		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	'1'B		
nonGPRSCellOptions	c_NonGPRSCellOptions		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_RefFreqListNone		
cellAllocation	c_CellAllocListNone		
gPRS_MobileAllocations	c_GPRSMobAllocListNone		
pCCCH_Description	c_PCCCH_DescrListNone		
spareMask	'1'B		fields below are added in R99
compactControlMask	'0'B		not present if spareMask = 0
compactControlInfo	-		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	p_AddPSIMask		not present if spareMask = 0
additionalPSI_Msg	p_AddPSI		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_2nd(p_rFL_Contents_Len:B4;p_rFL_Contents:OCTETSTRING;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE2
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : If this needs to be padded to a set number of octets, a second copy needs to be produced for DCS/PCS because their GPRS MA is different.
 values from TS 51.010-1 v.5.5.0 subclause 40.2.1.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	'110010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI2_CHANGE_MARK	'01'B		
pSI2_INDEX	'001'B		
pSI2_COUNT	'010'B		Three instances of PSI2
cellIdentificationMask	'0'B		Cell Identification parameters not present
cellIdentification	OMIT		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	'0'B		Non GPRS Cell Options not present
nonGPRSCellOptions	OMIT		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_ReferenceFreqLists('0010'B,p_rFL_Contents_Len,p_rFL_Contents)		
cellAllocation	c_CellAllocLists('0010'B)		List 2
gPRS_MobileAllocations	c_GPRS_MobileAllocationLists('0001'B,p_mA_LENGTH,p_mA_BITMAP)		
pCCCH_Description	c_PCCCH_DescriptionList_Hopping('0010'B,'000010'B,'00001000'B)		
spareMask	'1'B		fields below are added in R99
compactControlMask	'0'B		not present if spareMask = 0
compactControlInfo	OMIT		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	'0'B		not present if spareMask = 0
additionalPSI_Msg	OMIT		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_3rd(p_rFL_Contents_Len:B4;p_rFL_Contents:OCTETSTRING;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE2
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : If this needs to be padded to a set number of octets, a second copy needs to be produced for DCS/PCS because their frequency list and GPRS MA is different. values from TS 51.010-1 v.5.5.0 subclause 40.2.1.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	'110010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI2_CHANGE_MARK	'01'B		
pSI2_INDEX	'010'B		
pSI2_COUNT	'010'B		Three instances of PSI2
cellIdentificationMask	'0'B		Cell Identification parameters not present
cellIdentification	OMIT		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	'0'B		Non GPRS Cell Options not present
nonGPRSCellOptions	OMIT		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_ReferenceFreqLists('0001'B,p_rFL_Contents_Len,p_rFL_Contents)		
cellAllocation	c_CellAllocListNone		List 2
gPRS_MobileAllocations	c_GPRS_MobileAllocationLists('0010'B,p_mA_LENGTH,p_mA_BITMAP)		
pCCCH_Description	c_PCCCH_DescrListNone		
spareMask	'1'B		fields below are added in R99
compactControlMask	'0'B		not present if spareMask = 0
compactControlInfo	OMIT		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	'0'B		not present if spareMask = 0
additionalPSI_Msg	OMIT		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType3(p_StartFreq:B10; p_FreqDiffLen : B3; p_FreqDiff:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE3
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'110011'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI3_CHANGE_MARK	'00'B		Three 3bis messages
pSI3_BIS_COUNT	'0010'B		
servingCellParameters	c_ServingCellParams		
generalCellSelectionParameter	c_GenCellSel		
neighCellParameters	c_NeighCellParamsList(p_StartFreq, c_CellSelection_Cell1, p_FreqDiffLen, p_FreqDiff, c_CellSelection_Cell2)		
spareMask1	'1'B		fields below are add in R98
servingCell_LSA_Id_Info	c_LSA_ID_Info_OMIT		not present if spareMask1 = 0
ISA_ParameterMask	'0'B		not present if spareMask1 = 0
ISA_Parameter	OMIT		not present if spareMask1 = 0 or ISA_ParameterMask = 0
spareMask2	'1'B		fields below are added in R99
spareBits	'00'B		not present if spareMask1 = 0 or spareMask2 = 0
compactInfoMask	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
compactInfo	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or compactInfoMask = 0
spareBit	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
spareMask3	'0'B		fields below are added in R4
cCN_SupportDescriptionMask	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	OMIT		not present if cCN_SupportDescriptionMask = 0
spareMask4	'0'B		fields below are added in Release 5
cellBarQualify3	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Continued on next page

Continued from previous page

PDU Constraint Declaration			
Field Name	Field Value	Field Encoding	Comments
iuModeNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType3bis(p_Index : B4;
 p_StartFreq:B10;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE3bis
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'110100'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI3_CHANGE_MARK	'00'B		
pSI3_BIS_INDEX	p_Index		
pSI3_BIS_COUNT	'0010'B		
neighCellParameters	c_NeighCellParamsList(p_StartFreq,c_CellSelection_Cell3,p_FreqDiffLen,p_FreqDiff,c_CellSelection_Cell3)		
neighCellParameters2	c_NeighCellParams2List_OMIT		Neighbour Cell parameters 2 not present
spareMask1	'1'B		fields below are add in R98
ISA_ParameterMask	'0'B		not present if spareMask1 = 0
ISA_Parameter	OMIT		not present if spareMask1 = 0 or ISA_ParameterMask = 0
spareMask2	'1'B		fields below are added in R99
compactNeighCellParams	c_CompactNeighCellParams2List_OMIT		not present if spareMask1 = 0 or spareMask2 = 0
spareBit	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
spareMask3	'0'B		fields below are added in R4
cCN_SupportDescriptionMask	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	OMIT		not present if cCN_SupportDescriptionMask = 0
spareMask4	'0'B		fields below are added in Release 5
iuModeNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : c_PacketSysInfoType5			
Group :			
PDU Type : PACKETSYSTEMINFORMATIONTYPE5			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
msgType	'110110'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		
pSI5_CHANGE_MARK	'00'B		
pSI5_INDEX	'000'B		
pSI5_COUNT	'000'B		
nC_MeasMask	'1'B		
pSI5_NC_MeasParameter	c_NC_MeasParams		not present if nC_MeasMask = 0
spareBit	'0'B		set to '0'
spareMask	'1'B		following fields are added in R99
eNH_ReportingParamMask	'0'B		not present if spareMask = 0
eNH_ReportingParam	-		not present if eNH_ReportingParamMask = 0 or spareMask = 0
r5Mask	'0'B		not present if spareMask = 0
gprs3GAddMeasParam2Mask	-		not present if spareMask = 0 or if r5Mask = 0
rptThresMask	-		not present if spareMask = 0 or if r5Mask = 0 or if gprs3GAddMeasParam2Mask = 0
fddRptThres2	-		not present if spareMask = 0 or if r5Mask = 0 or if gprs3GAddMeasParam2Mask = 0 or if rptThresMask = 0
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cr_ChanReqOnePhase			
Group :			
PDU Type : CHANNELREQUEST			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	('011110??'B, '01111?0?'B, '01111??0'B)		establishment cause / random reference M
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_G_AssignmentComplete
Group :
PDU Type : ASSIGNMENTCOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMPLETE ue/ms -> ntw
 3GPP TS 44.018 clause 9.1.3

Field Name	Field Value	Field Encoding	Comments
skipIndicator	?		skip indicator M
rRProtocolDiscriminator	'0110'B		BITSTRING [4] RR protocol discriminator M
msgType	'29'O		BITSTRING [4] message type M
rRCau	c_G_RR_Cause		BITSTRING [8] RR cuase M BITSTRING [8] without IEI

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_AssignmentCommand (p_ChMode : ChMode ; p_Ch_Desc : ChannelDescr2 ;
 p_FreqList_at : FreqList; p_CellChDescr : CellChDescr; p_MultiSlot : MultislotAlloc;
 p_MobileAlloc : MobileAlloc ; p_Cphms : CipherModeSetting)
Group :
PDU Type : ASSIGNMENTCOMMAND
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMMAND ntw -> ue/ms
 3GPP TS 44.018 claus 9.1.2

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'2E'O		message type M BITSTRING [8]
ch1Descr_at	p_Ch_Desc		'00101110'B description of the 1st channel, after time M OCTETSTRING [3]
powerCmd	c_PowerCommand		power command M OCTETSTRING [1] without IEI
freqList_at	p_FreqList_at		frequency list, after time C OCTETSTRING [4..132]
cellChDescr	p_CellChDescr		cell channel description O OCTETSTRING [17]
multiSlotConfig	p_MultiSlot		multislot allocation C OCTETSTRING [3..12]
ch1Mode	p_ChMode		mode of the 1st channel (channel set 1) O OCTETSTRING [2]
channelSet2Mode	OMIT		mode of channel set 2 O OCTETSTRING [2]
channelSet3Mode	OMIT		mode of channel set 3 O OCTETSTRING [2]
channelSet4mode	OMIT		mode of channel set 4 O OCTETSTRING [2]
channelSet5mode	OMIT		mode of channel set 5 O OCTETSTRING [2]
channelSet6mode	OMIT		mode of channel set 6 O OCTETSTRING [2]

Continued on next page

Continued from previous page

PDU Constraint Declaration			
Field Name	Field Value	Field Encoding	Comments
channelSet7mode	OMIT		mode of channel set 7 O OCTETSTRING [2]
channelSet8mode	OMIT		mode of channel set 8 O OCTETSTRING [2]
ch2Descr_at	OMIT		description of the 2nd channel, after time O OCTETSTRING [4]
ch2Mode	OMIT		mode 2 of the 2nd channel O OCTETSTRING [2]
mobileAlloc_at	p_MobileAlloc		mobile allocation after time C OCTETSTRING [3..10]
startingTime	OMIT		starting time O OCTETSTRING [3]
freqList_bt	OMIT		frequency list, before time C OCTETSTRING [4..132]
ch1Descr_bt	OMIT		description of the 1st channel, before time O OCTETSTRING [4]
ch2Descr_bt	OMIT		description of the 2nd channel, before time O OCTETSTRING [4]
frqchs_bt	OMIT		frequency channel sequence before time C OCTETSTRING [10]
mobileAlloc_bt	OMIT		mobile allocation before time C OCTETSTRING [3..10]
cphms	p_Cphms		cipher mode setting O OCTETSTRING [1]
vGCS_TargetMode	OMIT		VGCS target mode Indication O OCTETSTRING [3]
mltiRateConfig	OMIT		multiRate configuration O OCTETSTRING [4..8]
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_G_PagingRequest1_TMSI_Def
Group :
PDU Type : PAGINGREQUESTTYPE1
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'25'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'21'O		message type M BITSTRING [8]
chNeeded_m1_2	c_G_ChneededAny		channels needed for mobiles 1 and 2 M BITSTRING [4] without IEI
pageMode	c_G_PagModeNormal		page mode M BITSTRING [4] without IEI
mobileId1	c_G_MobileIdTMSI_lv		mobility identity 1 M
mobileId2	-		OCTETSTRING [2..9] mobility identity 2 O
p1RO	OMIT		OCTETSTRING [3..10] P1 rest octets. The SS will fill the rest of the message with spare padding, so no need to include this field.

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_SetupUL_MO
Group :
PDU Type : SETUPul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n <- ue

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_MO		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000101'B		
repeatInd	c_RepeatIndAny IF_PRESENT		
bcap1	cr_BcapAnyMO		
bcap2	cr_BcapAnyMO IF_PRESENT		
facility	cr_FacAny IF_PRESENT		
cgps	cr_CGPS_Any IF_PRESENT		
cdpn	cr_CDPN_Any		
cdps	cr_CDPS_Any IF_PRESENT		
llcRepeatInd	c_RepeatIndAny IF_PRESENT		
llc1	cr_LLC_Any IF_PRESENT		
llc2	cr_LLC_Any IF_PRESENT		
hlcRepeatInd	c_RepeatIndAny IF_PRESENT		
hlc1	cr_HLC_Any IF_PRESENT		
hlc2	cr_HLC_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
cLIR_Suppression	'10100001'B IF_PRESENT		
cLIR_Invocation	'10100010'B IF_PRESENT		
cC_Capabilities	cr_CC_CapabilitiesAny IF_PRESENT		
facilityCCBS_AdvRecall	cr_FacilityAdvRecall IF_PRESENT		
facilityCCBS_RecallAlign	cr_FacilityRecallAlign IF_PRESENT		
streamId	cr_StreamIdAny IF_PRESENT		
supportedCodecs	cr_CodecListAny IF_PRESENT		supported codecs O OCTETSTRING[5-n]
redial	'10100011'B IF_PRESENT		

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_HandoverToUTRANComplete
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo *, message handoverToUTRANComplete : { startList *, count_C_ActivationTime * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_HandoverToUTRANComplete_Security
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo *, message handoverToUTRANComplete : { startList { { cn_DomainIdentity cs_domain, start_Value ?}, { cn_DomainIdentity ps_domain, start_Value ?} }, count_C_ActivationTime * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration

Constraint Name : cdr_UTRAN_MobilityInfo_CNInfo(
p_RRC_TI: RRC_TransactionIdentifier;
p_IntegrityCheckInfo : IntegrityCheckInfo ;
p_U_RNTI_New : U_RNTI;
p_C_RNTI_New : C_RNTI
)
Group :
PDU Type : DL_DCCH_Message
Derivation Path : cbs_108_UTRAN_MobilityInfo.
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
REPLACE
message.utranMobilityInformation.r3.utranMobilityInformation_r3.cn_InformationInfo BY
{
  cn_DomainInformationListFull
  {{
    cn_DomainIdentity ps_domain,
    cn_DomainSpecificNAS_Info '0000'O,
    cn_DRX_CycleLengthCoeff 7
  }}
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name : cdr_UTRAN_MobilityInfo_BothCNInfo(p_RRC_Ti: RRC_TransactionIdentifier; p_IntegrityCheckInfo : IntegrityCheckInfo ; p_U_RNTI_New : U_RNTI; p_C_RNTI_New : C_RNTI) Group : PDU Type : DL_DCCH_Message Derivation Path : cbs_108_UTRAN_MobilityInfo. Encoding Rule Name : Encoding Variation : Comments :	
Constraint Value	
REPLACE message.utranMobilityInformation.r3.utranMobilityInformation_r3.cn_InformationInfo BY { cn_DomainInformationListFull {{ cn_DomainIdentity cs_domain, cn_DomainSpecificNAS_Info '1E01'O, cn_DRX_CycleLengthCoeff 7 }, { cn_DomainIdentity ps_domain, cn_DomainSpecificNAS_Info '0600'O, cn_DRX_CycleLengthCoeff 7 }} }	
Detailed Comments :	

ASN.1 PDU Constraint Declaration	
Constraint Name : cr_UTRAN_MobilityInfoCnf_ActTime(p_RRC_Ti : RRC_TransactionIdentifier) Group : PDU Type : UL_DCCH_Message Derivation Path : Encoding Rule Name : Encoding Variation : Comments :	
Constraint Value	
{ integrityCheckInfo *, message utranMobilityInformationConfirm : { rrc_TransactionIdentifier p_RRC_Ti, ul_IntegProtActivationInfo *, count_C_ActivationTime *, -- rb_UL_CiphActivationTimeInfo * This optional field has been changed to dummy ul_CounterSynchronisationInfo *, laterNonCriticalExtensions * } }	
Detailed Comments :	

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_108_RRC_ConnRej (p_InitialUEId:InitialUE_Identity; p_RRC_Ti: RRC_TransactionIdentifier; p_RejCause: RejectionCause; p_Wait_time: WaitTime)
Group	:
PDU Type	: DL_CCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo OMIT, message rrcConnectionReject : r3 : { rrcConnectionReject_r3 { initialUE_Identity p_InitialUEId, rrc_TransactionIdentifier p_RRC_Ti, rejectionCause p_RejCause, waitTime p_Wait_time, redirectionInfo OMIT }, laterNonCriticalExtensions OMIT } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_108_RRC_ConnRelCmpl (p_RRC_Ti: RRC_TransactionIdentifier)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.
Constraint Value	
<pre>{ integrityCheckInfo *, message rrcConnectionReleaseComplete : { rrc_TransactionIdentifier p_RRC_Ti, errorIndication *, laterNonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_108_RRC_ConnReq (p_EstCause: EstablishmentCause)
Group	:
PDU Type	: UL_CCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.
Constraint Value	
<pre>{ integrityCheckInfo OMIT, message rrcConnectionRequest : { initialUE_Identity (imsi : ? , tmsi_and_LAI : ? , p_TMSI_and_RAI : ? , imei : ?), establishmentCause p_EstCause, protocolErrorIndicator noError, measuredResultsOnRACH *, v3d0NonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_108_RRC_SecModeCmpl (p_RRC_Ti : RRC_TransactionIdentifier; p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.
Constraint Value	
<pre>{ integrityCheckInfo *, message securityModeComplete : { rrc_TransactionIdentifier p_RRC_Ti , ul_IntegProtActivationInfo ?, rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList, laterNonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_RRC_ConnSetupDCH
 (
 p_InitUEId : InitialUE_Identity;
 p_RRC_Ti : RRC_TransactionIdentifier;
 p_PrmbScrmCode : PrimaryScramblingCode;
 p_U_RNTI_New : U_RNTI;
 p_UL_ScramblingCode : UL_ScramblingCode
)
Group :
PDU Type : DL_CCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{
  integrityCheckInfo OMIT,
  message rrcConnectionSetup:
  r3 :
  {
    rrcConnectionSetup_r3 --RRCConnectionSetup_r3_IEs
    {
      initialUE_Identity p_InitUEId,
      rrc_TransactionIdentifier p_RRC_Ti,
      activationTime OMIT,
      new_U_RNTI p_U_RNTI_New ,
      new_c_RNTI OMIT,
      rrc_StateIndicator cell_DCH ,
      utran_DRX_CycleLengthCoeff 9,
      capabilityUpdateRequirement {
        ue_RadioCapabilityFDDUpdateRequirement TRUE,
        ue_RadioCapabilityTDDUpdateRequirement FALSE,
        systemSpecificCapUpdateReqList {gsm}
      },
      srb_InformationSetupList {
        c_SRB_InfoSetupUM_DCH ( tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1, tsc_DL_DCCH1),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2, tsc_DL_DCCH2),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3, tsc_DL_DCCH3),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4, tsc_DL_DCCH4)
      },
      ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k,
      ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCCH_13_6k,
      dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
      dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCCH_SRB,
      frequencyInfo OMIT,
      maxAllowedUL_TX_Power OMIT,
      ul_ChannelRequirement ul_DPCH_Info : c_UL_DPCH_13_6_StandAlone ( p_UL_ScramblingCode ),
      dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset ( tsc_DL_DPCH1_SFP_SRB ),
      dl_InformationPerRL_List c_DL_InfoPerRL_DPCH_Offset (p_PrmbScrmCode, tsc_DL_DPCH1_2ndScrC,
      tsc_DL_DPCH1_ChC_SRB)
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_RRC_ConnSetupFACH
 (

- p_InitUEId : InitialUE_Identity;
- p_RRC_Ti : RRC_TransactionIdentifier;
- p_PrmbScrmCode: PrimaryScramblingCode;
- p_U_RNTI_New : U_RNTI;
- p_CRNTI_New : C_RNTI;
- p_UL_ScramblingCode : UL_ScramblingCode

)

Group :

PDU Type : DL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.123-1 annex A

Constraint Value

```
{
  integrityCheckInfo OMIT,
  message rrcConnectionSetup:
  r3 :
  {
    rrcConnectionSetup_r3 --RRCConnectionSetup_r3_IEs
    {
      initialUE_Identity p_InitUEId,
      rrc_TransactionIdentifier p_RRC_Ti ,
      activationTime OMIT,
      new_U_RNTI p_U_RNTI_New ,
      new_c_RNTI p_CRNTI_New,
      rrc_StateIndicator cell_FACH ,
      utran_DRX_CycleLengthCoeff 9,
      capabilityUpdateRequirement {
        ue_RadioCapabilityFDDUpdateRequirement TRUE,
        ue_RadioCapabilityTDDUpdateRequirement FALSE,
        systemSpecificCapUpdateReqList {gsm}
      },
      srb_InformationSetupList {
        c_SRB_InfoSetupUM_FACH (OMIT, tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1, tsc_DL_DCCH1),
        c_SRB_InfoSetupAM_FACH (OMIT, tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2, tsc_DL_DCCH2),
        c_SRB_InfoSetupAM_FACH (OMIT, tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3, tsc_DL_DCCH3),
        c_SRB_InfoSetupAM_FACH (OMIT, tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4, tsc_DL_DCCH4)
      },
      ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k,
      ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCCH_3_4k,
      dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
      dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCCH_SRB,
      frequencyInfo OMIT,
      maxAllowedUL_TX_Power OMIT,
      ul_ChannelRequirement OMIT,
      dl_CommonInformation OMIT,
      dl_InformationPerRL_List OMIT
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_UTRAN_MobilityInfo (
 p_RRC_TI: RRC_TransactionIdentifier;
 p_IntegrityCheckInfo : IntegrityCheckInfo ;
 p_U_RNTI_New : U_RNTI;
 p_C_RNTI_New : C_RNTI
)
Group :
PDU Type : DL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```

{
  integrityCheckInfo p_IntegrityCheckInfo,
  message utranMobilityInformation: r3 :
  { utranMobilityInformation_r3
    { --UTRANMobilityInformation
      rrc_TransactionIdentifier p_RRC_TI,
      integrityProtectionModelInfo OMIT,
      cipheringModelInfo OMIT,
      new_U_RNTI p_U_RNTI_New,
      new_C_RNTI p_C_RNTI_New ,
      ue_ConnTimersAndConstants {
        t_301 ms2000,
        n_301 2,
        t_302 ms4000,
        n_302 3,
        t_304 ms1000,
        n_304 3,
        t_305 m60,
        t_307 s50,
        t_308 ms320,
        t_309 8,
        t_310 ms320,
        n_310 5,
        t_311 ms500,
        t_312 5,
        n_312 s200,
        t_313 10,
        n_313 s200,
        t_314 s20,
        t_315 s30,
        n_315 s200,
        t_316 s50,
        t_317 infinity7
      },
      cn_InformationInfo OMIT,
      ura_Identity OMIT,
      dl_CounterSynchronisationInfo OMIT
    },
    v3a0NonCriticalExtensions OMIT
  }
}
  
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_108_RRC_ConnSetupCmpl (p_RRC_Ti : RRC_TransactionIdentifier; p_STARTList : STARTList)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.
Constraint Value	
<pre>{ integrityCheckInfo OMIT, message rrcConnectionSetupComplete : { rrc_TransactionIdentifier p_RRC_Ti, startList p_STARTList , ue_RadioAccessCapability *, ue_RATSpecificCapability *, v370NonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_108_SecModeFail (p_RRC_Ti : RRC_TransactionIdentifier; p_FailureCauseWithProtErr : FailureCauseWithProtErr)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo *, message securityModeFailure : { rrc_TransactionIdentifier p_RRC_Ti, failureCause p_FailureCauseWithProtErr, laterNonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_RRC_MeasRep
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo *, message measurementReport : ? }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_RRC_RrcConnReqAny
Group	:
PDU Type	: UL_CCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo OMIT, message rrcConnectionRequest : { initialUE_Identity ?, establishmentCause ?, protocolErrorIndicator noError, measuredResultsOnRACH *, v3d0NonCriticalExtensions * } }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_RRC_RrcStatus
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	:
Constraint Value	
<pre>{ integrityCheckInfo *, message rrcStatus : ? }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_108_RRC_ConnRelCCCH (p_U_rnti: U_RNTI; p_RRC_Ti: RRC_TransactionIdentifier)
Group	:
PDU Type	: DL_CCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.
Constraint Value	
<pre>{ integrityCheckInfo OMIT, message rrcConnectionRelease : r3 : { rrcConnectionRelease_CCCH_r3 { u_RNTI p_U_rnti, rrcConnectionRelease { rrc_TransactionIdentifier p_RRC_Ti, n_308 OMIT, releaseCause normalEvent } } }, laterNonCriticalExtensions OMIT }</pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name : cs_108_RRC_ConnRelDCCH (p_IntegrityCheckInfo : IntegrityCheckInfo; p_RRC_Ti: RRC_TransactionIdentifier; p_N308: INTEGER)	
Group :	
PDU Type :	DL_DCCH_Message
Derivation Path :	
Encoding Rule Name :	
Encoding Variation :	
Comments :	Defined in TS 34.108 clause 9.
Constraint Value	
<pre> { integrityCheckInfo p_IntegrityCheckInfo, message rrcConnectionRelease : r3 : { rrcConnectionRelease_r3 { rrc_TransactionIdentifier p_RRC_Ti, n_308 p_N308, releaseCause normalEvent, rplmn_information OMIT }, laterNonCriticalExtensions OMIT } } </pre>	
Detailed Comments :	

ASN.1 PDU Constraint Declaration	
Constraint Name : cs_108_RRC_SecModeCmd (p_IntegrityCheckInfo : IntegrityCheckInfo; p_SecModeCmd: SecurityModeCommand)	
Group :	
PDU Type :	DL_DCCH_Message
Derivation Path :	
Encoding Rule Name :	
Encoding Variation :	
Comments :	Defined in TS 34.108 clause 9.
Constraint Value	
<pre> { integrityCheckInfo p_IntegrityCheckInfo, message securityModeCommand : p_SecModeCmd } </pre>	
Detailed Comments :	

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgCmpl(p_SIBType : SIB_Type; p_SIBData: SIB_Data_fixed)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.
Constraint Value	
<pre> { message { sfn_Prime 0, payload completeSIB : { sib_Type p_SIBType, sib_Data_fixed p_SIBData } } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgCmplList1(p_SIBType : SIB_Type; p_SIBData: SIB_Data_variable)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.
Constraint Value	
<pre> { message { sfn_Prime 0, payload completeSIB_List : {{ sib_Type p_SIBType, sib_Data_variable p_SIBData }} } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgFirst(p_SIBType : SIB_Type; p_SegCount: INTEGER; p_SIBData: SIB_Data_fixed)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: The actual value of sfn_Prime shall be filled in by lower layer before sent on air.
Constraint Value	
<pre> { message { sfn_Prime 0, -- place holder payload firstSegment : { sib_Type p_SIBType, seg_Count p_SegCount, sib_Data_fixed p_SIBData } } } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgLast(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_fixed)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message contains last segment which is 222 bits long.
Constraint Value	
<pre> { message { sfn_Prime 0, payload lastSegment : { sib_Type p_SIBType, segmentIndex p_SegIndex, sib_Data_fixed p_SIBData } } } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgLastShort(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_variable)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message contains last segment which is short than 215 bits.
Constraint Value	
<pre> { message { sfn_Prime 0, payload lastSegmentShort : { sib_Type p_SIBType, segmentIndex p_SegIndex, sib_Data_variable p_SIBData } } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgNoSegment
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: System information message contains no SIB, sent on the frame which there is no any SIB/SB/MIB scheduled on. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.
Constraint Value	
<pre> { message { sfn_Prime 0, payload noSegment : NULL } } </pre>	
Detailed Comments	:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgSubsequent(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_fixed)
Group :
PDU Type : BCCH_BCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{  
  message {  
    sfn_Prime 0,  
    payload subsequentSegment : {  
      sib_Type p_SIBType,  
      segmentIndex p_SegIndex,  
      sib_Data_fixed p_SIBData }  
    }  
  }  
}
```

Detailed Comments :

IV

Dynamic Part

Test Case Dynamic Behaviour

Test Case Name : tc_60_1
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN handovers to the indicated channel in the UTRAN target cell when it is in the speech call active state in the GSM serving cell and receives a INTER-SYSTEM HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Inter system handover to UTRAN/From GSM/Speech/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard (420)			
2		[px_RAT = fdd]			FDD specific behaviour
3		+It_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			Combined Control Channel at -50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff(tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		REPEAT It_LocalTest UNTIL [tcv_ISHO_SubtestCounter = 4]			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		It_LocalTest (tcv_ISHO_SubtestCounter := tcv_ISHO_SubtestCounter + 1)			
17		[(tcv_ISHO_SubtestCounter = 1) AND (NOT pc_GSM_FR)]			If yes skip the subtest 1

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		[(tcv_ISHO_SubtestCounter = 2) AND (NOT pc_GSM_EFR)]			If yes skip the subtest 2
19		[(tcv_ISHO_SubtestCounter = 3) AND (NOT pc_GSM_AMR)]			If yes skip the subtest 3
20		[(tcv_ISHO_SubtestCounter = 4) AND (NOT pc_GSM_HR)]			If yes skip the subtest 4
21		[TRUE]			
22		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			No PBCCH
23		+lt_G_ConfigTrafficChannel			
24		+lt_InitAssignmentCmd			
25		+ts_SS_SwitchBackCellOn (tsc_CellA)			
26		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;
27		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Step 3 of prose;
28		+lt_Meas			Configure DTCH and RB10,11,12
29		+lt_InitHOCmd			Steps 4 and 5 of prose
30		+lt_SubTest			
31		+lt_Postamble			
32		lt_G_ConfigTrafficChannel [tcv_ISHO_SubtestCounter = 1]			Sub Test 1 Specific
33		(tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV1)			
34		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
35		[tcv_ISHO_SubtestCounter = 2]			Sub Test 2 Specific
36		(tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV2)			
37		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		[tcv_ISHO_SubtestCounter = 3]			Sub Test 3 Specific
39		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV3)			
40		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
41		[tcv_ISHO_SubtestCounter = 4]			Sub Test 4 Specific
42		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
43		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TS0, tcv_Ch_Mode, 2)			
44		lt_SubTest +lt_ConfigCipher_BeforeHO			
45		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_TrchId1 , tcv_RR_ChannelType2 , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN _HandoverCommand (c_G_HandoverToUTRANCm d (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_C md)))		Step 6 of prose; Sending the Handov er Comman d.
46	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComplete .startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComplete .count_C_ActivationTime)	car_InterSystemHandoverC omplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANCo mplete)	(P)	Step 9 of prose; Receivin g Handov er complete
47		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handov er successf ul, Release old channel
48		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
49		+lt_ConfigCipher_AfterHO lt_ConfigCipher_BeforeHO			
50		+ts_GetHFN			
51		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
52		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
53		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
54		+ts_ActivateCipherring_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
		It_ConfigCipher_AfterHO			
55		+ts_GetHFN			
56		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
57		+ts_ActivateCipherring_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
		It_Postamble			
58		+ts_GetHFN			Update StartVal ue
59		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
60		+ts_ActivateIntegrity_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			
61		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_C NInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT))		
62		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCn fInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf _ActTime(?))		
63		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
64		+ts_CC_Disconnect (tsc_CellA)			
65		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
66		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
67		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
68		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
69		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			
70		+ts_SS_SwitchCellOff(tsc_CellA)			
71		+ts_SSconfigToInitialState_DPCHOffset(tsc_CellA)			
72		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
73		+ts_G_DisableCiphering(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)			
74		(tcv_GPRS_CipherAlg := '000'B)			
75		+ts_LLC_TLLI_Assign(tsc_GSM_CellA, tcv_TLLI, tsc_TLLI_Initial, tcv_GPRS_CipherAlg)			
76		(tcv_TLLI := tsc_TLLI_Initial, tcv_oldTLLI := tsc_TLLI_Initial)			
77		[TRUE]			
78		+lt_GMMduringCS			
79		+ts_CC_Disconnect (tsc_CellA)			
80		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
81		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
82		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combine d Updatin g
83		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
84		+ts_SS_SwitchCellOff(tsc_CellA)			
85		+ts_SSconfigToInitialState_DPCHOffset(tsc_CellA)			
86		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
87		+ts_G_DisableCipherng(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)			
88		(tcv_GPRS_CipherAlg := '000'B)			
89		+ts_LLC_TLLI_Assign n(tsc_GSM_CellA, tcv_TLLI, tsc_TLLI_Initial, tcv_GPRS_CipherAlg)			
90		(tcv_TLLI := tsc_TLLI_Initial, tcv_oldTLLI := tsc_TLLI_Initial)			
91	lt_GMMduringCS [NOT pc_GPRS]				Will attach here if hasn't already done so in GERAN
92		+ts_U_GPRSAttach(tsc_CellA)			
93	[TRUE]				
94		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
95		lt_InitVariables +ts_RRC_InitVariablesCS			
96		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			
97		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
98		+ts_GSM_InitVariablesSpecific40			
99		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
100		+ts_GPRS_InitVariablesDef			
101		lt_InitAssignmentCmd [(tcv_ISHO_SubtestCounter= 1) OR (tcv_ISHO_SubtestCounter= 2) OR (tcv_ISHO_SubtestCounter= 3)]			
102		+ts_InitAssignmentCmd (tcv_Ch_Mode)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
103		[tcv_Ch_Mode = c_G_ChModeSpeechFROrHRV3]			
104		(tcv_AssignmentCommand.mltiRateConfig := c_G_MultiRateConfig)			If AMR channel, need to include optional MultiRat e Config
105		[TRUE]			
106		[tcv_ISHO_SubtestCounter= 4]			
107		+ts_InitAssigmentCmd_HR (tsc_GSM_CellA , tcv_Ch_Mode)			
108		[TRUE]			
109		It_InitHOCmd			
110		[px_CipheringOnOff] (tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecifcInfo.fd d.uarfcn_DL, 3))			
111		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
112		[NOT px_CipheringOnOff]			
113		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT,c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecifcInfo.fd d.uarfcn_DL, 3))			
114		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
115		It_Meas [tcv_RR_ChannelType2 = 11]			must be half rate, so SACCH is LogicCh 13
116		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_G_Trchld1 , 13 , tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
117		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
118		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , 13 , tcv_RR_Subchannel2, c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G)		Step 4 of prose; Sending the Measurement Information on the SACCH/TH
119		+lt_Meas_contd			
120		[TRUE]			
121		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
122		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
123		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G)		Step 4 of prose; Sending the Measurement Information on the SACCH
124		+lt_Meas_contd			
		lt_Meas_contd			
125		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
126	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
127		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport (tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
128		->RcvMR			wait for the next one
129		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_2a
Group : IntersytemHO/
Purpose : To test that the MS handovers to the indicated UTRAN target cell and the data rate of the target channel is the same as the old channel when it is in the data call active state in the GSM serving cell and receives a INTER SYSTEM TO UTRAN HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_C286
Description : Inter system handover to UTRAN/From GSM/Data/Same data rate/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			
7		+ts_SS_SwitchCellOff(tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE, tcv_ISHO_SubtestCounter := 1)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest +ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
17		+lt_G_ConfigTrafficChannel			
18		+ts_InitAssignmentCmd (tcv_Ch_Mode)			
19		+ts_SS_SwitchBackCellOn (tsc_CellA)			
20		+ ts_CC_InitTCV_MT_ForMultiRAT (streamUnknown_14_4k)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
21		+ts_G_CC_EnterU10_MT (tsc_GSM_CellA)			Step 2 of prose; Bring the mobile into Mobile terminated CC U10 state.	
22		+ ts_CalculateActTime (tsc_CellA)			Step 3 of prose; Configure DTCH and RB10	
23		+ts_SS_Reconf_DPCH_StreamingUnknown14_4k_28_8k_57_6k (tsc_CellA , tcv_ActTime)				
24		+lt_Meas				
25		+lt_InitHOCmd				
26		+lt_SubTest				Step 4 & 5 of prose;
27		+lt_Postamble				To Release the Traffic channel
28		+ts_GMM_DetachOnSwitchOff (tsc_CellA)				
29		+ts_SS_SwitchCellOff(tsc_CellA)				
30		+ts_SSconfigToInitialState_DPCHOffset(tsc_CellA)				
31		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_Trchld1)				
32		lt_InitVariables				
33		+ts_RRC_InitVariablesCS (tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			Initialises the Variables depending on the GSM Band under usage.	
34		+ts_GSM_InitVariablesAllBands				
35		+ts_GSM_InitVariablesSpecific40				
36		+ts_GPRS_InitVariablesDef				
37		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)				
		lt_G_ConfigTrafficChannel				

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		(tcv_Ch_Mode := c_G_ChModeDataRI_14_5)			
39		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
40		lt_InitHOCmd			
41		[px_CipheringOnOff]			
42		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_Sf64 , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 7))			
43		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
44		[NOT px_CipheringOnOff]			
45		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_Sf64 , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 7))			
46		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
47	TBP1	lt_SubTest +lt_ConfigCipher_BeforeHO G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_G_TrchId1 , tcv_RR_ChannelType2 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCommand (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))	(P)	Step 6 of prose; Sending the Handover Command.
48	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.am_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.am_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 9 of prose; Receiving Handover complete

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_Cella, tsc_G_TrchId1)		Handover successful, Release old channel
50		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_Cella, tsc_G_TrchId1)		
51		+lt_ConfigCipher_AfterHO			
		lt_ConfigCipher_BeforeHO			
52		+ts_GetHFN			
53		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
54		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_Cella, tsc_DL_DPCH1)		
55		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_Cella, tsc_DL_DPCH1)		
56		+ts_ActivateCiphering_NoSRB4 (tsc_Cella, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
		lt_ConfigCipher_AfterHO			
57		+ts_GetHFN			
58		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
59		+ts_ActivateCiphering_NoSRB4 (tsc_Cella, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
		lt_Postamble			
60		+ts_GetHFN			Update StartValue
61		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
62		+ts_ActivateIntegrity_NoSRB4(tsc_Cella, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
63		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT))		
64		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
65		[pc_RLPsupported]			
66		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Disc (?))		UE supporting RLP will timeout and send Disconnect
67	TSP	Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Rel (tcv_TI_S))		
68		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_RelCmpl (?))		
69		+ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
70		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
71		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
72		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
73		[TRUE]			
74		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
75		[NOT pc_RLPsupported]			
76		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
77		+ts_CC_Disconnect (tsc_CellA)			
78		+ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
79		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
80		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
81		[TRUE]			
82		+lt_GMMduringCS			
83		+ts_CC_Disconnect (tsc_CellA)			
84		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
85		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
86		+ts_CellChange_RAUpdate(tsc _CellA, '0'B, ('001'B, '010'B), TRUE)			Combine d Updatin g
87		lt_GMMduringCS [NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
88		+ts_U_GPRSAttach(tsc_CellA)			
89		[TRUE]			
90		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updatin g
91		lt_Meas G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), 15, TRUE)		Turn Meas Rpts On
92		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
93		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , 15 , c_G_RFN_Omit , cs_G_MeasurementInformati on (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_ TO_BIT(tcv_CellInfoA.frequ encyInfo. modeSpecificInfo.fdd.uarfcn _DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measure ment Informat ion on the SACCH

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
94		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
95	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
96		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport (tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
97		->RcvMR			wait for the next one
98		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_3a
Group : IntersytemHO/
Purpose : To test that the MS being in the data call active state handovers from the GSM serving cell to the indicated channel of a higher data rate in the UTRAN target cell after it receives a INTER SYSTEM TO UTRAN HANDOVER COMMAND. It is also verified that the MS performs measurements on the target UTRAN cell before the handover.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_C287
Description : Inter system handover to UTRAN/From GSM/Data/Data rate upgrading/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			
7		+ ts_SS_SwitchCellOff (tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		REPEAT lt_LocalTest UNTIL [tcv_ISHO_SubtestCounter = 2]			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest (tcv_ISHO_SubtestCounter := tcv_ISHO_SubtestCounter + 1)			
17		[(tcv_ISHO_SubtestCounter = 1) AND ((NOT pc_RAB_A_18c_16) OR (NOT pc_GSM_14_4))]			If yes skip subtest 1, as 14.4kbps or 28.8kbps not supported

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		[(tcv_ISHO_SubtestCounter = 2) AND ((NOT pc_RAB_A_18c_17) OR (NOT pc_GSM_14_4))]			If yes skip subtest 2, as 14.4kpbs or 57.6kpbs not supported
19		[TRUE]			
20		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			Idle Update
21		+lt_G_ConfigTrafficChannel			
22		+ts_InitAssignmentCmd (tcv_Ch_Mode)			
23		+ ts_SS_SwitchBackCellOn (tsc_CellA)			
24		+ ts_CC_InitTCV_MT_ForMultiRAT (streamUnknown_14_4k)			
25		+ts_G_CC_EnterU10_MT(tsc_GSM_CellA)			Step 2 of prose; Bring the mobile into Mobile terminated CC U10 state.
26		+ ts_CalculateActTime (tsc_CellA)			
27		+ts_SS_Reconf_DPCH_Streaming Unknown28_8k_57_6k (tsc_CellA , tcv_ActTime)			Step 3 of prose; Configure DTCH and RB10
28		+lt_Meas			
29		+lt_InitHOCmd			
30		+lt_SubTest			Step 4 – 7 of prose;
31		+lt_Postamble			
32		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
33		+ts_G_DisableCiphering(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)			
34		+ts_SS_SwitchCellOff (tsc_CellA)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
35		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel	
36		+ts_SSconfigToInitialState_DPCHOffset(tsc_CellA)				
37		(tcv_GPRS_CipherAlg := '000'B)				
38		+ts_LLC_TLLI_Assign(tsc_GSM_CellA, tcv_TLLI, tsc_TLLI_Initial, tcv_GPRS_CipherAlg)				
39		(tcv_TLLI := tsc_TLLI_Initial, tcv_oldTLLI := tsc_TLLI_Initial)				
40		It_InitVariables				
41		+ts_RRC_InitVariablesCS (tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)				
42		+ts_GSM_InitVariablesAllBands				Initialises the Variables depending on the GSM Band under usage.
43		+ts_GPRS_InitVariablesDef				
44		+ts_GSM_InitVariablesSpecific40				
45		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)				
46		It_Postamble				
46		+ts_GetHFN				Update StartValue
47		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)				
48		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)				

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT))		
50		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
51		[pc_RLPsupported]			
52		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Disc (?))		UE supporting RLP will timeout and send Disconnect
53	TSP	Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Rel (tcv_TI_S))		
54		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_RelCmpl (?))		
55		+ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
56		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
57		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
58		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
59		[TRUE]			
60		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
61		[NOT pc_RLPsupported]			
62		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
63		+ts_CC_Disconnect (tsc_CellA)			
64		+ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
65		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
66		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
67		[TRUE]			
68		+lt_GMMduringCS			
69		+ts_CC_Disconnect (tsc_Cella)			
70		+ ts_RRC_ConnRel (tsc_Cella , cell_Dch)			
71		+ts_RRC_ConnEst (tsc_Cella, est_Reg, registration)			
72		+ts_CellChange_RAUpdate(tsc _CellA, '0'B, ('001'B, '010'B), TRUE)			Combine d Updatin g
73		lt_GMMduringCS [NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
74		+ts_U_GPRSAttach(tsc_Cella)			
75		[TRUE]			
76		+ts_CellChange_RAUpdate_NoSRB4(tsc_Cella, '0'B, '000'B)			RA Updatin g
77		lt_G_ConfigTrafficChannel (tcv_Ch_Mode := c_G_ChModeDataRI_14_5)			
78		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_Cella, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
79		lt_SubTest +lt_ConfigCipher_BeforeHO			
80		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_Cella, 0 , tsc_G_TrchId1 , tcv_RR_ChannelType2, 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN _HandoverCommand (c_G_HandoverToUTRANCm d (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_C md)))		Step 6 of prose; Sending the Handov er Comman d.
81	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComplete .startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComplete .count_C_ActivationTime)	car_InterSystemHandoverC omplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANCo mplete)	(P)	Step 9 of prose; Receivin g Handov er complete

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
82		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
83		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
84		+lt_ConfigCipher_AfterHO			
		lt_ConfigCipher_BeforeHO			
85		+ts_GetHFN			
86		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
87		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		
88		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		
89		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
		lt_ConfigCipher_AfterHO			
90		+ts_GetHFN			
91		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
92		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
		lt_InitHOCmd			
93		[tcv_ISHO_SubtestCounter = 1]			
94		[px_CipheringOnOff]			
95		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_Sf32 , tsc_Sfc64 , tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 8))			step 3 Sending the Handover Command.
96		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
97		[NOT px_CipheringOnOff]			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
98		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)), tcv_CellInfoA , tsc_Sf32 , tsc_Sfc64 , tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f dd.uarfcn_DL , 8))			step 3 Sending the Handov er Comman d.
99		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
100		[(tcv_ISHO_SubtestCounter = 2)]			
101		[px_CipheringOnOff]			
102		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)), tcv_CellInfoA , tsc_Sf16 , tsc_Sfc32_0 , tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f dd.uarfcn_DL , 9))			step 3 Sending the Handov er Comman d.
103		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
104		[NOT px_CipheringOnOff]			
105		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)), tcv_CellInfoA , tsc_Sf16 , tsc_Sfc32_0 , tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f dd.uarfcn_DL , 9))			step 3 Sending the Handov er Comman d.
106		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
107		lt_Meas G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
108		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
109		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_Cella, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2, c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G)		Step 4 of prose; Sending the Measurement Information on the SACCH
110		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
111	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_Cella, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
112		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_Cella, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
113		->RcvMR			wait for the next one
114		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_4
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN handovers from GSM serving cell to the indicated channel in the UTRAN target cell when the MS is in the call establishment phase and receives a INTER-SYSTEM HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Establishment/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, si2quater, nopsi5)			no PBCCH, but SI2quater
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff (tsc_CellA)			
8		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
9		+lt_LocalTest			
10		+lt_Postamble			
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16	TBS	lt_LocalTest (tcv_TestBody := TRUE)			
17		+ts_CC_BasicServMO(tsc_SrvTelephony)			
18		+ts_G_CC_EnterU1 (tsc_GSM_CellA)			Step 2-7 of prose;
19		+ ts_SS_SwitchBackCellOn (tsc_CellA)			
20		+ts_SS_RB2_RB3_ReCfg_DefCfg1			
21		+ ts_CalculateActTime (tsc_CellA)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		+ts_SS_1DCH_DCCH_Modify_IR_G(t sc_Cella, tcv_ActTime)			
23		+lt_InitHOCmd			
24		+lt_Meas			Step 9 – 10 of Prose
25		+lt_SubTest			Step 9 – 14 of prose;
26	TBE	(tcv_TestBody := FALSE)		(P)	
		lt_SubTest			
27		+lt_ConfigCipher_BeforeHO			
28		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (		Step 11 of prose; Sending the Handov er Comman d.
			tsc_GSM_Cella, 0 , tsc_PhyCh0 , tcv_RR_ChannelType, tcv_RR_Subchannel , c_G_RFN_Omit , cs_G_InterSystemToUTRAN _HandoverCommand (
			c_G_HandoverToUTRANCm d (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_C md)))		
29	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComple .startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.handoverToUTRANComple .count_C_ActivationTime)	car_InterSystemHandoverC omplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANCo mplete)	(P)	Step 14 of prose; Receivin g Handov er complete
30		G_L2 ! G_L2_Release_REQ	cas_G_L2_Release_REQ (		Handov er successf ul, Release old channel
			tsc_GSM_Cella, tsc_PhyCh0 , tcv_RR_ChannelType, tcv_RR_Subchannel)		
31		G_L2 ? G_L2_Release_CNF	ca_G_L2_Release_CNF		
32		+lt_ConfigCipher_AfterHO			
		lt_ConfigCipher_BeforeHO			
33		+ts_GetHFN			
34		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
35		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
36		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
37		+ts_ActivateCipherring_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
38		lt_ConfigCipher_AfterHO			
39		+ts_GetHFN			
40		+ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
41		+ts_ActivateCipherring_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
42		lt_InitVariables			
43		+ts_RRC_InitVariablesCS (tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			
44		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
45		+ts_GSM_InitVariablesSpecific40			
46		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
47		+ts_GPRS_InitVariablesDef (tcv_SI2quarterRO := c_SI2quarterRO('1'B, c_SI2quarter_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quarterMeasParams3G_Meas('0111'B, '0000'B, '000'B), '0'B, OMIT))			
48		lt_InitHOCmd			
49		[px_CipherringOnOff] (tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommandNoRABInfo (uea1, c_URNTI_Short ('000000000001'B , '000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 1))			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
51		[NOT px_CipheringOnOff]			
52		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommandNoRABInfo (OMIT, c_URNTI_Short ('000000000001'B , '0000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fd d.uarfcn_DL, 1))			
53		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
54		lt_Meas G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_PhyCh0, (tcv_RR_ChannelType +1), tcv_RR_Subchannel, TRUE)		Turn Meas Rpts On
55		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
56		START t_WaitS(20)			Just so we don't sit here forever
57	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitS	ca_G_L2_UnitDataInd_Mea sReport(tsc_GSM_CellA, ? ,?, ?, ?, cr_G_MeasReport(c_G_Mea sResults_1UTRAN))	(P)	Receive Measure ment Report showing 1 UTRAN cell
58		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_Mea sReport(tsc_GSM_CellA, ? ,?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
59		->RcvMR			wait for the next one
60		?TIMEOUT t_WaitS		(F)	No measure ment report received
61		lt_Postamble +ts_GetHFN			Update StartVal ue
62		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
63		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			
64		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT))		
65		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfnd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
66		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
67		Dc ! RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_RelCmpl(tcv_TI_S))		
68		+ts_RRC_ConnRel_RelDPCH (tsc_CellA , cell_Dch)			
69		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
70		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
71		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
72		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			
73		[TRUE]			
74		+lt_GMMduringCS			
75		Dc ! RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_RelCmpl(tcv_TI_S))		
76		+ ts_RRC_ConnRel_RelDPCH (tsc_CellA , cell_Dch)			
77		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
78		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combine d Updatin g
79		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
		lt_GMMduringCS			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
80		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
81		+ts_U_GPRSAttach(tsc_CellA)			
82		[TRUE]			
83		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_5
Group : IntersytemHO/
Purpose : To test that the MS handovers from the GSM serving cell to the indicated channel of UTRAN target cell when it is in the speech call active state without any knowledge of the target system (blind handover) and receives a INTER-SYSTEM TO UTRAN HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Blind HO/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff(tsc_CellA)			
8		+lt_LocalTest			
9		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
10		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
11		+po_ConnectionAndSS_Rels			
12	ERR1	[px_RAT = tdd]		(I)	
13	ERR2	[TRUE]		(I)	
14	TBS	lt_LocalTest (tcv_TestBody := TRUE)			
15		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
16		+lt_G_ConfigTrafficChannel			
17		+ts_InitAssignmentCmd (tcv_Ch_Mode)			
18		+ts_SS_SwitchBackCellOn (tsc_CellA)			
19		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Configure DTCH and RB10,11,12
20		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			
21		+lt_InitHOCmd			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		+lt_SubTest			Step 3 – 6 of prose;
23	TBE	(tcv_TestBody := FALSE)		(P)	
24		+lt_Postamble			
25		lt_Postamble +ts_GetHFN			Update StartValue
26		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
27		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			
28		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
29		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
30		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
31		+ts_CC_Disconnect (tsc_CellA)			
32		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
33		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
34		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
35		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
36		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			
37		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
38		[TRUE]			
39		+lt_GMMduringCS			
40		+ts_CC_Disconnect (tsc_CellA)			
41		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
42		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
43		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
44		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
45		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_Trchld1)			To Release the Traffic channel
46		lt_GMMduringCS [NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
47		+ts_U_GPRSAttach(tsc_CellA)			
48		[TRUE]			
49		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
50		lt_G_ConfigTrafficChannel (tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV1)			
51		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_Trchld1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
52		lt_SubTest +lt_ConfigCipher_BeforeHO			
53		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_Trchld1 , 9 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd, tcv_GSM_ToUTRAN_HO_Cmd)))		Step 3 of prose; Sending the Handover Command.
54	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 6 of prose; Receiving Handover complete

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
55		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
56		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
57		+lt_ConfigCipher_AfterHO			
		lt_ConfigCipher_BeforeHO			
58		+ts_GetHFN			
59		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
60		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		
61		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		
62		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
		lt_ConfigCipher_AfterHO			
63		+ts_GetHFN			
64		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
65		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
		lt_InitVariables			
66		+ts_RRC_InitVariablesCS			
67		(tcv_CellInfoA.lac := '0080'0, tcv_CellInfoA.rac := '00'0)			
68		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
69		+ts_GSM_InitVariablesSpecific40			
70		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
71		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
72		[px_CipheringOnOff]			
73		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
74		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
75		[NOT px_CipheringOnOff]			
76		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
77		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_6
Group : IntersytemHO/
Purpose : To test that the MS reactivates the old channel and transmits HANDOVER FAILURE message to the network on the old channel in the GSM cell when it received a INTER-SYSTEM TO UTRAN HANDOVER COMMAND and the handover to UTRAN failed.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Failure

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff(tsc_CellA)			
8		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_G_DetachOnSwitchOff(tsc_GSM_CellA)			
12		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
13		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
14		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
15		+po_ConnectionAndSS_Relies			
16	ERR1	[px_RAT = tdd]		(I)	
17	ERR2	[TRUE]		(I)	
18	TBS	lt_LocalTest (tcv_TestBody := TRUE)			
19		+lt_G_ConfigTrafficChannel			
20		+ts_InitAssignmentCmd (tcv_Ch_Mode)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		+ts_SS_SwitchBackCellOn (tsc_CellA)			
22		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;
23		+lt_InitHOCmd			
24		+lt_Meas			
25		+lt_SubTest			Step 5 – 8 of prose;
26		+ts_G_Disconnect(tsc_GSM_CellA, tsc_G_Trchld1)			
27		+ ts_G_ChannelRelease(tsc_GSM_CellA, tsc_G_Trchld1)			
28		[pc_GPRS]			
29		+ts_U2GCellChange_RAUpdate(tsc_GSM_CellA, tsc_PhyCh1, ?, ?)			
30		[NOT pc_GPRS]			
31		lt_G_ConfigTrafficChannel (tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV1)			
32		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_Trchld1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
33		lt_SubTest G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_Trchld1 , 9 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 5 of prose; Sending the Handover Command.
34		G_L2 ? G_L2_L2Estab_IND	cabr_G_L2_L2Estab_IND(tsc_GSM_CellA , tsc_G_Trchld1 , 9 , 15 , ?)		
35	TBP1	G_L2 ? G_L2_DATA_IND	car_HandoverFailureInd (tsc_GSM_CellA , 0, tsc_G_Trchld1, 9, 15, ?, cr_G_HandoverFailure (c_G_RR_Cause))	(P)	Step 8 of prose; Receiving Handover Failure
36		lt_InitVariables +ts_RRC_InitVariablesCS			
37		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
39		+ts_GSM_InitVariablesSpecific40			
40		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
41		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
42		[px_CipheringOnOff]			
43		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('00000000001'B , '000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
44		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
45		[NOT px_CipheringOnOff]			
46		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('00000000001'B , '000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
47		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
48		lt_Meas G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
49		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_Cella, tsc_G_TrchId1 , 10, tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measurement Information on the SACCH
51		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
52	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_Cella, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
53		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_Cella, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
54		->RcvMR			wait for the next one
55		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_10
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN applies the correct CS Security START value after a successful handover from GSM to UTRAN when Integrity protection is activated by the NW.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Inter system handover to UTRAN/From GSM/Speech/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			Combined Control Channel at -50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff (tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest +ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			No PBCCH
17		+lt_G_ConfigTrafficChannel			
18		+ts_InitAssignmentCmd (tcv_Ch_Mode)			
19		+ts_SS_SwitchBackCellOn (tsc_CellA)			
20		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Step 3 of prose;
22		+lt_Meas			Configure DTCH and RB10,11,12
23		+lt_InitHOCmd			Steps 4 and 5 of prose
24		+lt_SubTest			
25		+lt_Postamble			
26		lt_G_ConfigTrafficChannel (tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV1)			
27		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_Trchld1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
28		lt_SubTest			
29		+lt_ConfigCipher_BeforeHO G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_G_Trchld1, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cr_G_ClassmarkEnquiry(c_ClassmarkEnquiryMask('88'O)))		SS sends CLASS MARK ENQUIRY MESSAGE on DCCH Channel to the Mobile Station, requesting only UTRAN CLASS MARK CHANGE
30		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_G_Trchld1, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	UE sends UTRAN CLASS MARK CHANGE message on DCCH Channel to SS.
31		+lt_CheckUtranClassmarkChange			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
32		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (		Step 9 of prose; Sending the Handover Command.
33	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_D CCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_D CCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete_Security)	(P)	Step 12 of prose; Receiving Handover complete
34		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (		Handover successful, Release old channel
35		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (
36		+lt_ConfigCipher_AfterHO	tsc_GSM_Cella, tsc_G_TrchId1)		
37		+ts_GetHFN			Update StartValue
38		[tcv_CellIndInfo.start_CS =tcv_ResAndStartValue.start]		(P)	Step 12 of prose
39		+lt_Security			
40		[TRUE]		(F)	Start value from HO Complete doesn't match that from Classmark
41		+lt_Security			
42		lt_ConfigCipher_BeforeHO			
43		+ts_GetHFN			
44		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)	cas_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
45		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
46		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
47		It_ConfigCipher_AfterHO +ts_GetHFN			
48		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
49		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
50		It_CheckUtranClassmarkChange (tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkC hange.uTRANPreConfigInfo.value, ?))			get start value, other elements of message not checked
51		It_Security + It_SS_InvalidSecurity_Step12			
52		(tcv_CellIndInfo.integrityStarted := FALSE)			
53		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			now do it properly
54		It_Postamble AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_C NInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT))		
55		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCn fInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf _ActTime(?))		
56		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
57		+ts_CC_Disconnect (tsc_CellA)			
58		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
59		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
60		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
61		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
62		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
63		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_Trchld1)			To Release the Traffic channel
64		[TRUE]			
65		+lt_GMMduringCS			
66		+ts_CC_Disconnect (tsc_CellA)			
67		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
68		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
69		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combine d Updatin g
70		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
71		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_Trchld1)			To Release the Traffic channel
72		lt_GMMduringCS [NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
73		+ts_U_GPRSAttach(tsc_CellA)			
74		[TRUE]			
75		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updatin g
76		lt_InitVariables +ts_RRC_InitVariablesCS			
77		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
78		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
79		+ts_GSM_InitVariablesSpecific40			
80		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
81		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
82		[px_CipheringOnOff]			
83		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
84		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
85		[NOT px_CipheringOnOff]			
86		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('00000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.f d.uarfcn_DL, 3))			
87		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
		lt_Meas			
88		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
89		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
90		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G)		Step 5 of prose; Sending the Measurement Information on the SACCH
91		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
92	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
93		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
94		->RcvMR			wait for the next one
95		?TIMEOUT t_WaitMS		(F)	
96		!t_SS_InvalidSecurity_Step12			
97		+ !t_InitSecurityVariables			
97		+ ts_SS_DownloadSecurityKey (tsc_CellA,tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, cs_domain)			
98		+ ts_CRLLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			

Continued on next page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
99		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (		Step 12
			tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (
			tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (
			tcv_RRC_Ti, cs_domain,		
			tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAl gorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7))))		
100		START t_WaitMS(4500)			Verify that the UE does not respond to the invalid security comman d for 5 -10% secs.
101		AM?RLC_AM_DATA_IND	car_RRC_SecModeCmpl (	(F)	
			tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (
			tcv_RRC_Ti , OMIT)		
)		
102		?TIMEOUT t_WaitMS		(P)	
103		lt_InitSecurityVariables (tcv_HFN := (INT_TO_BIT(((BIT_TO_INT(tcv_CellIndInfo.start_CS) + 10) MOD 1048576), 20)))			Use a different start value
104		+ ts_InitSystemSpecificCap			
105		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE,			Start integrity
		tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0)			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_22_29
Group : CellReselection/
Purpose : To verify that the 3G search parameters and neighbour cell description are correctly used by the MS in order to reselect a 3G cell.
 To verify that the individual parameters are used by the MS instead of broadcast 3G cell reselection parameters when the MS receives a PACKET MEASUREMENT ORDER message.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : UMTS_GPRS
Description : Packet Measurement order procedure / Downlink transfer / Normal case / 3G cell reselection dedicated parameters

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, si2quater, nopsi5)			Combined Control Channel at -50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA, c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff (tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest +ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
17		+ts_AT_OrgPS_Call_Type2(tsc_GSM_CellA)			
18		+ts_EstablishGPRSPDPContext2(tsc_GSM_CellA, tsc_PhyCh1, bcch)			include PDP Context

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+ts_LLC_XID (tsc_GSM_CellA, tsc_PhyCh1, tsc_LLC_SAPI_11)			
20		+lt_SubTest			
21		+ ts_InitialiseDlyAndTrafficClass			
22		+ts_ModifyPDP_Context_AcceptOrDeactivate(tsc_CellA, c_LLC_SAPI_11, cs_QoS_InteractiveOrBackgroundMT_lv (tcv_DlyClass, tcv_TrafficClass))			
23		[(tcv_Count = 1)]			UE already detached, so don't do it again
24		[TRUE]			
25		+ ts_RRC_ConnRel_RelDPCH (tsc_CellA, cell_Dch)			
26		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
		lt_SubTest			
27		+lt_StartDownlinkTBF			
28		G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ (tsc_GSM_CellA, tcv_K, cs_P_ImmediateAssignment ('1'B, tcv_ARFCN , 0, c_RFN_0, c_IARO_PDA_StartingTime(tcv_TLLI, tcv_Gamma, o_BitstringConcat(o_BitstringConcat(tcv_StartingTime.t1, tcv_StartingTime.t3, 5, 6), tcv_StartingTime.t2, 11, 5))))		Step 2 of Prose
29		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(tsc_GSM_CellA, tsc_PhyCh1, cr_PacketControlAcknowledgement)		Step 3 of Prose
30		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_PACCH(tsc_GSM_CellA, tsc_PhyCh1, 1, tsc_downlinkTFI, cs_PacketMeasOrder(tcv_TLLI, c_NC_MeasParamsCS, '1'B, c_NC_FreqList(c_NC_AddFreqs(tcv_G_CellInfoB.bccH_Freq, o_BitstringConcat(tcv_G_CellInfoB.ncc, tcv_G_CellInfoB.bcc, 3, 3), c_PMO_CellSel1)), c_ENH_MeasParamCS('1111'B)))		Step 4 of Prose

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
31		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 425)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 15 secs
32		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 425)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 15 secs
33		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 425)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 15 secs
34		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 425)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 15 secs
35		+ ts_SS_SwitchBackCellOn (tsc_CellA)			
36		START t_WaitMS(13500)			
37		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	Step 8 of Prose
38		?TIMEOUT t_WaitMS		(P)	

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_PACCH(tsc_GSM_Cell A, tsc_PhyCh1, 1, tsc_downlinkTFI, cs_PacketMeasOrder(tcv_TLLI, c_NC_MeasParamsCS, '1'B, c_NC_FreqList(c_NC_AddFreqs(tcv_G_CellInfoB.bCCH_Freq, o_BitstringConcat(tcv_G_CellInfoB.ncc, tcv_G_CellInfoB.bcc, 3, 3), c_PMO_CellSel1)),c_ENH_MeasParamCS('0111'B)))		Step 9 of Prose
40		START t_UpperBound(33000), START t_LowerBound(4500)			
41		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_OctsFromPRBS(0, 400)))		Send Downlink Data on SAPI 11, enough to keep going for at least 30 secs
42		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_OctsFromPRBS(0, 400)))		Send Downlink Data on SAPI 11, enough to keep going for at least 30 secs
43		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_OctsFromPRBS(0, 400)))		Send Downlink Data on SAPI 11, enough to keep going for at least 30 secs

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		G_LLC ! G_LLC_UNITDATA_R EQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 400)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 30 secs
45		G_LLC ! G_LLC_UNITDATA_ REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 400)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 30 secs
46		G_LLC ! G_LLC_UNITDATA_ REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 400)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 30 secs
47		G_LLC ! G_LLC_UNITDAT A_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 400)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 30 secs
48		G_LLC ! G_LLC_UNITD ATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, 11, tsc_LLC_PM, tsc_LLC_NoCiph, c_PacketData(o_GetN_Octe tsFromPRBS(0, 400)))		Send Downlin k Data on SAPI 11, enough to keep going for at least 30 secs

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Identifier := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identifier) CANCEL t_UpperBound , CANCEL t_LowerBound	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (??))	(F)	
50		?TIMEOUT t_LowerBound		(P)	
51		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Identifier := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identifier) CANCEL t_UpperBound	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (??))	(P)	
52		[px_UE_OpModeDef = opModeC]			PS only
53		+It_PerformRAU('000'B)			RA Updating
54		[TRUE]			CS and PS
55		+It_PerformRAU('001'B, '010'B))			Combine dRA/LA
56		?TIMEOUT t_UpperBound		(F)	
It_PerformRAU(p_UpdateType : B3)					

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
57		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(tsc_CellA, tsc_RB0, cbs_108_RRC_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_CellInfoA.priScrmCode , tcv_CellInfoA.uRNTI , tcv_CellInfoA.uL_Scramblin gCode))		
58		+ ts_RRC_ReceiveConnSetupCmpl (tsc_CellA)			
59		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?, p_UpdateType), ?, ?))		ROUTIN G AREA UPDATI NG REQUE ST
60		+lt_SendAccept			
61		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?, ?), ?, ?))	(F)	ROUTIN G AREA UPDATI NG REQUE ST wrong type
62		+lt_SendAccept			
		lt_SetUpdateResult			
63		[pc_PS AND pc_CS]			
64		(tcv_TmpB3 := '001'B)			
65		[pc_PS]			
66		(tcv_TmpB3 := '000'B)			
		lt_SendAccept			
67		+lt_SetUpdateResult			
68		+ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
69		+ ts_RRC_Security (tsc_CellA, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
70		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3,		ROUTIN G AREA UPDATI NG ACCEP T Send back appropri ate update type
71		Dc ? RRC_DataInd	cs_RA_UpdAcc3 (c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_CellInfoA.mcc, tcv_CellInfoA.mnc, tcv_CellInfoA.lac, tcv_CellInfoA.rac), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def), -))		
72		It_InitVariables	car_PS_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		
73		+ts_RRC_InitVariablesPS (cell_DCH)			
74		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O, tcv_CellInfoA.attenuationLevel:=tcv_CellInfoA.powerpCPICH+70, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL := 10650)			
75		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
76		+ts_GSM_InitVariablesSpecific40			
77		+ts_GPRS_InitVariablesDef			
78		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '0101'B, '111'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('0111'B, '1'B)), tcv_USFRate := 3)			used to slow down data block transmis sion rate
79		(tcv_G_CellInfoA.downlinkPowerLevel := tsc_ChPwrLvl_70dBm)			
		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test)]			

Continued on next page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
80		(tcv_G_CellInfoA.neighBCCHFreqLis t := c_NeighBCCH_FreqListGPRS710)			
81		[TRUE]			
82		It_StartDownlinkTBF G_CL1 ! G_CL1_ComingFN_REQ	c_GSM_CL1_ComingFN_REQ(tsc_GSM_CellA, tsc_PhyCh0, tsc_AGCH, -)		
83		G_CL1 ? G_CL1_ComingFN_CNF (tcv_StartingTime := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		
84		G_CRLC ! G_CRLC_DL_TBF_Config_REQ	ca_ActivateTBF_Downlink(tsc_GSM_CellA, tsc_PhyCh1, tsc_RlcMode_Ack, tcv_USFRate)		
85		G_CRLC ? G_CRLC_DL_TBF_Config_CNF	ca_Activate_DL_TBF_CNF		
86		[(tcv_SplitPGCycle.splitPGcycleCode = '00000000'B) OR (tcv_SplitPGCycle.splitOnCCCH = '0'B)]			
87		(tcv_K := o_PagingGroupCalculate(px_IMSI_Def, tcv_G_CellConfigInfo.cCCH_CONF, 6))			use calculatio n in clause 6.5.2
88		[TRUE]			use calculatio n in 6.5.6
89		(tcv_M := (3 - BIT_TO_INT(tcv_G_CellConfigInfo.bS_A G_BLKRES)) * 64)			for CCCH/ SDCCH combine d
90		(tcv_K := o_PacketPagingGroupCalculate(px_IMSI _Def, BIT_TO_INT(tcv_G_CellConfigInfo.cC H_CONF), tcv_M, (3 - BIT_TO_INT(tcv_G_CellConfigInfo.bS_ AG_BLKRES)) * BIT_TO_INT(tcv_G_CellConfigInfo.bS_ PA_MFRMS), tcv_SplitPGCycle.splitPGcycleCode))			for CCCH/ SDCCH combine d
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_2
Group : CellReselection/
Purpose : To verify that when the MS uses the FDD_Qmin parameter at cell re-selection from GSM to UTRAN while in GSM Idle Mode
Configuration :
Default : IntersystemDef
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / FDD_Qmin

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_CreateCell_GSM_Comb (tsc_GSM_CellA)			Combined Control Channel at -50 dBm
5		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, si2quater)			no GPRS indicated
6		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
7		+ts_SS_CreateCellFACH (tsc_CellB)			to provide noise source (not in Neighbor cell list)
8		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
9		+ts_SendSIB11_MulRatOrBMC(cd_SIB11_InterRATNoSIB12Ind (tcv_CellInfoA, tcv_CellInfoH, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_G_CellInfoA, tcv_G_CellInfoB), tsc_CellA, tsc_Now)			don't include Cell B in the neighbor cell lists
10		+ ts_SS_SwitchCellOff (tsc_CellA)			
11		+ ts_SS_SwitchCellOff (tsc_CellB)			
12	TBS	(tcv_TestBody := TRUE)			
13		+lt_LocalTest			
14	TBE	(tcv_TestBody := FALSE)		(P)	

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
16		+po_ConnectionAndSS_ Rels			
17	ERR1	[px_RAT = tdd]		(I)	
18	ERR2	[TRUE]		(I)	
19		lt_LocalTest			
20		+ts_MM_PwrOrUSIM_On(FALSE)			
21		+ts_G_LocationUpdate(tsc_GSM_CellA)			
22		+ ts_SS_SwitchBackCellOn (tsc_CellA)			
23		+ ts_SS_SwitchBackCellOn (tsc_CellB)			
24		START t_WaitS(27)			30 seconds – 10%
25		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn' t receive anything
26		?TIMEOUT t_WaitS		(P)	Step 2 of Prose
27		(tcv_SI2quarterRO.mP_CHANGE_MAR K := '1'B, tcv_SI2quarterRO.measurementParams3 G.fDD_Qmin := '100'B)			change FDD_Q min in SI2quater r to –16 dB
28		+ts_SendSysInfoType2quarter(tsc_GSM_CellA, tsc_PhyCh0, 0, '0'B, tcv_SI2quarterRO)			Step 3 of prose
29		START t_WaitMS(49500)			UE should answer in 45s + 10%
30		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	Step 4 of Prose
31		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establish ment cause
32		?TIMEOUT t_WaitMS		(F)	
33		lt_InitVariables			
34		+ts_RRC_InitVariables (cell_FACH)			
35		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
34		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
35		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '0000'B, '001'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('0111'B, '0'B)))			FDD_Q min -6dB
36		(tcv_CellInfoA.powerpCPICH := -48, tcv_CellInfoB.powerpCPICH := -43)			Set Cell A to -48 dBm and noise source to -43 dBm – to give an Ec/No of approx -10 dB
37		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
38		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS710)			
39		[TRUE]			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_3
Group : CellReselection/
Purpose : To verify that the MS uses the FDD_Qoffset parameter at cell re-selection from GSM/GPRS to UTRAN while in Idle Mode
Configuration :
Default : IntersystemDef
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / FDD_Qoffset

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_CreateCell_GSM_Comb (tsc_GSM_CellA)			Combined Control Channel at -50 dBm
5		+ts_SendGSMSysInfo_SI2qBCCExt(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, si2quater)			no GPRS indicated
6		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
7		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
8		+ ts_SS_SwitchCellOff (tsc_CellA)			
9	TBS	(tcv_TestBody := TRUE)			
10		+lt_LocalTest			
11	TBE	(tcv_TestBody := FALSE)		(P)	
12		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest			
17		+ts_MM_PwrOrUSIM_On(FALSE)			
17		+ts_G_LocationUpdate(tsc_GSM_CellA)			
18		+ts_SetAttenuationLevel (tsc_CellA, 10)			turn UTRAN Cell on and set to -60 dBm

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		START t_WaitS(27)			wait for 30 sec – 10%
20		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn't receive anything
21		?TIMEOUT t_WaitS		(P)	Step 2 of Prose
22		+ts_SetAttenuationLevel (tsc_CellA, 0)			Set UTRAN Cell to -50 dBm step 3 of prose
23		START t_WaitMS(15400)			UE should answer in 15.4 secs
24		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	Step 4 of Prose
25		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establishment cause
26		?TIMEOUT t_WaitMS		(F)	
27		lt_InitVariables +ts_RRC_InitVariables (cell_FACH)			
28		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O, tcv_CellInfoA.powerpCPICH := -50)			
29		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
30		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_Cel lInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '1101'B, '111'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('0111' B, '0'B)))			
31		(tcv_G_CellInfoA.downlinkPowerLevel := tsc_ChPwrLvl_75dBm, tcv_G_CellInfoA.rXLEV_ACCESS_MIN := '001011'B, tcv_G_CellInfoA.bS_AG_BLKES_RES := '001'B)			GSM cell at -75 dBm
32		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
33		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS710)			
34		[TRUE]			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_4
Group : CellReselection/
Purpose : To verify that the MS uses the Qsearch_I parameter at cell re-selection from GSM to UTRAN while in Idle Mode
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / Qsearch_I

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, si2quater, nopsi5)			GPRS but no PBCCH
5		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff (tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			
17		+ ts_SS_SwitchBackCellOn (tsc_CellA)			Set UTRAN Cell to -50 dBm step 1 of prose
18		START t_WaitS(30)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn't receive anything
20		?TIMEOUT t_WaitS		(P)	Step 2 of Prose
21		(tcv_SI2quaterRO.mP_CHANGE_MARK := '1'B, tcv_SI2quaterRO.measurementParams3G := c_SI2quaterMeasParams3G_None)			change SI2quater
22		+ts_SendSysInfoType2quater(tsc_GSM_CellA, tsc_PhyCh0, 0, '0'B, tcv_SI2quaterRO)			Step 3 of prose
23		+ts_SendSysInfoType13 (tsc_GSM_CellA, tsc_PhyCh0, '0'B, c_SI13_RO_SI2changed(tcv_RAC, tcv_NMO))			
24		START t_WaitS(65)			UE shouldn't answer
25		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	Step 4 of Prose
26		?TIMEOUT t_WaitS		(P)	
27		+ts_GSM_SetChPowerLevel (tsc_GSM_CellA, tsc_PhyCh0, tsc_ChPwrLvl_77dBm)			reduce GSM cell to -77 dBm step 5 of prose
28		START t_WaitS(33)			
29		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	UE should reselect UTRAN cell within 30s + 10%
30		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establishment cause
31		?TIMEOUT t_WaitS		(F)	
32		lt_InitVariables +ts_RRC_InitVariables (cell_FACH)			
33		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O, tcv_CellInfoA.powerpCPICH := -50)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
34		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage. GSM cell at -60 dBm,
35		+ts_GSM_InitVariablesSpecific40			
36		+ts_GPRS_InitVariablesDef			
37		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('1111' B, '0000'B, '111'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('01 11'B, '0'B)))			
38		(tcv_G_CellInfoA.downlinkPowerLevel := tsc_ChPwrLvl_60dBm, tcv_G_CellInfoA.rXLEV_ACCESS_MIN := '001011'B)			
39		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
40		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS710)			
41		[TRUE]			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_26_6_11_3
Group : Classmark_Interrogation/
Purpose : To verify that if the network requests the MS to supply all its classmark information, including the UTRA Classmark information, then this information is communicated on the DCCH to the network.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Test of Classmark interrogation / UTRAN Classmark Change

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+ts_MMI_UE_SwitchOff			
4		+lt_Preamble			
5		+ts_InitCapability			
6		+lt_InitCipherMode			
7	TBS	(tcv_TestBody := TRUE)			
8		+lt_LocalTest			
9	TBE	(tcv_TestBody := FALSE)		(P)	
10		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
11	ERR1	[px_RAT = tdd]		(I)	
12	ERR2	[TRUE]		(I)	
13		lt_LocalTest			
14		+ts_G_RR_Con_Est (tsc_GSM_CellA)			
15		+ts_G_Loc_UpdatingRequest (tsc_GSM_CellA) G_CL1 ! G_CL1_ComingFN_REQ	c_GSM_CL1_ComingFN_REQ (tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)		Get next dl FN for SDCCH /4
16		G_CL1 ? G_CL1_ComingFN_CNF (tcv_RR_RFN := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		
17		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, tcv_RR_RFN, cr_G_ClassmarkEnquiry(c_ ClassmarkEnquiryMask('0C' O)))		Step 5 SS sends CLASS MARK ENQUIRY MESSAGE on DCCH Channel to the Mobile Station, requesting CLASS MARK C

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		G_L2 ? G_L2_DATA_IND (tcv_G_ClassmarkChange := G_L2_DATA_IND.msg, tcv_P_Classmark3 := tcv_G_ClassmarkChange.additionalMscs mk, tcv_RFN2 := G_L2_DATA_IND.rfn)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChange)	(P)	HANGE and UTRAN CLASS MARK CHANG E message s Specify frame number to send message on Step 6 UE sends CLASS MARK CHANG E message on DCCH Channel to SS. Store RFN
19		+ts_G_CheckTimeFrames(15, 66)			see Note 1
20		+lt_CheckClassmark3			
21		G_L2 ? G_L2_DATA_IND(tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChan ge)	(P)	UE sends UTRAN CLASS MARK CHANG E message on DCCH Channel to SS.
22		+lt_CheckUtranClassmarkChange			
23		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAcc ept (tcv_G_CellConfigInfo, OMIT))		SendLoc ation Updatin g Accept.
24		+ts_G_ChannelRelease (tsc_GSM_CellA, tsc_PhyCh0)			
25		lt_InitCipherMode [pc_UEA1_Supp]			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
26		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000011'B)			
27		[NOT (pc_UEA1_Supp)]			
28		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
29		lt_Preamble +ts_GSM_InitVariablesAllBands			
30		+ts_CreateCell_GSM_Comb(tsc_GSM_CellA)			Combine d Control Channel at -50 dBm, no GPRS
31		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, nosi2quater)			no GPRS indicated
32		+ts_MM_PwrOrUSIM_On (tsc_USIM_NeedRmv)			
33		lt_CheckClassmark3 (tcv_Res := o_P_CheckClassmark3(tcv_P_Classmark3, pc_FDD, pc_TDD, pc_P_GSM_900_BAND, pc_E_GSM_900_BAND, pc_R_GSM_900_BAND, pc_DCS_1800_BAND, pc_PCS_1900_BAND, pc_GSM_450_BAND, pc_GSM_480_BAND, pc_GSM_700_BAND, pc_GSM_850_BAND, pc_TypeGSMClass2, pc_TypeGSMClass3, pc_TypeGSMClass4, pc_TypeGSMClass5, pc_TypeDCSCClass1, pc_TypeDCSCClass2, pc_TypeDCSCClass3, pc_TypePCSCClass1, pc_TypePCSCClass2, pc_TypePCSCClass3, pc_TypeGSM850Class2, pc_TypeGSM850Class3, pc_TypeGSM850Class4, pc_TypeGSM850Class5, pc_DTM_Multislotclass5, pc_DTM_Multislotclass9, pc_DTM_SingleSlotAllocation, pc_EOTD_Assist, pc_A_GPS_Assist, pc_A_GPS_Based, pc_Conv_GPS, px_EOTD_Based, pc_GERANFeaturePackage1, pc_GERANFeaturePackage2, pc_GERANluMode, pc_DTMEnhancCap, pc_TAOffset, px_MultiSlotClass, px_EGPRS_MultiSlotClass, px_SMS_Value, px_SM_Value, px_GSM400_RadioCapability, px_T400_RadioCapability, px_T900_RadioCapability, px_RGSM_RadioCapability, px_DTMGPRSHighMultiSlotClass, px_DTMEGPRSHighMultiSlotClass, px_DTM_EGPRS_MultiSlotSubClass, px_EDGE_PwrCap1, px_EDGE_PwrCap2, px_ExtDTM_MultiSlotClass, px_ExtDTM_EGPRS_MultiSlotClass, px_HighMultiSlotCap, px_GMSKPowerProfile, px			

Continued on next page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
34		_8PSKPowerProfile, px_TGSM400Support, px_DLAdvRxPerformance, pc_MS_ClsmkA5_4, pc_MS_ClsmkA5_5, pc_MS_ClsmkA5_6, pc_MS_ClsmkA5_7, px_CDMA2000, px_ExtMeasCap, px_ModulationCapability, pc_MS_ClsmkUCS2, px_RptACCHCap)) [tcv_Res]		(P)	Classmark 3 ok
35		[NOT tcv_Res]		(F)	Classmark 3 not correct
36		lt_CheckUtranClassmarkChange (tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, cr_RadioAccessCapabilityAnyBand(tcv_PDCP_Capability, tcv_DL_TurboSupport, tcv_UL_TurboSupport, tcv_SimultaneousSCCPCH_DPCH_Reception, {cipheringAlgorithmCap tcv_CellIndInfo.cipheringAlgorithmCapability, integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap})))			Check the ASN.1 contents of the UtranClassmark Change message
37		[tcv_ResAndStartValue.res]		(P)	UE RA Capabilities ok
38		[NOT tcv_ResAndStartValue.res]		(F)	UE RA Capabilities not correct
<p>Detailed Comments : 1. This test is performed on an SDCCH/4. Referring to 45.002, Table 3 each SDCCH/4 subchannel is allocated only 4 frames out of a 51 frame multiframe. Also, the uplink frames for a particular subchannel occur 15 frames after the corresponding downlink frames. e.g: STEP 5: The Classmark Enquiry message is sent in frame 26 of the 51 frame multiframe. This relates to the first frame of the SDCCH/4 subchannel 1 downlink (45.002, Table 3: SDCCH/4, subch1 D/L B(26,..29)). STEP 6: The first opportunity for the MS to send a response to this message is in frames 41–44 of the 51 frame multiframe (45.002, Table 3: SDCCH/4, subch1 U/L B(41,..44)). i.e. 15 frames (69 ms) after the Classmark Enquiry message is sent. The next opportunity for the MS to send the Classmark Change message is 51 frames later in the next uplink block (B41,..44). i.e. 66 frames (305 ms) after the Classmark Enquiry message is sent. Therefore in order to meet the prose requirement of the MS being ready to send the Classmark Change message in Step 6 within 300 ms of the Classmark Enquiry message in Step 5 the difference in frames between step 5 and step 6 must be either 15 or 66 frames exactly.</p>					

Test Case Dynamic Behaviour

Test Case Name : tc_26_6_11_4
Group : Classmark_Interrogation/
Purpose : To verify that if the network requests the MS to supply all its classmark information, including the UTRA Classmark information, then this information is communicated on the DCCH to the network. The request of the classmark information is indicated in SYSTEM INFORMATION TYPE 3.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Test of Early UTRAN Classmark Sending

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+ts_MMI_UE_SwitchOff			
4		+lt_Preamble			
5		+ts_InitCapability			
6		+lt_InitCipherMode			
7	TBS	(tcv_TestBody := TRUE)			
8		+lt_LocalTest			
9	TBE	(tcv_TestBody := FALSE)		(P)	
10		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
11	ERR1	[px_RAT = tdd]		(I)	
12	ERR2	[TRUE]		(I)	
		lt_LocalTest			
13		+ts_G_RR_Con_Est (tsc_GSM_CellA)			
14		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel, tcv_RR_RFN := G_L2_L2Estab_IND.rfn)	car_G_L2_L2Estab_IND (tsc_GSM_CellA, cb_LocUpdReqAny(?))		Step 4. Location Updating Request. Store FN
15		G_L2 ? G_L2_DATA_IND (tcv_RFN2 := G_L2_DATA_IND.rfn, tcv_G_ClassmarkChange := G_L2_DATA_IND.msg, tcv_P_Classmark3 := tcv_G_ClassmarkChange.additionalMscsmk)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChange)	(P)	Step 6. UE sends CLASS MARK CHANGE message on DCCH Channel to SS. Store 2nd FN

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
16		+lt_CheckTiming			Classmark Change must be exactly 51 frames after Location Updating Request in order to meet prose requirement. see note 1
17		+lt_CheckClassmark3			
18		G_L2 ? G_L2_DATA_IND(tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	UE sends UTRAN CLASS MARK CHANGE message on DCCH Channel to SS.
19		+lt_CheckUtranClassmarkChange			
20		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAccept (tcv_G_CellConfigInfo, OMIT))		SendLocation Updating Accept.
21		+ts_G_ChannelRelease (tsc_GSM_CellA, tsc_PhyCh0)			
22		lt_CheckTiming			
23		+ts_GetFNFromRFN(tcv_RR_RFN, tcv_FN1)			
		+ts_GetFNFromRFN(tcv_RFN2, tcv_FN2)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
24		[(tcv_FN2 – tcv_FN1 = 51)]		(P)	Classmark Change need exactly 51 frames after Location Updating Request see note 1
25		[TRUE]		(F)	
		lt_InitCipherMode			
26		[pc_UEA1_Supp]			
27		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
28		[NOT (pc_UEA1_Supp)]			
29		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
		lt_Preamble			
30		+ts_GSM_InitVariablesAllBands			
31		+ts_CreateCell_GSM_Comb(tsc_GSM_CellA)			
32		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, nosi2quater)		Combine d Control Channel at –50 dBm, no GPRS no GPRS indicated	
33		+ts_SendSysInfoType3 (tsc_GSM_CellA, tsc_PhyCh0, c_SI3_RO_Classmark (tsc_ECMSHigh, tsc_3GECMSHigh))		send SI3 now with Classma rk High	
34		+ts_MM_PwrOrUSIM_On (tsc_USIM_NeedRmv)			
		lt_CheckClassmark3			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
35		(tcv_Res := o_P_CheckClassmark3(tcvc_P_Classmark3, pc_FDD, pc_TDD, pc_P_GSM_900_BAND, pc_E_GSM_900_BAND, pc_R_GSM_900_BAND, pc_DCS_1800_BAND, pc_PCS_1900_BAND, pc_GSM_450_BAND, pc_GSM_480_BAND, pc_GSM_700_BAND, pc_GSM_850_BAND, pc_TypeGSMClass2, pc_TypeGSMClass3, pc_TypeGSMClass4, pc_TypeGSMClass5, pc_TypeDCSCClass1, pc_TypeDCSCClass2, pc_TypeDCSCClass3, pc_TypePCSCClass1, pc_TypePCSCClass2, pc_TypePCSCClass3, pc_TypeGSM850Class2, pc_TypeGSM850Class3, pc_TypeGSM850Class4, pc_TypeGSM850Class5, pc_DTM_Multislotclass5, pc_DTM_Multislotclass9, pc_DTM_SingleSlotAllocation, pc_EOTD_Assist, pc_A_GPS_Assist, pc_A_GPS_Based, pc_Conv_GPS, px_EOTD_Based, pc_GERANFeaturePackage1, pc_GERANFeaturePackage2, pc_GERANluMode, pc_DTMEnhancCap, pc_TAOOffset, px_MultiSlotClass, px_EGPRS_MultiSlotClass, px_SMS_Value, px_SM_Value, px_GSM400_RadioCapability, px_T400_RadioCapability, px_T900_RadioCapability, px_RGSM_RadioCapability, px_DTMGPRSHighMultiSlotClass, px_DTMGPRSHighMultiSlotClass, px_DTM_EGPRS_MultiSlotSubClass, px_EDGEPrCap1, px_EDGEPrCap2, px_ExtDTM_MultiSlotClass, px_ExtDTM_EGPRS_MultiSlotClass, px_HighMultiSlotCap, px_GMSKPowerProfile, px_8PSKPowerProfile, px_TGSM400Support, px_DLAdvRxPerformance, pc_MS_CismkA5_4, pc_MS_CismkA5_5, pc_MS_CismkA5_6, pc_MS_CismkA5_7, px_CDMA2000, px_ExtMeasCap, px_ModulationCapability, pc_MS_CismkUCS2, px_RptACCHCap))			
36		[tcv_Res]		(P)	Classmark 3 ok
37		[NOT tcv_Res]		(F)	Classmark 3 not correct
38		lt_CheckUtranClassmarkChange (tcv_ResAndStartValue := o_CheckUtranClassmark(tcvc_G_UtranClassmarkC hange.uTRANPreConfigInfo.value, cr_RadioAccessCapabilityAnyBand(tcvc_PDCP_Ca pability, tcvc_DL_TurboSupport, tcvc_UL_TurboSupport, tcvc_SimultaneousSCCPCH_DPCH_Reception, {cipheringAlgorithmCap tcvc_CellIndInfo.cipheringAlgorithmCapability, integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap})))			Check the ASN.1 contents of the UtranClassmark Change message
39		[tcv_ResAndStartValue.res]		(P)	UE RA Capabilities ok

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
40		[NOT tcv_ResAndStartValue.res]		(F)	UE RA Capabilities not correct
<p>Detailed Comments : 1. This test is performed on an SDCCH/4. Referring to 45.002, Table 3 each SDCCH/4 subchannel is allocated only 4 frames out of a 51 frame multiframe. Also, the uplink frames for a particular subchannel occur 15 frames after the corresponding downlink frames. e.g: STEP 4: The Location Updating Request (SABM) is received (uplink) in frame 41 of the 51 frame multiframe. This relates to the first frame of the SDCCH/4 subchannel 1 uplink (45.002, Table 3: SDCCH/4, subch1 U/L B(41,..44)).</p> <p>STEP 5: The first opportunity for the network to send a UA a response to this message is in frames 26–29 of the 51 frame multiframe (45.002, Table 3: SDCCH/4, subch1 D/L B(26,..29)). Because this is only a L2 message, it is not in the TTCN.</p> <p>STEP 6: The next opportunity for the MS to send the Classmark Change message is 15 frames (69ms) later in the next uplink block (B41,..44). i.e. exactly 51 frames after sending the SABM in Step 4.</p> <p>Therefore in order to meet the prose requirement of the MS sending the Classmark Change message in Step 6, 69ms after the SS sends the UA in Step 5 (a message not visible to the TTCN), the time between Step 6 and Step 4 must be exactly 51 frames.</p>					

Test Case Dynamic Behaviour

Test Case Name : tc_41_5_1_1_1_4
Group : DTM/
Purpose : Verifying that the MS aborts the Packet Access procedure and proceeds with the handover to UTRAN, upon reception of an INTER SYSTEM TO UTRAN HANDOVER COMMAND message
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : RRC_FDD_DTM
Description : Uplink TBF establishment with no reallocation of CS resources / Abnormal cases / Inter System to UTRAN Handover Command

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell_DTM(tsc_GSM_CellA, bcch, nosi2quater, tcv_Timeslot)			Combined Control Channel at -50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff(tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
16		lt_LocalTest +ts_DTM_IdleUpdated(tsc_GSM_CellA, bcch, tcv_Timeslot)			No PBCCH
17		+ts_AT_OrgPS_Call_Type2(tsc_GSM_CellA)			
18		+ts_DTM_EstablishGPRSPDPContext2(tsc_GSM_CellA, tsc_PhyCh1, bcch, tcv_Timeslot)			include PDP Context
19		+lt_G_ConfigTrafficChannel			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		+lt_InitAssignmentCmd			
21		+ts_SS_SwitchBackCellOn (tsc_CellA)			
22		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 1 of prose;
23		+lt_Meas			Steps 2 and 3 of prose
24		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Configure DTCH and RB10,11,12
25		+lt_InitHOCmd			
26		+lt_SubTest			
27		+lt_Postamble			
28		lt_G_ConfigTrafficChannel (tcv_Ch_Mode := c_G_ChModeSpeechFRorHRV3)			
29		+ts_SS_CreatePhyChOfTrafficChType_DTM (tsc_GSM_CellA, tsc_G_Trchld1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			CS channel has to be on TN before PS channel.
30		lt_SubTest +ts_triggerMSToSend1KBytes			Step 4 of prose
31		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA ,?, tsc_G_Trchld1, ?, ?, ?, cr_DTM_Request)		
32		+lt_ConfigCipher_BeforeHO			
33		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_Trchld1 , tcv_RR_ChannelType2 , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 6 of prose; Sending the Handover Command.

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
34	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DC CH_Message.message.handoverToUTRANC omplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DC CH_Message.message.handoverToUTRANC omplete.count_C_ActivationTime)	car_InterSystemHandoverC omplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANC omplete)	(P)	Step 9 of prose; Receiving Handover complete
35		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
36		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
37		+It_ConfigCipher_AfterHO			
		It_ConfigCipher_BeforeHO			
38		+ts_GetHFN			
39		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
40		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
41		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_Cell A, tsc_DL_DPCH1)		
42		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			
		It_ConfigCipher_AfterHO			
43		+ts_GetHFN			
44		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
45		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			
		It_Postamble			
46		+ts_GetHFN			Update StartValue
47		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
48		+ts_ActivateIntegrity_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			
49		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_BothCNInfo (tcv_RRC_Ti,		
50		AM ? RLC_AM_DATA_IND	tcv_CellIndInfo.dl_Integrity CheckInfo, OMIT, OMIT)) car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?)		
51		+ts_RAUpdate_AuthCiph_NoSRB4(tsc_CellA, ?, '000'B)			PS domain only
52		(tcv_TI_S.tiFlag:='1'B)			Change TI to PS call
53		+ts_DeactivatePDP_ContextMT(tsc_CellA, tcv_TI_S, cbs_SM_Cause_v(tsc_RejCauPDP_ContextDeact))			normal deactivation
54		(tcv_TI_S.tiFlag:='0'B)			Now change TI to CS call
55		+ts_CC_Disconnect (tsc_CellA)			
56		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
57		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
58		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
59		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
60		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
61		lt_InitVariables +ts_RRC_InitVariablesCS			
62		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '06'O)			

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
63		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.	
64		+ts_GSM_InitVariablesSpecific40				
65		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)				
66		+ts_GPRS_InitVariablesDef				
67		(tcv_Timeslot := (INT_TO_BIT((BIT_TO_INT(tsc_G_Timeslot) + 1), 3)))				
68		lt_InitAssignmentCmd +ts_InitAssignmentCmd (tcv_Ch_Mode)				
69		(tcv_AssignmentCommand.mltiRateConfig := c_G_MultiRateConfig)				If AMR channel, need to include optional MultiRate Config
70		lt_InitHOCmd [px_CipheringOnOff]				
71		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))				
72		(tcv_LengthOfHO_Cmd := o_LengthOfHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))				
73		[NOT px_CipheringOnOff]				
74		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT,c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))				
75		(tcv_LengthOfHO_Cmd := o_LengthOfHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))				
		lt_Meas				

Continued on next page

Continued from previous page

Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
76		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
77		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
78		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3G FDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 2 of prose; Sending the Measurement Information on the SACCH
79		+!t_Meas_contd			
		!t_Meas_contd			
80		START t_WaitS(10)			no time restriction on when Meas Rpt received, just don't wait forever
81	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
82		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport (tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
83		->RcvMR			wait for the next one
84		?TIMEOUT t_WaitS		(F)	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_2DCH_ModifyStreamUnknown14_4_IR_G (p_CellId : INTEGER; p_ActTime : ActivationTime; p_DL_CommonInformation : DL_CommonInformation; p_UL_DPCH_Info : UL_DPCH_Info; p_CommonTFS_CPHY : CommonOrDedicatedTFS)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1 and connect DCH1 and DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel and map DTCH(subflow#1) to the DCH1 transport channel respectively. Used for Streaming / unknown 14.4kbps. This step is same as ts_2DCH_ModifyStreamUnknown14_4 except for 1. RM attribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_AMR_Offset 2 (tsc_DL_DPCH1_ChC_SRB , p_DL_CommonInformation) , p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	cd_2_DCH_0_To3_DL_Info_IR_G (p_CellId, tsc_DL_DPCH1, cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY, p_ActTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), cd_TrChInfoDL_2_0_To3_IR_G (cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY), c_TrLogMappingDL_2 , p_ActTime)		3. C-RNTI and U-RNTI are not required on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info, p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_UL_DPCH1)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		CPHY!CPHY_TrCH_Config_RE Q	ca_2_DCH_0_To3_UL_Info (p_CellId , tsc_UL_DPCH1, cd_DCH_148_TFS_UL_RM 160, p_CommonTFS_CPHY ,p_ActTime)		2.
12		CPHY?CPHY_TrCH_Config_C NF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_2_0_To3 (cd_DCH_148_TFS_UL_RM 160, p_CommonTFS_CPHY , c_TrLogMappingUL_2 ,p_ActTime)		3. C-RNTI and U-RNTI are not required on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		|	
16	ERR2	[TRUE]		|	
<p>Detailed Comments : 1. configure DPCH1 for transporting conversational / unknown / UL:28.8 DL:28.8 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH. 2. connect DCH1 and DCH5 to DPCH1. 3. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_2DCH_ModifyStreamUnknown28_8_IR_G (
p_CellId : INTEGER;
p_ActTime : ActivationTime;
p_DL_CommonInformation : DL_CommonInformation;
p_UL_DPCH_Info : UL_DPCH_Info;
p_CommonTFS_CPHY : CommonOrDedicatedTFS)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1 and connect DCH1 and DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel and map DTCH(subflow#1) to the DCH1 transport channel respectively. Used for Streaming / unknown 28.8kbs.
This step is same as ts_2DCH_ModifyStreamUnknown28_8 except for 1. RM attribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_AMR_Offset 2 (tsc_Sfc64, p_DL_CommonInformation), p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_2_DCH_0_To5_DL_Info (p_CellId, tsc_DL_DPCH1, cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY, p_ActTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), c_TrChInfoDL_2_0_To5 (cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY), c_TrLogMappingDL_2, p_ActTime)		3. C-RNTI and U-RNTI is not required on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info, p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_2_DCH_0_To5_UL_Info (p_CellId, tsc_UL_DPCH1, cd_DCH_148_TFS_UL_RM 160, p_CommonTFS_CPHY, p_ActTime)		2.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrCHInfoUL_2_0_To5 (cd_DCH_148_TFS_UL_RM_160 ,p_CommonTFS_CPHY), c_TrLogMappingUL_2 ,p_ActTime)		3. C-RNTI and U-RNTI is not required on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		|	
16	ERR2	[TRUE]		|	
<p>Detailed Comments : 1. configure DPCH1 for transporting conversational / unknown / UL:28.8 DL:28.8 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH. 2. connect DCH1 and DCH5 to DPCH1. 3. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_ActivateCipherring_NoSRB4 (
 p_CellId : INTEGER;
 p_KC : KeyCipherring;
 p_IK : IntegrityKey;
 p_GSM_ck : GSM_CipherringKey;
 p_NewKey : BOOLEAN;
 p_CipherActTime : ActivationTime;
 p_IncrDcr : Increment_Mode;
 p_RLC_IncDcr : RLC_IncMode;
 p_CN_Domain : CN_DomainIdentity)
Group : UMTS_Specific/
Objective : Configure and Activate (or deactivate) cipherring for all concerned RBs
Default : RRC_Def1
Comments : This is only used for the 60 series test cases
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ It_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ It_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		It_ActivateSecurity_DL_SS [((tcv_CellIndInfo.ps_cipherringStarted = TRUE) AND (tcv_CellIndInfo.recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipherringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain =cs_domain))]			
6		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
7		(tcv_CellIndInfo.uL_CipherMode := cs_RB_ActTimeInfoListSRBs_NoSRB4 (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2, tcv_RLC_SeqNumDL_RB3))			
8		+ ts_CRLC_DL_CipherCfgSRB1_3 (tcv_CellIndInfo.dL_CipherMode, p_RLC_IncDcr, TRUE)			Configure cipherring for RLC (RBs 1, 2, 3 and 4)
9		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode , p_RLC_IncDcr)			
10		+ts_CMAC_DL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, p_IncrDcr)			
11		+ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, p_IncrDcr)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
12		[TRUE]			If no New Ciphering config
13		lt_RRC_InitVariables			
14		+ lt_InitCipherMode			
15		+ ts_SaveCellInfo (p_CellId) [p_NewKey = TRUE]			Authentication was done, reset HFN
16		(tcv_HFN := '00000000000000000000'B)			
17		[p_CN_Domain = cs_domain]			
18		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
19		[p_CN_Domain = ps_domain]			
20		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
21		[p_NewKey = FALSE]			
22		[p_CN_Domain = cs_domain]			
23		(tcv_HFN := tcv_CellIndInfo.start_CS)			
24		[p_CN_Domain = ps_domain]			
25		(tcv_HFN := tcv_CellIndInfo.start_PS)			
26		lt_InitCipherMode			
27		[px_CipheringOnOff = TRUE]			
28		[pc_UEA1_Supp] (tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Switch On ciphering
29		[p_CN_Domain = cs_domain]			
30		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
31		[p_CN_Domain = ps_domain]			
32		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
33		[NOT (pc_UEA1_Supp)]			
34		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			Switch On ciphering
35		[p_CN_Domain = cs_domain]			
36		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
37		[p_CN_Domain = ps_domain]			
38		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
39		[NOT (px_CipheringOnOff)]			
40		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
41		[pc_UEA1_Supp]			
42		(tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
43		[NOT (pc_UEA1_Supp)]			
44		(tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour

Test Step Name : ts_ActivateIntegrity_NoSRB4 (
 p_CellId : INTEGER;
 p_KC : KeyCiphering;
 p_IK : IntegrityKey;
 p_GSM_ck : GSM_CipheringKey;
 p_NewKey : BOOLEAN;
 p_CN_Domain : CN_DomainIdentity)
Group : UMTS_Specific/
Objective : Activate integrity for all concerned RBs
Default : RRC_Def1
Comments : This is only used for the 60 series test cases
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ It_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ It_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		+It_RB2_UL_IntegrityActivate			
6		+ It_StartSecurity_UE			
7		It_RB2_UL_IntegrityActivate [tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
8		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)			
9		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
10		+ ts_RB2_UL_IntegrityActivate(0) It_ActivateSecurity_DL_SS			
11		+ It_InitialiseRRC_MSN			
12		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity) It_InitialiseRRC_MSN			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
14		+ ts_SetDL_RRC_MessageSN_NoSRB4 (p_CellId)			
15		[tcv_Int_ModifyFlag]			
16		It_StartSecurity_UE			
17	TSP2	+ It_SendSecurityModeCommand AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.uL_Inte gProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti , OMIT))	(P)	No UL CIPHERING information
18		+ ts_CRRC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			
19	TSF2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti , ?))	(F)	
20		It_SendSecurityModeCommand [pc_UMTS_GSM]			Branching if GSM Supported
21		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dL_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgo rithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
22		[NOT pc_UMTS_GSM]			Branching if GSM Not Supported	
23		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (
			tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (
			tcv_RRC_Ti, p_CN_Domain,			
			tcv_CellIndInfo.dL_Integrity ,			
			tcv_CellIndInfo.cipheringAlgorithmCapability, OMIT)))			
24		lt_RRC_InitVariables				
25		+ lt_InitIntegrity				
26		+ ts_InitSystemSpecificCap				
27		+ ts_SaveCellInfo (p_CellId) [p_NewKey = TRUE]				
28		(tcv_HFN := '00000000000000000000'B)				
29		[p_CN_Domain = cs_domain]				
30		(tcv_CellIndInfo.start_CS := '000000000000000000000000'B)				
31		[p_CN_Domain = ps_domain]				
32		(tcv_CellIndInfo.start_PS := '000000000000000000000000'B)				
33		[p_NewKey = FALSE]				
34		[p_CN_Domain = cs_domain]				
35		(tcv_HFN := tcv_CellIndInfo.start_CS)				
36		[p_CN_Domain = ps_domain]				
37		(tcv_HFN := tcv_CellIndInfo.start_PS)				
38		lt_InitIntegrity (tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)				
39		[tcv_CellIndInfo.integrityStarted]				
40		+ts_GetRRC_MessageSN_NoSRB4 (p_CellId)				
						Authentication was done, reset HFN

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
41		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_NoSRB4(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
42		[NOT tcv_CellIndInfo.integrityStarted]			
43		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dL_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_DL_CipherCfgSRB1_3 (p_CipherMode: CipheringModeCommand;p_IncMode : RLC_IncMode; p_Now : BOOLEAN)					
Group : UMTS_Specific/					
Objective : Configure ciphering for RLC layer for RB1, RB2, RB3					
Default : SS_Def					
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ It_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1)			
2		+ It_RLC_Activate (tsc_RB3 , tcv_RLC_SeqNumDL_RB3)			
3		[p_Now]			
4		+ It_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2)			
5		[NOT p_Now]			if not now, must be later
6		+ It_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2+2) It_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber)			
7		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq, p_IncMode)		configur e cipherin g for signaling radio bearers
8		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_UL_Integrity_NoSRB4 (p_IntegrityProtActivationInfo : IntegrityProtActivationInfo)
Group : UMTS_Specific/
Objective : To start the integrity protection
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, c_RestRB_IntegrityProtActivationInfoList_NoSRB4(p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[0], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[1], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[3]))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CellChange_RAUpdate_NoSRB4(p_CellId : INTEGER; p_FOR : B1; p_UpdateType : B3)
Group : UMTS_Specific/
Objective : Perform appropriate signalling to re-establish the connection after moving from GERAN to UTRAN
Default : RRC_Def1
Comments : This version is used in 60 series test cases as the UE will not configure SRB4
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (		ROUTIN G AREA UPDATI NG REQUE ST
2		+lt_SendAccept			
3		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (	(F)	ROUTIN G AREA UPDATI NG REQUE ST wrong type
4		+lt_SendAccept			
5		lt_SendAccept			
6		(tcv_TmpB3 := '000'B)			
7		+lt_DoSecurity			
7		+ ts_SetTmpCellInfo (p_CellId)			Get cell info of new UTRAN cell
8		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_RA_UpdAcc3 (		ROUTIN G AREA UPDATI NG ACCEP T Send back appropri ate update type
9		Dc ? RRC_DataInd	c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def), -)		
10		lt_DoSecurity +ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		+ ts_RRC_Security_NoSRB4 (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_GetHFN					
Group : UMTS_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Count := NUMBER_OF_ELEMENTS (tcv_StartList))			
2		[tcv_Count = 1]			
3		+ It_FirstValue			
4		[tcv_Count = 2]			
5		+ It_FirstValue			
6		+ It_SecondValue			
7	ERR1	[TRUE] It_FirstValue		F	
8		[tcv_StartList.[0].cn_DomainIdentity = tsc_CS_Domain]			
9		(tcv_CellIndInfo.start_CS := tcv_StartList.[0].start_Value)			
10		[tcv_StartList.[0].cn_DomainIdentity = tsc_PS_Domain]			
11		(tcv_CellIndInfo.start_PS := tcv_StartList.[0].start_Value)			
12	ERR2	[TRUE] It_SecondValue		F	
13		[tcv_StartList.[1].cn_DomainIdentity = tsc_CS_Domain]			
14		(tcv_CellIndInfo.start_CS := tcv_StartList.[1].start_Value)			
15		[tcv_StartList.[1].cn_DomainIdentity = tsc_PS_Domain]			
16		(tcv_CellIndInfo.start_PS := tcv_StartList.[1].start_Value)			
17	ERR3	[TRUE]		F	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GetRRC_MessageSN_NoSRB4(p_CellId : INTEGER)
Group : UMTS_Specific/
Objective : To Calculate the Message sequence numbers for RB0 to RB3 and store in TCV's.
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB0)		
2		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB0 := CRLC_RRC_MessageSN_CNF.count_I_LSB_D L)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB0)		
3		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB1)		
4		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB1 := CRLC_RRC_MessageSN_CNF.count_I_LSB _DL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB2)		
6		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB2 := CRLC_RRC_MessageSN_CNF.count_I_L SB_DL, tcv_RRC_MSN_RB2_UL := CRLC_RRC_MessageSN_CNF.count_I_L SB_UL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB3)		
8		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB3 := CRLC_RRC_MessageSN_CNF.count_ I_LSB_DL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB3)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ModifyPDP_Context_AcceptOrDeactivate (p_CellId : CellId; p_LLC_SAPI_v: LLC_SAPI_v; p_qos_lv: QualityOfService_lv)
Group : UMTS_Specific/
Objective :
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cbs_Modify_PDP_ContextReq_MT(tcv_TI_S, p_LLC_SAPI_v, p_qos_lv))		Send Modify PDP Context Request message
2		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Modify_PDP_ContextAcp_MO)	(P)	either receive Modify PDP Context Activation Accept message
3		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextReq_MO(cbs_SM_Cause_v('25'O)))	(P)	or receive Deactivate PDP Context from the UE with cause set to QoS not acceptable
4		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cbs_Deact_PDP_ContextAcp_MT(tcv_TI_S))		
5		START t_3390			UE may optionally send Detach Request
6		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)	(P)	
7		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cs_DetachAcc)		
8		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
9		(tcv_Count := 1)			Update this so test case knows not to detach on switch off
10		? TIMEOUT t_3390			
11		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel_RelDPCH (p_CellId: INTEGER; p_RRC_RelStatus : RRC_Rel_Status)

Group : UMTS_Specific/

Objective : To bring the UE from state CELL_DCH to idle state by releasing the RRC connection, regardless of whether a RAB is configured

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ It_Send_RRC_ConnectionRelease			
4		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
5		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
6		+ ts_SS_ResetSecurityKey			
7		It_Send_RRC_ConnectionRelease [p_RRC_RelStatus= cell_Dch]			
8		(tcv_N308 := 2, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
9		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
			cs_108_RRC_ConnRelDCC H(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
10	TSP1	UM ? RLC_UM_DATA_IND	car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
12		[p_RRC_RelStatus = cell_Fach_Dcch]			
13		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
			cs_108_RRC_ConnRelDCC H (tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, OMIT))		
14	TSP2	AM ? RLC_AM_DATA_IND	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2,	(P)	
			cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))		
15		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			
16		[p_RRC_RelStatus = cell_Fach_Ccch]			
17		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0,		
			cs_108_RRC_ConnRelCCC H (c_U_RNTI, tcv_RRC_Ti))		
18		[TRUE]		I	Programming error
19		It_RptRcvConnRel			
20	TSF2	START t_Dly		(F)	
21		? TIMEOUT t_Dly (tcv_K := tcv_N308 + 1)			To stop the loop
22	TSP2	UM ? RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1,	(P)	Retransmission
			cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))		
Detailed Comments : 1. No RRC connection is established					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Security_NoSRB4 (
 p_CellId : INTEGER;
 p_KC : KeyCiphering;
 p_IK : IntegrityKey;
 p_GSM_ck : GSM_CipheringKey;
 p_NewKey : BOOLEAN;
 p_CN_Domain : CN_DomainIdentity)
Group : UMTS_Specific/
Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs
Default : RRC_Def1
Comments : This is only used for the 60 series test cases
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		+ ts_SetTmpCellInfo (p_CellId)				
2		+ It_RRC_InitVariables				
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)				
4		+ It_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2	
5		+It_RB2_UL_IntegrityActivate				
6		+ It_StartSecurity_UE				
7		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo.recentSecureDomain = ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = cs_domain))]				
8		+ ts_CRLC_ResumeSecurity (p_CellId)				
9		[TRUE]				
10		It_RB2_UL_IntegrityActivate [tcv_Int_ModifyFlag]				If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
11		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)				
12		[NOT tcv_Int_ModifyFlag]				If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
13		+ ts_RB2_UL_IntegrityActivate(0)				
14		It_ActivateSecurity_DL_SS + It_InitialiseRRC_MSN				

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
16		[[(tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo.recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain =cs_domain))]			
17		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
18		+ It_AssignRB_ActivationTimeInfoList			
19		+ ts_CRLC_SuspendSecurity (p_CellId)			Suspend SRBs 1, 3 and 4
20		+ ts_CRLC_DL_CipherCfgSRB1_3 (tcv_CellIndInfo.dL_CipherMode, notInc, FALSE)			Configure ciphering for RLC (RBs 1, 2, 3 and 4)
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			
22		+ ts_CMACE_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[TRUE]			If no New Ciphering config
24		It_InitialiseRRC_MSN [NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
25		+ ts_SetDL_RRC_MessageSN_NoSRB4 (p_CellId)			
26		[tcv_Int_ModifyFlag]			
27		It_StartSecurity_UE + It_SendSecurityModeCommand			
28		[px_CipheringOnOff]			Ciphering and Integrity

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
29	TSP1	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.uL_Int egProtActivationInfo, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.rb_U L_CiphActivationTimeInfo)	car_RRC_SecModeCmpl () tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti , ?))	(P)	UL cipherin g informati on is present
30		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode ,notInc)			
31		+ ts_CRLC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			
32	TSF1	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti , ?))	(F)	
33		[NOT (px_CipheringOnOff)]			Integrity only no cipherin g
34	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.uL_Int egProtActivationInfo)	car_RRC_SecModeCmpl () tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti , OMIT))	(P)	No UL Cipherin g informati on
35		+ ts_CRLC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			
36	TSF2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti , ?))	(F)	
37		lt_SendSecurityModeCommand [pc_UMTS_GSM]			Branchin g if GSM Support ed
38		[px_CipheringOnOff]			Cipherin g ON and integrity ON

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		<pre> ((((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)] </pre>			Ciphering on TM RAB present, hence include Ciphering activation time
40		<pre> AM!RLC_AM_DATA_REQ </pre>	<pre> cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7))))) </pre>		Ciphering for signalling RBs 1 to 4
41		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
42		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,cs_UE_Sys SpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		Cipherin g for signallin g RBs 1 to 4
43		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF
44		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		
45		[NOT pc_UMTS_GSM]			Branchin g if GSM Not Support ed

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
46		[px_CipheringOnOff]			Ciphering ON and integrity ON
47		<pre> [((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS))) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)] </pre>			Ciphering on TM RAB present, hence include Ciphering activation time
48		AM!RLC_AM_DATA_REQ	<pre> cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT))) </pre>		Ciphering for signalling RBs 1 to 4
49		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		Cipherin g for signallin g RBs 1 to 4
51		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF
52		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		
53		lt_RRC_InitVariables			
54		+ lt_InitCipherMode			
55		+ lt_InitIntegrity			
56		+ ts_InitSystemSpecificCap			
57		+ ts_SaveCellInfo (p_CellId) [p_NewKey = TRUE]			Authenti cation was done, reset HFN
58		(tcv_HFN := '00000000000000000000'B)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
59		[p_CN_Domain = cs_domain]			
60		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
61		[p_CN_Domain = ps_domain]			
62		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
63		[p_NewKey = FALSE]			
64		[p_CN_Domain = cs_domain]			
65		(tcv_HFN := tcv_CellIndInfo.start_CS)			
66		[p_CN_Domain = ps_domain]			
67		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitCipherMode			
68		[px_CipheringOnOff = TRUE]			
69		[pc_UEA1_Supp]			
70		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Switch On ciphering
71		[p_CN_Domain = cs_domain]			
72		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
73		[p_CN_Domain = ps_domain]			
74		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
75		[NOT (pc_UEA1_Supp)]			
76		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			Switch On ciphering
77		[p_CN_Domain = cs_domain]			
78		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
79		[p_CN_Domain = ps_domain]			
80		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
81		[NOT (px_CipheringOnOff)]			
82		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			
83		[pc_UEA1_Supp]			
84		(tcv_CellIndInfo.cipheringAlgorithmCapability := '00000000000001'B)			
85		[NOT (pc_UEA1_Supp)]			
86		(tcv_CellIndInfo.cipheringAlgorithmCapability := '00000000000001'B)			
		lt_InitIntegrity			
87		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
88		[tcv_CellIndInfo.integrityStarted]			
89		+ts_GetRRC_MessageSN_NoSRB4 (p_CellId)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
90		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_NoSRB4(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
91		[NOT tcv_CellIndInfo.integrityStarted]			
92		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dL_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
93		lt_AssignRB_ActivationTimeInfoList (tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_NoSRB4 (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2 +2, tcv_RLC_SeqNumDL_RB3))			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Cfg_DPCH_Offset (p_CellId : INTEGER)
Group : UMTS_Specific/
Objective : to configure physical channel DPCH1 and connect DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel. Used for setting up stand-alone UL:13.6 DL:13.6 kbps SRBs
Default : SS_Def
Comments : The transport channel DCH5 carries only dedicated control channels. MAC-d is configured with cellId -1 (tsc_CellDedicated).
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_RL_Setup_REQ	ca_DL_DPCH_Info (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_SRB_StandAloneDPCH_Offset2 (tcv_TmpCellInfo.dl_DPCH_2ndScrCode))		1.
5		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_DL_DPCH1)		
6		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId, tsc_DL_DPCH1)		2.
7		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
8		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_13_6_StandAlone, c_TrLogMappingDL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH
9		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
10		CPHY!CPHY_RL_Setup_REQ	ca_UL_DPCH_Info(p_CellId, tsc_UL_DPCH1, c_UL_DPCH_13_6_StandAlone(tcv_TmpCellInfo.ul_ScramblingCode))		1.
11		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_UL_DPCH1)		
12		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId, tsc_UL_DPCH1)		2.
13		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
14		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_13_6_StandAlone, c_TrLogMappingUL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
16	ERR1	[px_RAT = tdd]		|	
17	ERR2	[TRUE]		|	
Detailed Comments : 1. configure physical channel DPCH1. 2. connect DCH5 to DPCH1. 3. map logical channels: DCCH1-4 to DCH5. MAC-d is to be configured with cellId -1.					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Modify_IR_G (p_CellId : INTEGER; p_ActTime : ActivationTime)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1 and connect DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel. Used for setting up stand-alone UL:13.6 DL:13.6 kbps SRBs
This ts is the same as ts_SS_1DCH_DCCH_Modify expect for 1. RM attribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments : The transport channel DCH5 carries only dedicated control channels.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_TrCH_Config_REQ	cd_DCH_148_TTI_10_DL_Info_RM160 (p_CellId, tsc_DL_DPCH1, p_ActTime)		2.
5		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
6		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoDL_13_6_StandAlone_RM160, c_TrLogMappingDL_4DCH, p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH
7		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
8		CPHY!CPHY_TrCH_Config_REQ	cd_DCH_148_TTI_10_UL_Info_RM160 (p_CellId, tsc_UL_DPCH1, p_ActTime)		2.
9		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_UL_DPCH1)		
10		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info(OMIT, OMIT), cd_TrChInfoUL_13_6_StandAlone_RM160, c_TrLogMappingUL_4DCH, p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH
11		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_UL_DPCH1)		
12		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			1.
13	ERR1	[px_RAT = tdd]		I	
14	ERR2	[TRUE]		I	

Detailed Comments : 1. configure physical channel DPCH1.
2. connect DCH5 to DPCH1.
3. map logical channels: DCCH1-4 to DCH5.

Test Step Dynamic Behaviour

Test Step Name : ts_SS_4DCH_Modify_IR_G (p_CellId : INTEGER; p_ActTime : ActivationTime;
p_DL_CommonInformation : DL_CommonInformation; p_UL_DPCH_Info : UL_DPCH_Info)

Group : UMTS_Specific/

Objective : to modify physical channel DPCH1 and connect DCH1, DCH2, DCH3 and DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel and map DTCH(subflow#1), DTCH(subflow#2), DTCH(subflow#3) to the DCH1, DCH2, DCH3 transport channel respectively. Used for AMR speech.
This step is same as ts_SS_4DCH_Modify except for 1. RM attribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_122_AMR_Offset2 (p_DL_CommonInformation , tcv_TmpCellInfo.dl_DPCH_2ndScrCode) ,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_4DCH_DL_Info_RM160 (p_CellId, tsc_DL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_ActTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoDL_122_AMR_RM160, c_TrLogMappingDL_4DCH_3DTCH ,p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info ,p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_4DCH_UL_Info_RM160 (p_CellId, tsc_UL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_ActTime)		2.
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoUL_122_AMR_RM160, c_TrLogMappingUL_4DCC H_3DTCH,p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		|	
16	ERR2	[TRUE]		|	
<p>Detailed Comments : 1. configure new DPCH1 for transporting conversational/speech/UL:12.2 DL:12.2 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH. 2. connect DCH1, DCH2, DCH3 and DCH5 to DPCH1. 3. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1, DTCH2 to DCH2, DTCH3 to DCH3 for both uplink and downlink and send relevant transport channel configuration information to MAC.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreateCellDCH_DPCH_Offset (p_CellId : INTEGER)

Group : UMTS_Specific/

Objective : This test Step sets up a cell with stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH which consists of the following:
 For a first cell:
 physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH and DPCH;
 transport channels: BCH, FACH, PCH, RACH, DCH;
 The DPCH Offset/DPCH FrameOffset is configured with special value
 logical channels: BCCH, CCCH, PCCH, DCCH; and
 signalling radio bearer RB0 on FACH and RACH; signalling bearer RB1, RB2, RB3, RB4 on DCH.

For cells other than the first cell
 physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH (no DPCH)
 transport channels: BCH, FACH, PCH, RACH (no DCH)
 logical channels: BCCH, CCCH, PCCH (no DCCH)
 signalling radio bearer RB0 on FACH and RACH (not RB1 RB2 RB3 RB4 on DCH)

Default : InitOtherwiseFail

Comments : Cell configuration supporting UL:3.4 DL:3.4 kbps stand-alone signalling RB.
 CRLC is configured with cellId -1 (tsc_CellDedicated)
 CMAC for DCCH (MAC-d) is configured with cellId -1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ts_SS_PCH_FACH_CCCH_Cfg(p_CellId)			
4		+ts_SS_RACH_CCCH_Cfg(p_CellId)			
5		+ ts_CountConfiguredCell			
6		[tcv_NumCfgCell = 0]			First cell to be created
7		+ts_SS_1DCH_DCCH_Cfg_DPCH_Offset(p_CellId)			
8		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
9		+ts_SS_RB_PCCH_Cfg(p_CellId)			
10		+ts_SS_RB0_Cfg (p_CellId)			
11		+ts_SS_RB1_ToRB4_Cfg			
12		(tcv_TmpCellInfo.DL_DPCH_S HO := TRUE, tcv_TmpCellInfo.UL_DPCH_S HO := TRUE, tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_No Conn)			
13		+ ts_SaveCellInfo (p_CellId)			1.
14		[tcv_NumCfgCell <> 0]			Next cell to be created
15		+ ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
16		+ ts_SS_RB_PCCH_Cfg(p_CellId)			
17		+ ts_SS_RB0_Cfg(p_CellId)			
18		+ ts_SetCellCfg (p_CellId, cell_NoDPCH)			1.

Detailed Comments : 1. Set the cell configuration in the CellInfoCfg record

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB2_RB3_ReCfg
Group : UMTS_Specific/
Objective : To setup radio bearers : RB2 and RB3 as per values specified in 25.331 Sec 13.7 for 60.x test cases.
Default : SS_Def
Comments : CRLC is Reconfigured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_IR_G (tsc_CellDedicated, tsc_RB2, {uLogicalChannelIdentity tsc_UL_DCCH2, dLogicalChannelIdentity tsc_DL_DCCH2}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_IR_G (tsc_CellDedicated, tsc_RB3, {uLogicalChannelIdentity tsc_UL_DCCH3, dLogicalChannelIdentity tsc_DL_DCCH3}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		

Detailed Comments : ANITE Added this step

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB2_RB3_ReCfg_DefCfg1
Group : UMTS_Specific/
Objective : To setup radio bearers : RB2 and RB3 as per values specified in 25.331 Sec 13.7, default config 1, for 60.4
Default : SS_Def
Comments : CRLC is Reconfigured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_DefCfg1 (tsc_CellDedicated, tsc_RB2, {uLogicalChannelIdentity tsc_UL_DCCH2, dLogicalChannelIdentity tsc_DL_DCCH2}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_DefCfg1 (tsc_CellDedicated, tsc_RB3, {uLogicalChannelIdentity tsc_UL_DCCH3, dLogicalChannelIdentity tsc_DL_DCCH3}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		

Detailed Comments : ANITE Added this step

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Reconf_DPCH_Speech (p_CellId : INTEGER)
Group : UMTS_Specific/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ts_SS_RB2_RB3_ReCfg			
3		+ ts_CalculateActTime (p_CellId)			
4		+ts_SS_4DCH_Modify_IR_G (p_CellId , tcv_ActTime, c_DL_CommonInformationRB_SetUpSpeech (tsc_DL_DPCH1_SFP_Speech), cb_UL_DPCH_Info (tsc_UL_DPCH_SF_Speech, pl0_84, tcv_TmpCellInfo.uL_ScramblingCode)			
5)			
6		+ts_SS_RB10_ToRB12_TM_Cfg + ts_SetCellCfg (p_CellId, tcv_RRC_RAB_Type)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Reconf_DPCH_StreamingUnknown14_4k_28_8k_57_6k (p_CellId : INTEGER ; p_ActTime : ActivationTime)
Group : UMTS_Specific/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ts_SS_RB2_RB3_ReCfg			
3		[tcv_ISHO_SubtestCounter = 1]			For 14.4kpbs
4		+ ts_2DCH_ModifyStreamUnknown14_4_IR_G (p_CellId, p_ActTime, c_DL_CommonInformationRB_SetUp (tsc_Sfd128_8), cb_UL_DPCH_Info (tsc_Sf64, pl1, tcv_TmpCellInfo.uL_ScramblingCode), c_DCH_576_TFS_2)			
5		+ts_SS_RB10_TM_Cfg (576)			
6		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
7		[tcv_ISHO_SubtestCounter = 2]			For 28.8kpbs
8		+ ts_2DCH_ModifyStreamUnknown28_8_IR_G (p_CellId, p_ActTime, c_DL_CommonInformationRB_SetUp (tsc_Sfd64), cb_UL_DPCH_Info (tsc_Sf32, pl1, tcv_TmpCellInfo.uL_ScramblingCode), c_DCH_576_TFS_3 (155))			
9		+ts_SS_RB10_TM_Cfg (576)			
10		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
11		[tcv_ISHO_SubtestCounter = 3]			For 57.6kpbs
12		+ts_SS_2DCH_Modify (tsc_CellA , c_DCH_576_148_UL_Info_RM160 (tcv_ActTime) , c_DCH_576_148_DL_Info_RM160 (tcv_ActTime) , c_TrChInfoUL_576_148_RM160, c_TrChInfoDL_576_148_RM160, c_TrLogMappingUL_2, c_TrLogMappingDL_2, p_ActTime, cd_DL_DPCH_64K_CS_Offset2 (c_DL_CommonInformationDCH_ToDCH_Offset1 (tsc_DL_DPCH1_SFP_Streaming, TRUE), tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		Streaming , pI0_96, tcv_TmpCellInfo.uL_ScramblingCode))			
14		+ts_SS_RB10_TM_Cfg (576) + ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Reconf_DPCH_StreamingUnknown28_8k_57_6k (p_CellId : INTEGER ; p_ActTime : ActivationTime)
Group : UMTS_Specific/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ts_SS_RB2_RB3_ReCfg			
3		[tcv_ISHO_SubtestCounter = 1]			For 28.8kpbs
4		+ ts_2DCH_ModifyStreamUnknown28_8_IR_G (p_CellId, p_ActTime, c_DL_CommonInformationRB_SetUp (tsc_Sfd64), cb_UL_DPCH_Info (tsc_Sf32, pl1, tcv_TmpCellInfo.uL_ScramblingCode), c_DCH_576_TFS_3 (155))			
5		+ts_SS_RB10_TM_Cfg (576)			
6		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
7		[(tcv_ISHO_SubtestCounter = 2) OR (tcv_ISHO_SubtestCounter = 3)]			For 57.6kpbs
8		+ts_SS_2DCH_Modify (tsc_CellA , c_DCH_576_148_UL_Info_RM160 (tcv_ActTime), c_DCH_576_148_DL_Info_RM160 (tcv_ActTime), c_TrChInfoUL_576_148_RM160, c_TrChInfoDL_576_148_RM160, c_TrLogMappingUL_2, c_TrLogMappingDL_2, p_ActTime, cd_DL_DPCH_64K_CS_Offset2 (c_DL_CommonInformationDCH_ToDCH_Offset1 (tsc_DL_DPCH1_SFP_Streaming, TRUE), tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_Streaming, pl1, tcv_TmpCellInfo.uL_ScramblingCode))			
9		+ts_SS_RB10_TM_Cfg (576)			
10		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SSconfigToInitialState_DPCHOffset(p_CellId:INTEGER)
Group : UMTS_Specific/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_RelDPCH (p_CellId)			Release RAB/RAB's 1.
2		+ts_SS_1DCH_DCCH_Cfg_DPCH_Offset(p_CellId)			
3		+ts_SS_RB1_ToRB4_Cfg			
4		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
5		+ts_SS_ResetSecurityKey			

Detailed Comments : 1. configure DPCH1supporting13.6 kbps Signalling RB.

Test Step Dynamic Behaviour

Test Step Name : ts_SendDefSysInfoMulRatHo(p_CellId: INTEGER; p_SIB16 : SysInfoType16)
Group : UMTS_Specific/
Objective : To broadcast default system information.
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch record corresponding to current cell
2		+ ts_UTRAN_GERAN_ParaInit(p_CellId)			
3		+ts_CellDependentPara(p_CellId)			
4		[px_RAT = fdd]			
5		(tcv_SB1 := c_SB1_MulRatHo, tcv_MIB := c_MIB_MulRatOrBMC(tcv_TmpCellInfo))			
6		+ts_SendNoSegMulRatHo(p_CellId)			
7		+ts_SendSIB1_MulRatOrBMC (cb_SIB1_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
8		+ts_SendSIB2_MulRatOrBMC(c_SIB2_Def (tcv_TmpCellInfo), p_CellId, tsc_Now)			
9		+ts_SendSIB3_MulRatOrBMC(tcv_SIB3, p_CellId, tsc_Now)			
10		+ts_SendSIB4_MulRatOrBMC(tcv_SIB4, p_CellId, tsc_Now)			
11		+ts_SendSIB5_MulRatHo(cd_SIB5_DefMulRatHo(tcv_TmpCellInfo), p_CellId, tsc_Now)			
12		+ts_SendSIB7_MulRatOrBMC(cd_SIB7_DefMulRatHo, p_CellId, tsc_Now)			
13		+ts_SendSIB11_MulRatOrBMC(cd_SIB11_InterRATNoSIB12Ind (tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_G_CellInfoA, tcv_G_CellInfoB), p_CellId, tsc_Now)			
14		+ts_SendSIB16_MulRatHo (p_SIB16 , p_CellId, tsc_Now)			
15		+ts_SendSIB18_MulRatOrBMC(c_SIB18_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
16		+ts_SendSB1_MulRatOrBMC(tcv_SB1, p_CellId, tsc_Now)			
17		+ts_SendMIB(tcv_MIB , p_CellId, tsc_Now)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18	ERR1	[px_RAT = tdd]		|	
19	ERR2	[TRUE]		|	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendNoSegMulRatHo(p_CellId : INTEGER)
Group : UMTS_Specific/
Objective : To deliver the system information message with NoSegment to SS on the frames on which there is no any SIB/MIB/SB scheduled
Default : InitOtherwiseFail
Comments : Current scheduling assumption:
 Repetition period: 128;
 Not scheduled positions: 3, 14, 46, 61, 62, 63.
 Above unscheduled positions can be used for other SIBs later, if so this test Step shall be modified accordingly.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_Scheduling(p_CellId, 7, 3, tsc_Now)			pos = 3
2		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
3		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
4		+ts_Scheduling(p_CellId, 7, 14, tsc_Now)			pos = 14
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
7		+ts_Scheduling(p_CellId, 7, 46, tsc_Now)			pos = 46
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
10		+ts_Scheduling(p_CellId, 7, 61, tsc_Now)			pos = 61
11		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
13		+ts_Scheduling(p_CellId, 7, 62, tsc_Now)			pos = 62
14		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
16		+ts_Scheduling(p_CellId, 7, 63, tsc_Now)			pos = 63
17		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
18		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB16_MulRatHo(p_SIB: SysInfoType16; p_CellId : INTEGER; p_Timing: INTEGER)
Group : UMTS_Specific/
Objective : To deliver the SIBType16 to SS
Default : InitOtherwiseFail
Comments : used for multi-rat handover test cases
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB16 : p_SIB)))			1.
2		[tcv_Segs.segCount >8]		I	2.
3		[tcv_Segs.segCount <=8]			
4		+It_SendNoSegments			
5		[tcv_Segs.segCount = 1]			
6		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag := ((tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag) +1) MOD 16, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul1)			
7		+ts_ChangeSB1_ValueTag			
8		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
9		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		+It_CompleteSIB(systemInformation BlockType16)			4.
11		[tcv_Segs.segCount = 2]			
12		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul2)			
13		+ts_ChangeSB1_ValueTag			
14		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
15		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType16, 2, tcv_Segs.seg1))		4.
17		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
18		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		[LENGTH_OF(tcv_Segs.seg2) <= 214]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
21		[TRUE]			
22		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
23		[tcv_Segs.segCount = 3]			
24		(tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB16_Schedul3)			
25		+ts_ChangeSB1_ValueTag			
26		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
27		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 3, tcv_Segs.seg1))		4.
29		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
30		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
31		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
32		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
33		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
34		[LENGTH_OF(tcv_Segs.seg3) <= 214]			
35		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
36		[TRUE]			
37		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
38		[tcv_Segs.segCount = 4]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul4)			
40		+ts_ChangeSB1_ValueTag			
41		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
42		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType16, 4, tcv_Segs.seg1))		4.
44		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
45		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
46		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType16, 1, tcv_Segs.seg2))		6.
47		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
48		CMAC?CMAC_SYSINFO_ Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
49		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType16, 2, tcv_Segs.seg3))		8.
50		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
51		CMAC?CMAC_SYSIN FO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
52		[LENGTH_OF(tcv_S egs.seg4) <= 214]			
53		TM!RLC_TR_DATA _REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(sys temInformationBlockType16, 3, tcv_Segs.seg4))		10.
54		[TRUE]			
55		TM!RLC_TR_DATA _REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType16, 3, tcv_Segs.seg4))		10.
56		[tcv_Segs.segCount = 5]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
57		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul5)			
58		+ts_ChangeSB1_ValueTag			
59		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
60		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
61		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 5, tcv_Segs.seg1))		4.
62		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
63		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
64		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
65		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
66		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
67		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
68		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
69		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
70		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
71		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
72		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
73		[LENGTH_OF(tcv_Segs.seg5) <= 214]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
77		[tcv_Segs.segCount = 6]			
78		(tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB16_Schedule6)			
79		+ts_ChangeSB1_ValueTag			
80		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
81		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
82		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 6, tcv_Segs.seg1))		4.
83		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
84		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
85		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
86		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
87		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
88		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
89		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
90		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
91		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
92		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
93		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
94		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
95		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
96		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
97		[LENGTH_OF(tcv_Segs.seg6) <= 214]			
98		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
99		[TRUE]			
100		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
101		[tcv_Segs.segCount = 7]			
102		(tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.systemInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB16_Schedul7)			
103		+ts_ChangeSB1_ValueTag			
104		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
105		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
106		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 6, tcv_Segs.seg1))		4.
107		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
108		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
109		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
110		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
111		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
112		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
113		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
114		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
115		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
116		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
117		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
118		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
119		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
120		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
121		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
122		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
123		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
124		[LEN GTH_ OF(tc v_Se gs.se g7) <= 214]			
125		TM! RLC _TR _DA TA_ RE Q	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType16, 6, tcv_Segs.seg7))		16.
126		[TRU E]			
127		TM! RLC _TR _DA TA_ RE Q	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType16, 6, tcv_Segs.seg7))		16.
128		[tcv_Segs.segCount = 8]			
129		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sy sInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul8)			
130		+ts_ChangeSB1_ValueTag			
131		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
132		CMAC?CMAC_SYSINFO_Config_CN F	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
133		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType16, 6, tcv_Segs.seg1))		4.
134		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
135		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
136		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType16, 1, tcv_Segs.seg2))		6.
137		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
138		CMAC?CMAC_SYSINFO_ Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
139		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
140		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
141		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
142		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
143		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
144		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
145		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
146		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
147		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
148		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
149		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
150		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
151		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 6, tcv_Segs.seg7))		16.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
152			+ts_Scheduling(p_CellId, 7, 55, p_Timing)		17.
153			CMAC ? CMAC ? SYNOCONF - Config - CONF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)	
154					
155				ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 7, tcv_Segs.seg8))	18.
156					
157				ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 7, tcv_Segs.seg8))	18.
158		It_CompleteSIB(p_SIBType : SIB_Type) [LENGTH_OF(tcv_Segs.seg1) = 226]			
159		TM!RLC_TR_DATA_REQ		ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))	4.
160		[TRUE]			
161		TM!RLC_TR_DATA_REQ		ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))	4.
		It_SendNoSegments			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
162		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
163		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
164		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
165		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
166		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
167		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
168		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
169		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
170		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
171		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
172		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
173		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
174		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
175		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
176		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
177		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
178		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
179		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
180		+ts_Scheduling(p_CellId, 7, 55, p_Timing)			17.
181		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
182		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
183		+ts_Scheduling(p_CellId, 7, 61, p_Timing)			remove possible SIB12

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
184		CMAC?CM AC_SYSINF O_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
185		TM!RLC_T R_DATA_R EQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
186		+ts_Sche duling(p_ CellId, 7, 62, p_Timing)			remove possible SIB12
187		CMAC ?CMA C_SYS INFO_ Config_ _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
188		TM!R LC_T R_DA TA_R EQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
<p>Detailed Comments :</p> <ol style="list-style-type: none"> 1. Unaligned PER encoding of the SIB16 then segmentation. 2. The segmentation shall result in one to eight segments for the SIB16 (current assumption). 3. Send the scheduling info for first segment to SS.(one segment; REP=128; POS=35). 4. Construct the first system information message containing first segment of SIB16 and send it to SS. 5. Send the scheduling info for second segment to SS.(one segment; REP=128; POS=37). 6. Construct the second system information message containing second segment of SIB16 and send it to SS. 7. Send the scheduling info for third segment to SS.(one segment; REP=128; POS=38). 8. Construct the third system information message containing third segment of SIB16 and send it to SS. 9. Send the scheduling info for forth segment to SS.(one segment; REP=128; POS=39). 10. Construct the forth system information message containing forth segment of SIB16 and send it to SS. 11. Send the scheduling info for fifth segment to SS.(one segment; REP=128; POS=51). 12. Construct the fifth system information message containing fifth segment of SIB16 and send it to SS. 13. Send the scheduling info for sixth segment to SS.(one segment; REP=128; POS=53). 14. Construct the sixth system information message containing sixth segment of SIB16 and send it to SS. 15. Send the scheduling info for seventh segment to SS.(one segment; REP=128; POS=54). 16. Construct the seventh system information message containing seventh segment of SIB16 and send it to SS. 17. Send the scheduling info for eighth segment to SS.(one segment; REP=128; POS=55). 18. Construct the eighth system information message containing eighth segment of SIB16 and send it to SS. 19. Send no segment system information message to SS when the number of segments is less than 8. 					

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB5_MulRatHo(p_SIB: SysInfoType5; p_CellId : INTEGER; p_Timing: INTEGER)
Group : UMTS_Specific/
Objective : To deliver the SIBType5 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB5 : p_SIB)))			1.
2		[tcv_Segs.segCount >4]		I	2.
3		[tcv_Segs.segCount <=4]			
4		[tcv_Segs.segCount = 1]			
5		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
6		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
7		+lt_CompleteSIB(systemInformationBlock Type5)			4.
8		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
9		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
11		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
12		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
14		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
15		CMAC?CMAC_SYSINFO_ Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
17		(tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5 := (tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5) MOD 4 + 1, tcv_MIB.sibSb_Referenc eList.[5].scheduling := c_SIB5_Schedul1_MulRa tOrBMC)			
18		+ts_ChangeMIB_Value Tag			
19		[tcv_Segs.segCount = 2]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul2_MulRatOrBMC)			
21		+ts_ChangeMIB_ValueTag			
22		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
26		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
28		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType5, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
32		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Seg s.seg2) <= 214]			
34		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType5, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType5, 1, tcv_Segs.seg2))		7.
37		[tcv_Segs.segCount = 3]			
38		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul3_MulRatOrBMC)			
39		+ts_ChangeMIB_ValueTag			
40		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
43		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
44		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType5, 3, tcv_Segs.seg1))		4.
46		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
47		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 1, tcv_Segs.seg2))		7.
49		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
50		CMAC?CMAC_SYSINFO_O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
51		[LENGTH_OF(tcv_Segs.seg3) <= 214]			
52		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
53		[TRUE]			
54		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
55		[tcv_Segs.segCount = 4]			
56		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type.sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type.sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul4_MulRatOrBMC)			
57		+ts_ChangeMIB_ValueTag			
58		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
59		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
60		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType5, 4, tcv_Segs.seg1))		4.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
61		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
62		CMAC?CMAC_SYSINFO_Config_CNf	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
63		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 1, tcv_Segs.seg2))		7.
64		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
65		CMAC?CMAC_SYSINFO_Config_CNf	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
66		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
67		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
68		CMAC?CMAC_SYSINFO_Config_CNf	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
69		[LENGTH_OF(tcv_Segs.seg4) <= 214]			
70		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType5, 3, tcv_Segs.seg4))		11.
71		[TRUE]			
72		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType5, 3, tcv_Segs.seg4))		11.
73		It_CompleteSIB(p_SIBType : SIB_Type) [LENGTH_OF(tcv_Segs.seg1) = 226]			
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.
<p>Detailed Comments : 1. Unaligned PER encoding of the SIB5 then segmentation. 2. The result of segmentation shall be one or two or four segments for the SIB5 (current assumption). 3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=19. 4. Construct the first system information message containing first segment of SIB5 and send it to SS. 5. Send the scheduling info for second segment to SS. one segment: REP=128, POS=21. 6. Send no segment system information message to SS. 7. Construct the second system information message containing second segment of SIB5 and send it to SS.</p>					

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour	
Detailed Comments : ...	
8. Send the scheduling info for third segment to SS. one segment: REP=128, POS=22.	
9. Construct the third system information message containing third segment of SIB5 and send it to SS.	
10. Send the scheduling info for third segment to SS. one segment: REP=128, POS=23.	
11. Construct the fourth system information message containing fourth segment of SIB5 and send it to SS.	

Test Step Dynamic Behaviour					
Test Step Name : ts_SetDL_RRC_MessageSN_NoSRB4 (p_ActCell : INTEGER)					
Group : UMTS_Specific/					
Objective : To Set the Message sequence number in DL to all 0 for RB0 to RB3					
Default : SS_Def					
Comments : This step to be used when Integrity is to be started					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ (p_ActCell, tsc_RB0, 0)		
2		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (p_ActCell, tsc_RB0)		
3		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB1, 0)		
4		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB2, 0)		
6		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB3, 0)		
8		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB3)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_U_GPRSAttach(p_CellId : INTEGER)
Group : UMTS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUE ST – Extract Attach type requeste d
3		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
4		+ts_GMM_Authentication (p_CellId)			AUTHE NTICATI ON AND CIPHER ING REQUE ST AUTHE NTICATI ON AND CIPHER ING RESPO NSE
5		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE
6		(tcv_AssignedPTMSI := px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('001'B), c_RAI_v(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature(tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI(tcv_AssignedPTMSI,-))		ATTACH ACCEPT for PS only - Attach result 'GPRS attached' - RAI default (RAI-1) - P-TMSI -1 signature - MobileId P-TMSI -1 - omit TMSI
8		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_RAUpdate_AuthCiph_NoSRB4(p_CellId : INTEGER; p_FOR : B1; p_UpdateType : B3)
Group : UMTS_Specific/
Objective : Perform appropriate signalling to re-establish the connection after moving from GERAN to UTRAN, including Authentication and Ciphering
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (		ROUTIN G AREA UPDATI NG REQUE ST
2		+It_SendAccept	c_GMM_UpdateType_v(p_FOR, p_UpdateType), ?, ?)		
3		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (	(F)	ROUTIN G AREA UPDATI NG REQUE ST wrong type
4		+It_SendAccept	c_GMM_UpdateType_v(?, ?, ?, ?)		
5		It_SendAccept			
6		+ts_GMM_Authentication (p_CellId)			
7		(tcv_TmpB3 := '000'B)			
8		+It_DoSecurity			
8		+ ts_SetTmpCellInfo (p_CellId)			Get cell info of new UTRAN cell
9		Dc ! RRC_DataReq	ca_PS_DataReq (		ROUTIN G AREA UPDATI NG ACCEP T Send back appropri ate update type
			tsc_CellDedicated, tsc_RB3, cs_RA_UpdAcc3 (
			c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (
			tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (px_PTMSI_SigDef),		
			c_MobileIdPTMSI (px_PTMSI_Def, -))		
10		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		
		It_DoSecurity			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		+ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
12		+ ts_RRC_Security_NoSRB4 (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CellChange_RAUpdate(p_CellId : INTEGER; p_FOR : B1; p_UpdateType : B3; p_SecurityReqd : BOOLEAN)
Group : UMTS_Specific/
Objective : Perform appropriate signalling to re-establish the connection after moving from GERAN to UTRAN
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (		ROUTIN G AREA UPDATI NG REQUE ST
2		+lt_SendAccept	c_GMM_UpdateType_v(p_FOR, p_UpdateType), ?, ?)		
3		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (	(F)	ROUTIN G AREA UPDATI NG REQUE ST wrong type
4		+lt_SendAccept	c_GMM_UpdateType_v(?, ?, ?)		
5		lt_SetUpdateResult			
6		[pc_PS AND pc_CS]			
7		(tcv_TmpB3 := '001'B)			
8		[pc_PS]			
9		(tcv_TmpB3 := '000'B)			
10		lt_SendAccept			
11		+lt_SetUpdateResult			
12		+lt_DoSecurity			
		+ ts_SetTmpCellInfo (p_CellId)			Get cell info of new UTRAN cell
12		Dc ! RRC_DataReq	ca_PS_DataReq (		ROUTIN G AREA UPDATI NG ACCEP T Send back appropri ate update type
			tsc_CellDedicated, tsc_RB3, cs_RA_UpdAcc3 (
			c_GMM_UpdateResult_v(tcv_TmpB3),		
			c_RAI_v (
			tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac),		
			c_PTMSI_Signature (px_PTMSI_SigDef),		
			c_MobileIdPTMSI (px_PTMSI_Def), -)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		
14		+lt_RRC_ConnRel			
15		lt_DoSecurity			
16		[p_SecurityReqd]			
17		+ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
18		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
19		[NOT p_SecurityReqd]			
20		lt_RRC_ConnRel			
		[tcv_TmpRAU_ReqPDU.updateType.for = '0'B]			if no follow on request, release connection
		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dch)			
22		[tcv_TmpCellInfo.cellConfig <> cell_FACH]			
23		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			
24		[TRUE]			another procedure to follow, so don't release connection
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU1 (p_GCellId : INTEGER)
Group : GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_GCellId)			
2		+ ts_AT_InitCallCS			
3		+ts_G_RR_Con_Est (p_GCellId)			
4		+ts_G_CMServiceReq_MO(p_GCellId)			
5		START t_ReceiveMessageTimer (5)			
6		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ? , cr_G_ClassmarkChangeAny)		SI message s indicate early classmar k sending
7		+lt_ReceiveUTRANClassmark			
8		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcvc_G_Utran ClassmarkChange.uTRANPreConfigInf o.value, ?))			
9		(tcv_StartList.[0].cn_DomainIdentity := tsc_CS_Domain, tcv_StartList.[0].start_Value := tcv_ResAndStartValue.start)			
10		+lt_Continue			
11		?TIMEOUT t_ReceiveMessageTimer			
12		[pc_GPRS]		(F)	UEs which support GPRS have to send classmar k here
13		+lt_Continue			
14		[NOT pc_GPRS]		(F)	CS only UEs
15		+lt_Continue			
		lt_Continue			
16		+ts_G_Authentication (p_GCellId)			
17		[px_GSM_CipheringOnOff='1'B]			Cipherin g
18		+ts_G_Ciphering_Mode_Setting (p_GCellId, tsc_PhyCh0)			
19		+ts_G_Rcv_SetUp (p_GCellId)			Then wait for Setup
20		[TRUE]			No Cipherin g

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_GCellId, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, c_CM_ServAcP)		Send CM Service Accept because not doing ciphering here
22		+ts_G_Rcv_SetUp (p_GCellId)			Then wait for Setup
23		It_ReceiveUTRANClassmark G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	can receive these in either order
24		+ts_G_ReceiveOptSuspend(tsc_PhyCh0, ?)			
25		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, tsc_PhyCh0, ?, ?, ?, cr_GPRS_SUSPENSIONREQ(?, ?, ?))		to Receive Suspension Msg if Mode B UE
26		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU10_MT(p_CellId : CellId)
Group : GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ_PCH (p_CellId , px_IMSI_Def, tcv_G_CellConfigInfo.cCCH_CONF, 6 , c_G_PagingRequest1_TMSI_Def)		
3		START t_CampResponseTimer(33)			
4		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst) CANCEL t_CampResponseTimer	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , c_G_ChannelReq_Any)		Receive CHANNEL REQUE ST message
5		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			MS camped on cell1.
6		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId , tsc_PhyCh0 , 3 , 15 , c_G_RFN_Omit , cs_ImmediateAssignment (tcv_G_CellConfigInfo.bCCH_Freq , tcv_G_CellConfigInfo.bcc , tcv_RR_RA , tcv_RR_RFN))		Send immediat e assignm ent message
7		START t_T3101			Stat 33 secs timer for camping.
8		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType := G_L2_L2Estab_IND.g_LogicChType , tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel) CANCEL t_T3101	cabr_G_L2_L2Estab_IND (p_CellId , ? , ? , ? , c_PagRsp (? , c_G_MobileIdTMSI_Iv))	(P)	paging respons e
9		START t_ReceiveMessageTimer (5)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChangeAny)		SI message s indicate early classmar k sending
11		+lt_ReceiveUTRANClassmark			
12		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G _UtranClassmarkChange.uTRA NPreConfigInfo.value, ?))			
13		(tcv_StartList.[0].cn_DomainI dentity := tsc_CS_Domain, tcv_StartList.[0].start_Value := tcv_ResAndStartValue.start)			
14		+lt_Continue			
15		?TIMEOUT t_ReceiveMessageTimer			
16		[pc_GPRS]		(F)	UEs which support GPRS have to send classmar k here
17		+lt_Continue			
18		[NOT pc_GPRS]		(F)	CS only UEs
19		+lt_Continue			
20		G_L2?OTHERWISE CANCEL t_T3101		(F)	
21		?TIMEOUT t_CampResponseTimer		(F)	
22		lt_Continue			
23		+ts_G_Authentication (p_CellId)			
24		+ts_G_Ciphering_Mode_Setting (p_CellId, tsc_PhyCh0)			
25		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_PhyCh0, tcv_RR_ChannelType , tcv_RR_Subchannel , c_G_RFN_Omit, tcv_SetupMT)		
26		START t_ReceiveMessageTimer (2)			
27		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_CallConfAny)		
28		+ts_G_Assignment (p_CellId)			
29		+ lt_ReceiveConnectOrAlerting			
30		G_L2 ! G_L2_Release_REQ	cas_G_L2_Release_REQ(tsc _GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)		
30		G_L2 ? G_L2_Release_CNF	ca_G_L2_Release_CNF		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
31		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_G_TrchId1, tcv_RR_ChannelType2 , tcv_RR_Subchannel2 , c_G_RFN_Omit, cs_ConnAck (tcv_TI_S))		
32		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
33		?TIMEOUT t_ReceiveMessageTimer It_ReceiveConnectOrAlerting		(F)	
34		START t_ReceiveMessageTimer(20)			
35		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_Alert (?))		
36		+ts_AT_AnswerCall			
37		START t_ReceiveMessageTimer(60)			
38		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_Connect (?))		
39		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer It_ReceiveUTRANClassmark	c_G_L2_DATA_IND (p_CellId, cr_Connect (?))		
40		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ? , ? , ? , cr_G_UtranClassmarkChange)	(P)	can receive these in either order
41		+ts_G_ReceiveOptSuspend(tsc_PhyCh0, ?)			
42		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, tsc_PhyCh0, ? , ? , ? , cr_GPRS_SUSPENSIONREQ(?,?,?))		to Receive Suspension Msg if Mode B UE
43		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ? , ? , ? , cr_G_UtranClassmarkChange)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU10_MT_Speech (p_CellId : CellId)

Group : GSM_Specific/

Objective :

Default : IntersystemDef

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_CC_InitTCV_MT_ForMultiRAT (speech_12_2k)			
2		+ts_G_CC_EnterU10_MT (p_CellId)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_InitAssignmentCmd_HR (p_CellId : CellId ; p_ChMode : ChMode)
Group : GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		<pre> [(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test) OR (px_GSM_BandUnderTest =tsc_GSM_480Band_Test) OR (px_GSM_BandUnderTest =tsc_GSM_480Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_850Band_Test)]</pre>			
2		<pre> (tcv_AssignmentCommand := cs_G_AssignmentCommand (tcv_Ch_Mode , c_ChannelDescr2_FH (INT_TO_BIT ((2 + BIT_TO_INT (tsc_G_TCH_H_SubA)), 5), tsc_G_TS0, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 16) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))</pre>			
3		<pre> [(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]</pre>			
4		<pre> (tcv_AssignmentCommand := cs_G_AssignmentCommand (tcv_Ch_Mode , c_ChannelDescr2_FH (INT_TO_BIT ((2 + BIT_TO_INT (tsc_G_TCH_H_SubA)), 5), tsc_G_TS0, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 16) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_9, tcv_G_CellInfoA.cipherMode))</pre>			different mobile alloc
5		[TRUE]		(I)	Inconclusive

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_CheckTimeFrames(p_Frame1, p_Frame2 : INTEGER)
Group : GSM_Specific/
Objective :
Default : IntersystemDef
Comments : tcv_RFN2 and tcv_RR_RFN are expected to contain the correct values before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GetFNFromRFN(tcv_RR_RFN, tcv_FN1)			
2		+ts_GetFNFromRFN(tcv_RFN2, tcv_FN2)			
3		[tcv_FN2 - tcv_FN1 = p_Frame1]		(P)	
4		[tcv_FN2 - tcv_FN1 = p_Frame2]		(P)	
5		[TRUE]		(F)	has to match passed in frame no.s

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GERANIdleUpdated(p_CellId : INTEGER; b_PBCCH : GPRSCellConfiguration)
Group : GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Expects GERANCreateCell to be called first
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_PwrOrUSIM_On(FALSE)			
2		[pc_G_operation_mode_C]			
3		[pc_AutomaticAttachSwitchON]			
4		+ts_GPRSAttach(tsc_GSM_CellA, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports mode C, do normal Attach
5		[NOT pc_AutomaticAttachSwitchON]			
6		+ts_AT_TriggerGMM_Attach			
7		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports mode C, do normal Attach
8		[NOT pc_G_operation_mode_C]			
9		[pc_GPRS]			
10		[pc_AutomaticAttachSwitchON]			
11		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports GPRS (not mode C), do combined Attach
12		[NOT pc_AutomaticAttachSwitchON]			
13		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
14		START t_WaitS(1)			
15		?TIMEOUT t_WaitS			wait for UE to relax
16		+ts_AT_TriggerGMM_Attach			
17		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports GPRS (not mode C), do combined Attach
18		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GPRSAttach(p_CellId : CellId; p_PhysicalChld : PhysicalChld; p_RLCMAC_Entity : INTEGER; b_PBCCH : GPRSCellConfiguration)

Group : GPRS_Specific/

Objective :

Default : IntersystemGPRS

Comments : Assumes GPRS channel already configured, RLCMAC Entity created, PSI messages sent (if combination 11) and User asked to turn phone on

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_UplinkTBF			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAttachReqPDU := G_LLC_UNITDATA_IND.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_SplitPGCycle := tcv_TmpAttachReqPDU.drxParameter)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		Receive GPRS Attach Request Message
3		+ts_GPRS_Authentication (p_CellId, p_PhysicalChld, b_PBCCH)			
4		(tcv_AssignedTMSI :=tsc_G_TMSI_Def, tcv_AssignedPTMSI :=px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values
5		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChld, b_PBCCH)			
6		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLCsapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_AttachAcc (c_GMM_AttachResult(tcv_ TmpB3), c_RAI_v(tcv_G_CellInfoA.m cc, tcv_G_CellInfoA.mnc, tcv_G_CellInfoA.lac, tsc_RAC_Def), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_GMM_MobileIdTMSI(tcv_ AssignedTMSI)))		ATTACH Accept
7		+lt_UplinkTBF			
8		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachComplete)		Receive GPRS Attach Comple e Message
9		lt_UplinkTBF [b_PBCCH = pbcch]			
10		+ts_UplinkTBFOnePhase_MMProc_PBCCH(p_C ellId, p_PhysicalChld)			
11		[b_PBCCH = bcch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
12		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GPRS_Authentication(p_CellId : INTEGER; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration)
Group : GPRS_Specific/
Objective : Generate authentication parameters and run the GMM Authentication
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Compute all relevant authentication parameters.
2		(tcv_GPRS_CipherAlg := px_GPRS_CipherAlg)			
3		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, b_PBCCH)			
4		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, tsc_LLC_NoCiph,		AUTHENTICATION AND CIPHERING REQUEST
			cs_G_AuthAndCiphReq (c_GMM_AuthRAND(tcv_AuthRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), tcv_GPRS_CipherAlg, c_GMM_AuthAUTN(tcv_AuthAUTN)))		using relevant PS keys computed before.
5		+lt_UplinkTBF			
6		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, c_AuthCiphRspExtAny))		AUTHENTICATION AND CIPHERING RESPONSE including both Authentication Response parameters (RES and RESext)

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the cipherin g algorith m
8		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authenti cation Respon se paramet ers match expecte d respons e.
9	TSF1	[tcv_Res = FALSE]		(F)	
10	TSP1	[tcv_Res = TRUE]		(P)	
11		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.v alue)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, -))		AUTHE NTICATI ON AND CIPHER ING RESPO NSE including only one Authenti cation Respon se paramter s (RES)
12		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the cipherin g algorith m

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, -, tcv_AuthK, tcv_AuthRAND, FALSE))			Verify that the received Authentication Response parameters match expected response.
14	TSF2	[tcv_Res = FALSE]		(F)	
15	TSP2	[tcv_Res = TRUE]		(P)	
16		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphFailureAny)	I	AUTHENTICATION AND CIPHERING Failure, then stop execution by assigning INCONCLUSIVE verdict
17		lt_UplinkTBF [b_PBCCH = pbch]			
18		+ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId, p_PhysicalChId)			
19		[b_PBCCH = bcch]			
20		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
<p>Detailed Comments : See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of authentication parameters for Test USIM) See also the detailed description in test Step ts_MM_Authentication, on which this test Step is based.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_EstablishGPRSPDPContext2(p_CellId : CellId; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration)
Group : GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_UplinkTBF			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_ActPDP_ContextReq := G_LLC_UNITDATA_IND.msg, tcv_TI_R := tcv_ActPDP_ContextReq.ti,	car_G_LLC_UnitData_IND(tsc_LLEntity, cr_ActPDP_ContextReqMO_Any)		
3		tcv_PktDataProtoAddr := tcv_ActPDP_ContextReq.pDP_Address			
4		+lt_PDP_Address			
5		+lt_SendPDPAccept			
6		START t_WaitS(2)			
7		?TIMEOUT t_WaitS			
8		lt_PDP_Address			
9		[tcv_PktDataProtoAddr.length = '02'O]			Static address NOT included
10		(tcv_Len:= LENGTH_OF((o_IA5_IP_ToOct (px_PDP_IP_AddrInfoDCH, tcv_IPv4_Flag))) + 2)			Calculate the length field
11		(tcv_LenBit:= o_IntToOct(tcv_Len, 1))			Convert length in INTEGER into bits
12		[TRUE]			
13		(tcv_StaticPDP_AddressReceived := TRUE)			Static address included, so don't need to send one back
14		lt_UplinkTBF			
15		[b_PBCCH = pbcch]			
16		+ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId, p_PhysicalChId)			
17		[b_PBCCH = bcch]			
18		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
19		lt_SendPDPAccept			
20		+ts_SetTI_Rsp(tcv_TI_R)			
21		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, b_PBCCH)			
22		[tcv_StaticPDP_AddressReceived = FALSE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_PDPContextAccept (tcv_TI_S, c_LLC_SAPI_11, c_QoS_PDP2, cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH, tcv_IP_TypeNo, tcv_IPv4_Flag), c_ProtoCfgOpt_PDP2))		Include PDP address
20		[tcv_StaticPDP_AddressReceived = TRUE]			
21		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_PDPContextAccept (tcv_TI_S, c_LLC_SAPI_11, c_QoS_PDP2, OMIT, c_ProtoCfgOpt_PDP2))		UE already specified PDP address in Request, so don't include it here
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_AT_OrgPS_Call_Type2 (p_CellId : INTEGER)
Group : GPRS_Specific/Others/
Objective : To originate a PDP Context from the UE.
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_AT_SupportToInit_PS_Call = TRUE]			USE complete set of AT commands.
2		+ts_AT_SetQoS_Type2			
3		+lt_AssignAT_Cmd			
4		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
5		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
6		(tcv_AT_Cmd := "AT+CGACT=1,1<CR>")			ACTIVATE PDP CONTEXT message for MO
7		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
8		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
9		[pc_AT_SupportToInit_PS_Call = FALSE]			USE only CGACT to initiate a call...
10		(tcv_AT_Cmd := "AT+CGACT=1,1<CR>")			ACTIVATE PDP CONTEXT message for MO
11		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
12		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		lt_AssignAT_Cmd			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		<pre>[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)]</pre>			
14		<pre>(tcv_AT_Cmd :=o_ConcatStrg(o_ConcatStrg("AT+CGDCONT=1,""", o_ConcatStrg(o_ConcatStrg(tcv_PDP_Type, "", ""), o_ConcatStrg (o_ConcatStrg (tsc_AccessPtNameDCH,"","", ""), px_PDP_IP_AddrInfoDCH))), "",0,0<CR>"))</pre>			Prepare ACTIVA TE PDP CONTE XT message for MO

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
16		(tcv_AT_Cmd :=o_ConcatStrg(o_ConcatStrg("AT+CGDCONT=1, "", o_ConcatStrg(o_ConcatStrg(tcv_PDP_Type, "", ""), o_ConcatStrg (o_ConcatStrg (tsc_AccessPtNameFACH, "", ""), px_PDP_IP_AddrInfoFACH))), "", 0,0<CR>"))			Prepare ACTIVA TE PDP CONTE XT message for MO
17		[TRUE]		I	Program ming error
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_AT_SetQoS_Type2 Group : GPRS_Specific/Others/ Objective : This Step sets the QoS for a Type 2 PDP Context Activation Default : UT_OtherwiseFail Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_AT_Cmd := ("AT+CGEQREQ=1,3,128,128,,0,150,""1E4"" ""1E5""0,,<CR>"))			set up the QoS with the following parameters: (tcv_AT_Cmd := ("AT+CGEQREQ=1,3,128,128,,0,150,""1E4"" ""1E5""0,,<CR>"))
2		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
3		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_triggerMSToSend1KBytes Group : GPRS_Specific/Others/ Objective : Default : UT_OtherwiseFail Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please trigger UE to send 1 kbyte of data on SAPI 3")		
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf	(P)	
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnfNeg	(F)	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GetFNFromRFN(p_RFN : RFN; p_FN : INTEGER)
Group : GPRS_Specific/Others/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(p_FN := (51*((BIT_TO_INT(p_RFN.t3) - BIT_TO_INT(p_RFN.t2)) MOD 26) + BIT_TO_INT(p_RFN.t3) + (51*26*BIT_TO_INT(p_RFN.t1_))))			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_DTM_IdleUpdated(p_CellId : INTEGER; b_PBCCH : GPRSCellConfiguration; p_Timeslot : B3)
Group : DTM_Specific/
Objective :
Default : IntersystemGPRS
Comments : Expects GERANCreateCell to be called first
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_PwrOrUSIM_On(FALSE)			
2		[pc_G_operation_mode_C]			
3		[pc_AutomaticAttachSwitchON]			
4		+ts_DTM_GPRSAttach(tsc_GSM_CellA, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH, p_Timeslot)			if it supports mode C, do normal Attach
5		[NOT pc_AutomaticAttachSwitchON]			
6		+ts_AT_TriggerGMM_Attach			
7		+ts_DTM_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH, p_Timeslot)			if it supports mode C, do normal Attach
8		[NOT pc_G_operation_mode_C]			
9		[pc_GPRS]			
10		[pc_AutomaticAttachSwitchON]			
11		+ts_DTM_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH, p_Timeslot)			if it supports GPRS (not mode C), do combine d Attach
12		[NOT pc_AutomaticAttachSwitchON]			
13		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
14		START t_WaitS(1)			
15		?TIMEOUT t_WaitS			wait for UE to relax
16		+ts_AT_TriggerGMM_Attach			
17		+ts_DTM_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH, p_Timeslot)			if it supports GPRS (not mode C), do combine d Attach
18		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_DTM_GPRSAttach(p_CellId : CellId; p_PhysicalChId : PhysicalChId; p_RLCMAC_Entity : INTEGER; b_PBCCH : GPRSCellConfiguration; p_Timeslot : B3)

Group : DTM_Specific/

Objective :

Default : IntersystemGPRS

Comments : Assumes GPRS channel already configured, RLCMAC Entity created, PSI messages sent (if combination 11) and User asked to turn phone on

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_UplinkTBFOnePhase_DTM(p_CellId, p_PhysicalChId, p_Timeslot)			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAttachReqPDU := G_LLC_UNITDATA_IND.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_SplitPGCycle := tcv_TmpAttachReqPDU.drxParameter)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_iv, c_RAI_Any_v, ?))		Receive GPRS Attach Request Message
3		+ts_DTM_GPRS_Authentication (p_CellId, p_PhysicalChId, b_PBCCH, p_Timeslot)			
4		(tcv_AssignedTMSI :=tsc_G_TMSI_Def, tcv_AssignedPTMSI :=px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values
5		+ts_DownlinkTBFEstablishment_DTM(p_CellId, p_PhysicalChId, b_PBCCH, p_Timeslot)			
6		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLC_Sapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_AttachAcc (c_GMM_AttachResult(tcv_TmpB3), c_RAI_v(tcv_G_CellInfoA.mcc, tcv_G_CellInfoA.mnc, tcv_G_CellInfoA.lac, tsc_RAC_Def), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_GMM_MobileIdTMSI(tcv_AssignedTMSI)))		ATTACH Accept
7		+ts_UplinkTBFOnePhase_DTM(p_CellId, p_PhysicalChId, p_Timeslot)			
8		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachComplete)		Receive GPRS Attach Complete Message

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_DTM_GPRS_Authentication(p_CellId : INTEGER; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration; p_Timeslot :B3)

Group : DTM_Specific/

Objective : Generate authentication parameters and run the GMM Authentication

Default : IntersystemGPRS

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Compute all relevant authentication parameters.
2		(tcv_GPRS_CipherAlg := px_GPRS_CipherAlg)			
3		+ts_DownlinkTBFEstablishment_DTM(p_CellId, p_PhysicalChId, b_PBCCH, p_Timeslot)			
4		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, tsc_LLC_NoCiph,		AUTHENTICATION AND CIPHERING REQUEST
			cs_G_AuthAndCiphReq (c_GMM_AuthRAND(tcv_AuthRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), tcv_GPRS_CipherAlg, c_GMM_AuthAUTN(tcv_AuthAUTN)))		using relevant PS keys computed before.
5		+ts_UplinkTBFOnePhase_DTM(p_CellId, p_PhysicalChId, p_Timeslot)			
6		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, c_AuthCiphRspExtAny))		AUTHENTICATION AND CIPHERING RESPONSE including both Authentication Response parameters (RES and RES ext)

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the cipherin g algorith m
8		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authenti cation Respon se paramet ers match expecte d respons e.
9	TSP1	[tcv_Res = FALSE]		(F)	
10	TSP1	[tcv_Res = TRUE]		(P)	
11		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.v alue)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, -))		AUTHE NTICATI ON AND CIPHER ING RESPO NSE including only one Authenti cation Respon se paramter s (RES)
12		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the cipherin g algorith m

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, -, tcv_AuthK, tcv_AuthRAND, FALSE))			Verify that the received Authentication Response parameters match expected response.
14	TSF2	[tcv_Res = FALSE]		(F)	
15	TSP2	[tcv_Res = TRUE]		(P)	
16		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphFailureAny)	I	AUTHENTICATION AND CIPHERING Failure, then stop execution by assigning INCONCLUSIVE verdict
<p>Detailed Comments : See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of authentication parameters for Test USIM) See also the detailed description in test Step ts_MM_Authentication, on which this test Step is based.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_DTM_EstablishGPRSPDPContext2(p_CellId : CellId; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration; p_Timeslot : B3)
Group : DTM_Specific/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_UplinkTBFOnePhase_DTM(p_CellId, p_PhysicalChId, p_Timeslot)			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_ActPDP_ContextReq := G_LLC_UNITDATA_IND.msg, tcv_TI_R := tcv_ActPDP_ContextReq.ti,	car_G_LLC_UnitData_IND(tsc_LLEntity, cr_ActPDP_ContextReqMO_Any)		
3		tcv_PktDataProtoAddr := tcv_ActPDP_ContextReq.pDP_Address			
4		+lt_PDP_Address			
5		+lt_SendPDPAccept			
6		START t_WaitS(2) ?TIMEOUT t_WaitS			
7		lt_PDP_Address [tcv_PktDataProtoAddr.length = '02'O]			Static address NOT included
8		(tcv_Len:= LENGTH_OF((o_IA5_IP_ToOct (px_PDP_IP_AddrInfoDCH, tcv_IPv4_Flag))) + 2)			Calculate the length field
9		(tcv_LenBit:= o_IntToOct(tcv_Len, 1))			Convert length in INTEGER into bits
10		[TRUE]			
11		(tcv_StaticPDP_AddressReceived := TRUE)			Static address included, so don't need to send one back
12		lt_SendPDPAccept			
13		+ts_SetTI_Rsp(tcv_TI_R)			
14		+ts_DownlinkTBFEstablishment_DTM(p_CellId, p_PhysicalChId, b_PBCCH, p_Timeslot) [tcv_StaticPDP_AddressReceived = FALSE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_PDPContextAccept (tcv_TI_S, c_LLC_SAPI_11, c_QoS_PDP2, cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH, tcv_IP_TypeNo, tcv_IPv4_Flag), c_ProtoCfgOpt_PDP2))		Include PDP address
16		[tcv_StaticPDP_AddressReceived = TRUE]			
17		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_PDPContextAccept (tcv_TI_S, c_LLC_SAPI_11, c_QoS_PDP2, OMIT, c_ProtoCfgOpt_PDP2))		UE already specified PDP address in Request, so don't include it here
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MT_ForMultiRAT (p_ConfigType : RB_Type)
Group : RRCM_CC_StepsForMultiRAT/
Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MT calls.
To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
To assign the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
To assign the tcv_ActiveService test case variable, that contains the service used for the CC call
To assign the tcv_PagingCau test case variable, that contains the paging cause value used in the PAGING REQUEST message to be sent by SS to initiate the call.
To assign the tcv_TI_S and tcv_TI_R with the value 0.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B)			
2		[p_ConfigType = speech_12_2k]			
3		(tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall, tcv_ActiveService := tsc_SrvTelephony)			
4		+ ts_CC_BasicServMT (tcv_ActiveService)			
5		[(p_ConfigType = streamUnknown_57_6k) OR (p_ConfigType = streamUnknown_14_4k) OR (p_ConfigType = streamUnknown_28_8k)]			
6		(tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
7		+ It_AssignStreamingSrv			
8		[px_BcapSyncAsync = tsc_BcapASync]			
9		+ ts_CC_BS20_MT (tcv_ActiveService)			
10		+ ts_UT_ConfigUE_MT (tcv_ActiveService)			
11		[px_BcapSyncAsync = tsc_BcapSync]			
12		+ ts_CC_BS30_MT (tcv_ActiveService)			
13		+ ts_UT_ConfigUE_MT (tcv_ActiveService)			
14	ERR1	[TRUE]		|	
15	ERR2	[TRUE ]		|	
		It_AssignStreamingSrv			
16		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV120_9600]			
17		(tcv_ActiveService := tsc_SrvV120)			
18		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV120_14400]			
19		(tcv_ActiveService := tsc_SrvV120)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV120_19200]			
21		(tcv_ActiveService := tsc_SrvV120)			
22		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV120_28800]			
23		(tcv_ActiveService := tsc_SrvV120)			
24		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV120_38400]			
25		(tcv_ActiveService := tsc_SrvV120)			
26		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_AsyncV120_48000]			
27		(tcv_ActiveService := tsc_SrvV120)			
28		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncV120_56000]			
29		(tcv_ActiveService := tsc_SrvV120)			
30		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_AsyncPIAFS_32000]			
31		(tcv_ActiveService := tsc_SrvPIAFS)			
32		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncPIAFS_64000]			
33		(tcv_ActiveService := tsc_SrvPIAFS)			
34		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncFTM_56000]			
35		(tcv_ActiveService := tsc_SrvFTM)			
36		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncFTM_64000]			
37		(tcv_ActiveService := tsc_SrvFTM)			
38		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV110_9600]			
39		(tcv_ActiveService := tsc_SrvV110)			
40		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV110_14400]			
41		(tcv_ActiveService := tsc_SrvV110)			
42		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV110_19200]			
43		(tcv_ActiveService := tsc_SrvV110)			
44		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV110_38400]			
45		(tcv_ActiveService := tsc_SrvV110)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
46		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Async31kHz_9600]			
47		(tcv_ActiveService := tsc_Srv31kHz)			
48		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Async31kHz_14400]			
49		(tcv_ActiveService := tsc_Srv31kHz)			
50		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Async31kHz_19200]			
51		(tcv_ActiveService := tsc_Srv31kHz)			
52		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Async31kHz_28800]			
53		(tcv_ActiveService := tsc_Srv31kHz)			
54		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapModemType = tsc_BcapMT_Autobaud1) AND pc_Async31kHz_AutoBanding1]			
55		(tcv_ActiveService := tsc_Srv31kHz)			
56		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncV120_9600]			
57		(tcv_ActiveService := tsc_SrvV120)			
58		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncV120_14400]			
59		(tcv_ActiveService := tsc_SrvV120)			
60		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncV120_19200]			
61		(tcv_ActiveService := tsc_SrvV120)			
62		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV120_28800]			
63		(tcv_ActiveService := tsc_SrvV120)			
64		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncV120_38400]			
65		(tcv_ActiveService := tsc_SrvV120)			
66		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV120_48000]			
67		(tcv_ActiveService := tsc_SrvV120)			
68		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV120_56000]			
69		(tcv_ActiveService := tsc_SrvV120)			
70		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncX31_9600]			
71		(tcv_ActiveService := tsc_SrvX31)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
72		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncX31_14400]			
73		(tcv_ActiveService := tsc_SrvX31)			
74		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200]			
75		(tcv_ActiveService := tsc_SrvX31)			
76		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800]			
77		(tcv_ActiveService := tsc_SrvX31)			
78		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncX31_38400]			
79		(tcv_ActiveService := tsc_SrvX31)			
80		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncX31_48000]			
81		(tcv_ActiveService := tsc_SrvX31)			
82		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncX31_56000]			
83		(tcv_ActiveService := tsc_SrvX31)			
84		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Sync31kHzA_9600]			
85		(tcv_ActiveService := tsc_SrvX31)			
86		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Sync31kHzA_14400]			
87		(tcv_ActiveService := tsc_SrvX31)			
88		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Sync31kHzA_19200]			
89		(tcv_ActiveService := tsc_SrvX31)			
90	ERR3	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_DL_InitTurboSupport					
Group : RRCM_Steps/					
Objective : To initialize tcv_DL_TurboSupport.					
Default : RRC_Def1					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_DL_TC]			
2		(tcv_DL_TurboSupport := supported: px_DL_MaxTC_TB_Bits)			
3		[TRUE]			
4		(tcv_DL_TurboSupport := notSupported: NULL)			
Detailed Comments : Note: To be called prior to the test body.					

Test Step Dynamic Behaviour					
Test Step Name : ts_InitCapability					
Group : RRCM_Steps/					
Objective : To initialize local variables used in capability constraints.					
Default : RRC_Def1					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitPDCP_Capability			
2		+ts_DL_InitTurboSupport			
3		+ts_UL_InitTurboSupport			
4		+ts_InitSimultaneousSCCPCH_DPCH_Reception			
5		+ lt_InitUE_PowerClassExt			
		lt_InitUE_PowerClassExt			
6		[px_UE_PowerClass = 1]			
7		(tcv_UE_PowerClassExt := class1)			
8		[px_UE_PowerClass = 2]			
9		(tcv_UE_PowerClassExt := class2)			
10		[px_UE_PowerClass = 3]			
11		(tcv_UE_PowerClassExt := class3)			
12		[px_UE_PowerClass = 4]			
13		(tcv_UE_PowerClassExt := class4)			
14		[TRUE]			
Detailed Comments : Note: To be called prior to the test body.					

Test Step Dynamic Behaviour					
Test Step Name : ts_InitPDCP_Capability					
Group : RRCM_Steps/					
Objective : To initialize tcv_PDCP_Capability.					
Default : RRC_Def1					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_PDCP_Capability.losslessSRNS_RelocationSupport := pc_LosslessSRNS_Reloc)			
2		[pc_RFC2507]			
3		(tcv_PDCP_Capability.supportForRfc2507 := supported: px_MaxHcContextSpace)			
4		[TRUE]			
5		(tcv_PDCP_Capability.supportForRfc2507 := notSupported: NULL)			
Detailed Comments : Note: To be called prior to the test body.					

Test Step Dynamic Behaviour					
Test Step Name : ts_InitSimultaneousSCCPCH_DPCH_Reception					
Group : RRCM_Steps/					
Objective : To initialize tcv_SimultaneousSCCPCH_DPCH_Reception.					
Default : RRC_Def1					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_SimultaneousSCCPCH_DPCH_Reception]			
2		(tcv_SimultaneousSCCPCH_DPCH_Reception := supported: { maxNoSCCPCH_RL px_MaxNoSCCPCH_RL, simultaneousSCCPCH_DPCH_DPCH_Reception pc_SimultaneousSCCPCH_DPCH_DPCH_Reception })			
3		[TRUE]			
4		(tcv_SimultaneousSCCPCH_DPCH_Reception := notSupported: NULL)			
Detailed Comments : Note: To be called prior to the test body.					

Test Step Dynamic Behaviour

Test Step Name : ts_UL_InitTurboSupport
Group : RRCM_Steps/
Objective : To initialize tcv_UL_TurboSupport.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_UL_TC]			
2		(tcv_UL_TurboSupport := supported: px_UL_MaxTC_TB_Bits)			
3		[TRUE]			
4		(tcv_UL_TurboSupport := notSupported: NULL)			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSB1_MulRatOrBMC(p_SB: SysInfoTypeSB1; p_CellId : INTEGER; p_Timing : INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SysInfoTypeSB1 to SS
Default : InitOtherwiseFail
Comments : for two S-CCPCH or two PRACH (MBC) configuration or multi-Rat handover configuration.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sB1 : p_SB)))			1.
2		[tcv_Segs.segCount >2]		I	2.
3		[tcv_Segs.segCount <=2]			
4		[tcv_Segs.segCount = 1]			
5		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
6		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
7		+lt_CompleteSIB(schedulingBlock1)			4.
8		+ts_Scheduling(p_CellId, 4, 2, p_Timing)			5.
9		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
11		+ts_ChangeSB1_ValueTag			
12		(tcv_MIB.sibSb_ReferenceList.[0]. scheduling := c_SB1_Schedul1, tcv_SB1_ValueTagChanged := FALSE)			
13		[tcv_Segs.segCount = 2]			
14		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
15		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(scheduling Block1, 2, tcv_Segs.seg1))		4.
17		+ts_Scheduling(p_CellId, 4, 2, p_Timing)			5.
18		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
20		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(sche dulingBlock1, 1, tcv_Segs.seg2))		7.
21		+ts_ChangeSB1_ValueTag			
22		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul2, tcv_SB1_ValueTagChanged := FALSE)			
23		[TRUE]			

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(scheduling Block1, 1, tcv_Segs.seg2))		7.
25		+ts_ChangeSB1_ValueTag			
26		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul2, tcv_SB1_ValueTagChanged := FALSE)			
27		lt_CompleteSIB(p_SIBType : SIB_Type)			
28		[LENGTH_OF(tcv_Segs.seg1) = 226] TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
29		[LENGTH_OF(tcv_Segs.seg1) <> 226]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.
<p>Detailed Comments :</p> <ol style="list-style-type: none"> 1. Unaligned PER encoding of the SB1 then segmentation. 2. The result of segmentation shall be less than three segments for the SB1 (current assumption). 3. Send the scheduling info for first segment to SS.(one segment; REP=16; POS=1). 4. Construct the first system information message containing first segment of SB1 and send it to SS. 5. Send the scheduling info for second segment to SS.(one segment; REP=16; POS=2). 6. Send no segment system information message to SS. 7. Construct the second system information message containing second segment of SB1 and send it to SS. 					

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB11_MulRatOrBMC(p_SIB: SysInfoType11; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIBType11 to SS
Default : InitOtherwiseFail
Comments : maximum two segments, scheduled according 3GPP TS 34.123-3 clause 8.4.4.1 and 8.4.4.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation (o_SIB_PER_Encoding (sIB11 : p_SIB)))			1.
2		[tcv_Segs.segCount >3]		I	2.
3		[tcv_Segs.segCount <=3]			
4		[tcv_Segs.segCount = 1]			
5		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul1_MulRatOrBMC)			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		+It_CompleteSIB(systemInformationBlockType11)			4.
10		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
11		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
13		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
14		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
16		[tcv_Segs.segCount = 2]			
17		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul2_MulRatOrBMC)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
20		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
21		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType11, 2, tcv_Segs.seg1))		4.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
26		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
29		[TRUE]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
31		[tcv_Segs.segCount = 3]			
32		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul3_MulRatOrBMC)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
35		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType11, 3, tcv_Segs.seg1))		4.
37		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
38		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
39		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
40		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg2) <= 214]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType11, 2, tcv_Segs.seg3))		9.
44		[TRUE]			
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType11, 2, tcv_Segs.seg3))		9.
46		It_CompleteSIB(p_SIBType : SIB_Type) [LENGTH_OF(tcv_Segs.seg1) = 226]			
47		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
48		[TRUE]			
49		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.
<p>Detailed Comments :</p> <ol style="list-style-type: none"> 1. Unaligned PER encoding of the SIB11 then segmentation. 2. The result of segmentation shall be one or two or three segments for the SIB11 (current assumption). 3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=29. 4. Construct the first system information message containing first segment of SIB11 and send it to SS. 5. Send the scheduling info for second segment to SS. one segment: REP=128, POS=30. 6. Send no segment system information message to SS. 7. Construct the second system information message containing second segment of SIB11 and send it to SS. 8. Send the scheduling info for third segment to SS. one segment: REP=128, POS=31. 9. Construct the third system information message containing third segment of SIB11 and send it to SS. 					

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB18_MulRatOrBMC (p_SIB: SysInfoType18; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB18 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB18 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 7, 6, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		4.
6		+lt_CompleteSIB(systemInformationBlockTy pe18)			4.
7		(tcv_SB1.sib_ReferenceList.[3].sib_Type.s ysInfoType18 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.s ysInfoType18) MOD 4 + 1)			
8		+ts_ChangeSB1_ValueTag			
9		lt_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226] TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB7 then segmentation.
 2. The result of segmentation shall be one segment for the SIB18 (current assumption).
 3. Send the scheduling info to SS. one segment: REP=128, POS=6.
 4. Construct the system information message containing SIB18 and sent to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB1_MulRatOrBMC(p_SIB: SysInfoType1; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIBType1 to SS
Default : InitOtherwiseFail
Comments : system information on air changes imediatly if p_Timing => 512. change of system information on air starts at the frame number = p_Timing.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB1 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		1	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 7, 5, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+It_CompleteSIB(systemInformationBlockType1)			4.
7		(tcv_MIB.sibSb_ReferenceList.[1].sibSb_Type.sysInfoType1 := (tcv_MIB.sibSb_ReferenceList.[1].sibSb_Type.sysInfoType1) MOD 256 + 1)			
8		+ts_ChangeMIB_ValueTag			
9		It_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226] TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB1 then segmentation.
 2. The result of segmentation shall be one segment for the SIB1 (current assumption).
 3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=5.
 4. Construct the first system information message containing segment of SIB1 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB2_MulRatOrBMC (p_SIB: SysInfoType2; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB2 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB2 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 7, 7, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		4.
6		+It_CompleteSIB(systemInformationBlockType2)			4.
7		(tcv_MIB.sibSb_ReferenceList.[2].sibSb_Type.sysInfoType2 := (tcv_MIB.sibSb_ReferenceList.[2].sibSb_Type.sysInfoType2) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
		It_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB2 then segmentation.
 2. The result of segmentation shall be one segment for the SIB2 (current assumption).
 3. Send the scheduling info to SS. one segment, REP=128, POS=7.
 4. Construct the system information message containing SIB2 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB3_MulRatOrBMC (p_SIB: SysInfoType3; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB3 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB3 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		4.
6		+It_CompleteSIB(systemInformationBlockType3)			4.
7		(tcv_MIB.sibSb_ReferenceList.[3].sibSb_Type.sysInfoType3 := (tcv_MIB.sibSb_ReferenceList.[3].sibSb_Type.sysInfoType3) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
9		It_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226] TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB3 then segmentation.
 2. The result of segmentation shall be one segment for the SIB3 (current assumption).
 3. Send the scheduling info to SS. one segment; REP=64, POS=13.
 4. Construct the system information message containing SIB3 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB4_MulRatOrBMC (p_SIB: SysInfoType4; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB4 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB4 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		4.
6		+It_CompleteSIB(systemInformationBlockType4)			4.
7		(tcv_MIB.sibSb_ReferenceList.[4].sibSb_Type.sysInfoType4 := (tcv_MIB.sibSb_ReferenceList.[4].sibSb_Type.sysInfoType4) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
9		It_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226] TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB4 then segmentation.
 2. The result of segmentation shall be one segment for the SIB4 (current assumption).
 3. Send the scheduling info to SS. one segment; REP=64, POS=15.
 4. Construct the system information message containing SIB4 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB7_MulRatOrBMC(p_SIB: SysInfoType7; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB7 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB7 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			3.
4		+ts_Scheduling(p_CellId, 5, 11, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		4.
6		+lt_CompleteSIB(systemInformationBlockTy pe7)			4.
7		lt_CompleteSIB(p_SIBType : SIB_Type)			
8		[LENGTH_OF(tcv_Segs.seg1) = 226]			
9		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
10		[TRUE]			
		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB7 then segmentation.
 2. The result of segmentation shall be one segment for the SIB7 (current assumption).
 3. Send the scheduling info to SS. one segment: REP=32, POS=11.
 4. Construct the system information message containing SIB7 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BS20_MT (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To generate an MT SETUP message with appropriate Bcap for BS20 service.
Default : NAS_OtherwiseFail
Comments : 3G TS 27.001 clause B.1.2
 3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvPIAFS]			
4		+ lt_PIAFS			
5		[p_Serv = tsc_SrvFTM]			
6		+ lt_FTM			
7		[p_Serv = tsc_SrvV110]			
8		+ lt_V110			
9		[p_Serv = tsc_SrvV120]			
10		+ lt_V120			
11	ERR1	[TRUE]		I	
		lt_31kHz			
12		[px_BcapFNUR = tsc_Bcap28800]			
13		+ lt_31kHz_T			
14		[px_BcapFNUR <> tsc_Bcap28800]			
15		+ lt_31kHz_NT			
		lt_31kHz_NT			
16		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
17		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.2
18		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
19		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_CopNoFict)))			see 3G TS 27.001 cl B.1.2.2
20		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType)))			see 3G TS 27.001 cl B.1.2.2
22	ERR2	[TRUE] lt_31kHz_T		I	
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType))) lt_PIAFS			see 3G TS 27.001 cl B.1.2.2
24		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_UDI , tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare , tsc_BcapOtherRA_PIAFS , tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone , tsc_BcapOtherMT_None))) lt_FTM			see 3G TS 27.001 cl B.1.2.4
25		[px_BcapITC = tsc_BcapITC_IntUDI]			
26		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31 ,tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3
27		[px_BcapITC = tsc_BcapITC_IntRDI]			
28		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_Other, tsc_BcapRA_X31, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3
29	ERR3	[(px_BcapITC <> tsc_BcapITC_IntRDI) AND (px_BcapITC <> tsc_BcapITC_IntUDI)] lt_V110		I	
30		[px_BcapFNUR = tsc_Bcap28800]			
31		+ lt_V110_T			
32		[px_BcapFNUR <> tsc_Bcap28800]			
33		+ lt_V110_NT			
34		lt_V110_NT [px_BcapUeFlowControl = tsc_BcapFlowInband]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
35		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.1
36		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1
38		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None , tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.1
40	ERR4	[TRUE]		I	
		lt_V110_T			
41		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			27.001 cl B.1.2.1
		lt_V120			
42		[(px_BcapITC = tsc_BcapITC_IntUDI)]			
43		+ lt_V120_UDI_RDI (tsc_BcapITC_UDI, tsc_BcapOtherITC_Spare)			
44		[px_BcapITC = tsc_BcapITC_IntRDI]			
45		+ lt_V120_UDI_RDI (tsc_BcapITC_Other, tsc_BcapOtherITC_RDI)			seeTS 27.001 cl B.1.2.1
46	ERR5	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)]		I	
		lt_V120_UDI_RDI (p_ltcLt : B3 ; p_OtherltcLt : B2)			
47		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
48		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ltcLt, tsc_BcapSACP_I440450, p_OtherltcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.1
49		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ItcLt, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1
51		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			
52		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab_AsyncNT (p_ItcLt, tsc_BcapRA_Other, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapOtherRA_V120, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity)))			see 3G TS 27.001 cl B.1.2.1
53	ERR6	[TRUE]		I	
<p>Detailed Comments : The algorithm for derivation of BS20 Bearer Capabilities:</p> <pre> IF service = 31kHz IF rate = 28800 Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with T ELSE IF FlowControl = Inband Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT UIL2P=ISO6429 IF FlowControl = NoFlowControl Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT UIL2P=COPnoFlct IF FlowControl = Outband Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT without UIL2P IF service = PIAFS Use coding of BCAP BS20 PIAFS NT (see TS 27.001 B.1.2.4) IF service = FTM IF itc = UDI Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with UDI IF itc = RDI Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with RDI IF itc <> RDI AND itc <> UDI ERROR IF service = V110 IF rate = 28800 Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V110 T UDI ELSE IF FlowControl = Inband Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI UIL2P=ISO6429 IF FlowControl = NoFlowControl Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI UIL2P=COPnoFlct IF FlowControl = Outband Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI without UIL2P IF service = V120 IF itc = UDI IF FlowControl = Inband use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI UIL2P=ISO6429 IF FlowControl = NoFlowControl use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI UIL2P=COPnoFlct IF FlowControl = Outband use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI without UIL2P </pre>					

Continued on next page

Test Step Dynamic Behaviour

Detailed Comments : ...

IF itc = RDI

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI

IF FlowControl = Inband

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=ISO6429

IF FlowControl = NoFlowControl

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=COPnoFlct

IF FlowControl = Outband

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI without UIL2P

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BS30_MT (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To generate an MT SETUP message with appropriate Bcap for BS30 service.
Default : NAS_OtherwiseFail
Comments : 3G TS 27.001 clause B.1.3
 3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvV110]			
4		+ lt_V110			
5		[p_Serv = tsc_SrvX31]			
6		+ lt_X31			
7		[p_Serv = tsc_SrvV120]			
8		+ lt_V120			
9		[p_Serv = tsc_SrvBTM]			
10		+ lt_BTM			
11		[p_Serv = tsc_SrvMmediaCall]			
12		+ lt_Mmedia			
13	ERR1	[TRUE]		I	
		lt_31kHz			
14		[px_BcapSACP = tsc_BcapSACP_I440450]			non X.32
15		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2.1
16		[px_BcapSACP = tsc_BcapSACP_X32]			X.32
17		[px_BcapFNUR = tsc_Bcap28800]			
18		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2.2
19		[px_BcapFNUR <> tsc_Bcap28800]			
20		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.2.2
21	ERR2	[TRUE]		I	
22	ERR3	[(px_BcapSACP <> tsc_BcapSACP_I440450) AND (px_BcapSACP <> tsc_BcapSACP_X32)]		I	
		lt_V110			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None))) It_X31			see TS 27.001 cl. B.1.3.1.1
24		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
25		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
26		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
27		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
28	ERR4	[TRUE] It_V120		I	
29		[px_BcapITC = tsc_BcapITC_IntUDI]			
30		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
31		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
32		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
33		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
34	ERR5	[TRUE]		I	
35		[px_BcapITC = tsc_BcapITC_IntRDI]			
36		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
38		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
40	ERR6	[TRUE]		I	
41	ERR7	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)] It_BTM		I	
42		[px_BcapFNUR = tsc_Bcap56000]			
43		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.7
44		[(px_BcapFNUR = tsc_Bcap64000)]			
45		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.7
46	ERR8	[TRUE] It_Mmedia		I	
47		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap33600)]			
48		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_V34)))			see TS 27.001 cl. B.1.3.2.3
49		[(px_BcapFNUR = tsc_Bcap32000) OR (px_BcapFNUR = tsc_Bcap64000)]			
50		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.6
51		[(px_BcapFNUR = tsc_Bcap56000)]			
52		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.6

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
53	ERR9	[TRUE]		I	
<p>Detailed Comments : The algorithm for derivation of BS30 Bearer Capabilities</p> <pre> IF service = 31Khz IF sacp = I.440 Use coding of with BCAP BS30 31kHz nonX32 (see TS 27.001 cl. B.1.3.2.1) IF sacp = X.32 IF rate = 28800 Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with T ELSE Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with NT IF service = V110 Use coding of BACP BS30 UDI nonX32 (see TS 27.001 cl. B.1.3.1.1) IF service = X31 Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with X31 IF service = V120 IF itc = UDI Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT IF itc = RDI Use coding of BCAP BS30 RDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT ELSE ERROR IF service = BTM IF itc = UDI Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with UDI IF itc = RDI Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with RDI ELSE ERROR IF service = Sync_MmediaCall_ IF rate = 28800 OR rate = 33600 Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with T IF rate = 32000 OR rate = 64000 Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with UDI IF rate = 56000 Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with RDI </pre>					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BasicServMO (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate a Bcap and a MO SETUP message based on the service, as well as on several IXIT parameters.

Default : NAS_OtherwiseFail

Comments : 1. This test step generates an appropriate MO SETUP message according to the IXIT parameters of Bearer services/Teleservices for an MO call.
 2. The detailed algorithms for Bcap derivation for each Bearer service/Teleservice are described in test steps ts_CC_BS20_MO, ts_CC_BS30_MO, ts_CC_TS61_MO, ts_CC_TelephonyMO.

Affected variables: tcv_ESetup, tcv_Setup MO, tcv_RB_ConfigType, tcv_EstCause, tcv_BcapCE, tcv_ActiveService

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MO (p_Serv)			
2		+ ts_UT_ConfigUE_MO (p_Serv)			

Detailed Comments : 1. invalid service

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BasicServMT (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To generate a Bcap and a MT SETUP message based on the service, as well as on several IXIT parameters.
Default : NAS_OtherwiseFail
Comments : 1. This test step generates an appropriate MT SETUP message according to the IXIT parameters of Bearer services/Teleservices for an MT call.
 2. The detailed algorithms for Bcap derivation for each Bearer service/Teleservice are described in test steps ts_CC_BS20_MT, ts_CC_BS30_MT, ts_CC_TS61_MT, and ts_CC_TelephonyMT.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MT (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		(tcv_SetupMT := cs_SetupMT (cs_BcapSpeechMT))			
4		+ ts_UT_ConfigUE_MT (p_Serv)			
5		[p_Serv = tsc_SrvAltSpeechFax]			
6		+ ts_CC_TS61_MT (p_Serv)			
7		+ ts_UT_ConfigUE_MT (p_Serv)			
8		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
9		[px_BcapSyncAsync = tsc_BcapASync]			
10		+ ts_CC_BS20_MT (p_Serv)			
11		+ ts_UT_ConfigUE_MT (p_Serv)			
12		[px_BcapSyncAsync = tsc_BcapSync]			
13		+ ts_CC_BS30_MT (p_Serv)			
14		+ ts_UT_ConfigUE_MT (p_Serv)			
15	ERR1	[TRUE]		I	1
16	ERR2	[TRUE]		I	

Detailed Comments : 1. Invalid service

Test Step Dynamic Behaviour

Test Step Name : ts_CC_CheckServSupported (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To check whether the Basic Service p_Serv is supported against PICS answers.
Default : NAS_OtherwiseFail
Comments : In PICS, if the p_Serv is declared supported, the test case variable tcv_Res is set to TRUE, otherwise FALSE.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Res := FALSE)			
2		[(p_Serv = tsc_SrvTelephony) AND pc_Speech]			
3		(tcv_Res := TRUE)			
4		[(p_Serv = tsc_SrvEmgCall) AND pc_EmergSpeech]			
5		(tcv_Res := TRUE)			
6		[(p_Serv = tsc_SrvAltSpeechFax) AND pc_AltSpeechFax_TS61]			
7		(tcv_Res := TRUE)			
8		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Async31kHz_9600]			
9		(tcv_Res := TRUE)			
10		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Async31kHz_14400]			
11		(tcv_Res := TRUE)			
12		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Async31kHz_19200]			
13		(tcv_Res := TRUE)			
14		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Async31kHz_28800]			
15		(tcv_Res := TRUE)			
16		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapModemType = tsc_BcapMT_Autobaud1) AND pc_Async31kHz_AutoBanding1]			
17		(tcv_Res := TRUE)			
18		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV110_9600]			
19		(tcv_Res := TRUE)			
20		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV110_14400]			
21		(tcv_Res := TRUE)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV110_19200]			
23		(tcv_Res := TRUE)			
24		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV110_28800]			
25		(tcv_Res := TRUE)			
26		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV110_38400]			
27		(tcv_Res := TRUE)			
28		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV120_9600]			
29		(tcv_Res := TRUE)			
30		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV120_14400]			
31		(tcv_Res := TRUE)			
32		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV120_19200]			
33		(tcv_Res := TRUE)			
34		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV120_28800]			
35		(tcv_Res := TRUE)			
36		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV120_38400]			
37		(tcv_Res := TRUE)			
38		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_AsyncV120_48000]			
39		(tcv_Res := TRUE)			
40		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncV120_56000]			
41		(tcv_Res := TRUE)			
42		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_AsyncPIAFS_32000]			
43		(tcv_Res := TRUE)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncPIAFS_64000]			
45		(tcv_Res := TRUE)			
46		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncFTM_56000]			
47		(tcv_Res := TRUE)			
48		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncFTM_64000]			
49		(tcv_Res := TRUE)			
50		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Sync31kHzA_9600]			
51		(tcv_Res := TRUE)			
52		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Sync31kHzA_14400]			
53		(tcv_Res := TRUE)			
54		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Sync31kHzA_19200]			
55		(tcv_Res := TRUE)			
56		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Sync31kHzA_28800]			
57		(tcv_Res := TRUE)			
58		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV110_28800]			
59		(tcv_Res := TRUE)			
60		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV110_48000]			
61		(tcv_Res := TRUE)			
62		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV110_56000]			
63		(tcv_Res := TRUE)			
64		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncX31_9600]			
65		(tcv_Res := TRUE)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
66		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncX31_14400]			
67		(tcv_Res := TRUE)			
68		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200]			
69		(tcv_Res := TRUE)			
70		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800]			
71		(tcv_Res := TRUE)			
72		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncX31_38400]			
73		(tcv_Res := TRUE)			
74		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncX31_48000]			
75		(tcv_Res := TRUE)			
76		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncX31_56000]			
77		(tcv_Res := TRUE)			
78		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncV120_9600]			
79		(tcv_Res := TRUE)			
80		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncV120_14400]			
81		(tcv_Res := TRUE)			
82		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncV120_19200]			
83		(tcv_Res := TRUE)			
84		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV120_28800]			
85		(tcv_Res := TRUE)			
86		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncV120_38400]			
87		(tcv_Res := TRUE)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
88		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV120_48000]			
89		(tcv_Res := TRUE)			
90		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV120_56000]			
91		(tcv_Res := TRUE)			
92		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncBTM_56000]			
93		(tcv_Res := TRUE)			
94		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncBTM_64000]			
95		(tcv_Res := TRUE)			
96		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncMmediaCall_28800]			
97		(tcv_Res := TRUE)			
98		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_SyncMmediaCall_32000]			
99		(tcv_Res := TRUE)			
100		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap33600) AND pc_SyncMmediaCall_33600]			
101		(tcv_Res := TRUE)			
102		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncMmediaCall_56000]			
103		(tcv_Res := TRUE)			
104		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncMmediaCall_64000]			
105		(tcv_Res := TRUE)			
106		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MO (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MO calls.
To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
To assign the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
To assign the tcv_ActiveService test case variable, that contains the service used for the CC call.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_ActiveService := p_Serv, tcv_CN_Domain := cs_domain)			
2		[(p_Serv = tsc_SrvEmgCall)]			
3		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := emergencyCall)			
4		[(p_Serv = tsc_SrvTelephony) OR (p_Serv = tsc_SrvAltSpeechFax)]			
5		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
6		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
7		[px_BcapSyncAsync = tsc_BcapASync]			
8		+ lt_Asynchronous			
9		[px_BcapSyncAsync = tsc_BcapSync]			
10		+ lt_Synchronous			
11	ERR4	[TRUE ]		|	
12	ERR5	[TRUE ]		|	
		lt_Asynchronous			
13		[(p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvV120)]			
14		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
15		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_Srv31kHz)]			
16		[(p_Serv = tsc_Srv31kHz) AND (px_BcapModemType = tsc_BcapMT_Autobaud1)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := originatingConversationalCall)			
18		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap48000) OR (px_BcapFNUR = tsc_Bcap56000)]			
19		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
20		[TRUE]			
21		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := originatingConversationalCall)			
22	ERR1	[TRUE] It_Synchronous		|	
23		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
24		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
25		[(p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvX31)]			
26		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
27		[p_Serv = tsc_Srv31kHz]			
28		[px_BcapFNUR = tsc_Bcap28800]			
29		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
30		[px_BcapFNUR <> tsc_Bcap28800]			
31		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
32	ERR2	[TRUE ]		|	
33	ERR3	[TRUE ]		|	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MT (p_Serv : Services)
Group : L3M_CC_Steps/
Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MT calls.
 To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
 To assign the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
 To assign the tcv_ActiveService test case variable, that contains the service used for the CC call
 To assign the tcv_PagingCau test case variable, that contains the paging cause value used in the PAGING REQUEST message to be sent by SS to initiate the call.
 To assign the tcv_TI_S and tcv_TI_R with the value 0.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_ActiveService := p_Serv, tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B, tcv_CN_Domain := cs_domain)			
2		[(p_Serv = tsc_SrvTelephony) OR (p_Serv = tsc_SrvAltSpeechFax)]			
3		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
4		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
5		[px_BcapSyncAsync = tsc_BcapASync]			
6		+ lt_Asynchronous			
7		[px_BcapSyncAsync = tsc_BcapSync]			
8		+ lt_Synchronous			
9	ERR4	[TRUE]		I	
10	ERR5	[TRUE]		I	
		lt_Synchronous			
11		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
12		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
13		[(p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvX31)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
14		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
15		[p_Serv = tsc_Srv31kHz]			
16		[px_BcapFNUR = tsc_Bcap28800]			
17		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
18		[px_BcapFNUR <> tsc_Bcap28800]			
19		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)			
20	ERR2	[TRUE ]		|	
21	ERR3	[TRUE ]		|	
		lt_Asynchronous			
22		[(p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvV120)]			
23		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
24		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_Srv31kHz)]			
25		[(p_Serv = tsc_Srv31kHz) AND (px_BcapModemType = tsc_BcapMT_Autobaud1)]			
26		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)			
27		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap48000) OR (px_BcapFNUR = tsc_Bcap56000)]			
28		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
29		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
30		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
31	ERR1	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CC_TS61_MT (p_Serv : Services) Group : L3M_CC_Steps/ Objective : To generate an MT SETUP message with appropriate Bcap for TS61 service. Default : NAS_OtherwiseFail Comments : 3G TS 27.001 cl.s B.1.8 and B.1.10.3 The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(px_BcapFNUR = tsc_Bcap9600) OR (px_BcapFNUR = tsc_Bcap14400)]			
2		(tcv_SetupMT := cs_SetupMT_2_Bcap (cs_BcapSpeechMT, cs_BcapMT_AsyncNT (tsc_BcapITC_Fax3, tsc_BcapRA_No , tsc_BcapSACP_I440450, tsc_BcapStopBitSpare , tsc_BcapDataB8 , tsc_BcapParityNone , tsc_BcapMT_None , tsc_BcapOtherMT_None)))			1. see 3G TS 27.001 B.1.8 B.1.10.3
3	ERR1	[(px_BcapFNUR <> tsc_Bcap9600) AND (px_BcapFNUR <> tsc_Bcap14400)]		I	2.
Detailed Comments : 1. The first bearer capability for TS61 (Alternate Speech / Fascimile) is: SPEECH. The second berarer capability for TS 61 (Alternate Speech / Facsimile) is: FAX 2. The FNUR for TS61 can be 9600 bit/s or 14400 bit/s only					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_Disconnect (p_CellId :INTEGER)
Group : L3M_CC_Steps/
Objective : To disconnect the captive CC call.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Disc (tcv_TI_S))		
2	TSP	Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Rel (tcv_TI_R))	(P)	
3		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_RelCmpl (tcv_TI_S))		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MM_IMSI_Detach (p_CellId: INTEGER; p_USIM_Rmvd : BOOLEAN)
Group : L3M_MM_GMM_Steps/
Objective : Force the UE to execute the IMSI Detach procedure
Default : NAS_OtherwiseFail
Comments : To achieve this, deactivate the UE depending upon its properties (USIM removal, switching off or powering off).
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv) AND (pc_DetachOnUSIM_Rmv)]			USIM needs to be removed
2		+ts_MMI_USIM_Remove			remove USIM card
3		+lt_IMSI_Detach			
4		[pc_SwitchOnOff]			
5		+ts_MMI_UE_SwitchOff			switch off the UE
6		+lt_IMSI_Detach			
7		[(((NOT p_USIM_Rmvd) OR (NOT pc_USIM_Rmv) OR (NOT pc_DetachOnUSIM_Rmv)) AND (NOT pc_SwitchOnOff))]			
8		+ts_MMI_UE_PwrOff			power off the UE
9		lt_IMSI_Detach +ts_RRC_ConnEst (p_CellId, est_MO, detach)			Connect ion Establis hment MO
10	TSP1	Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	
11		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
12		+ lt_Init_RRC_RelStatus			
13		+ts_RRC_ConnRel(p_CellId, tcv_RRC_RelStatus)			Connect ion Release
14		+ ts_RRC_ConnRejectGMM_Detach (p_CellId) lt_Init_RRC_RelStatus			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCC			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
16		PCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)]			
17		(tcv_RRC_RelStatus := cell_Fach_Dcch)			
18		[TRUE] (tcv_RRC_RelStatus := cell_Dch)			
<p>Detailed Comments : There are 2 types of deactivation required for testing:</p> <ol style="list-style-type: none"> 1. USIM removal or switching off or removal of the power source 2. Switching off or removal of the power source <p>Parameter p_USIM_Rmvd controls the variant to be applied:</p> <ol style="list-style-type: none"> 1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be removed if possible 2. tsc_USIM_In(=FALSE): variant 2 is to be used, the USIM must not be removed. <p>Finally the IMSI Detach procedure is performed after the deactivation has been done.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_DetachOnSwitchOff (p_CellId : INTEGER)
Group : L3M_MM_GMM_Steps/
Objective : Turn off UE and execute GMM Detach procedure for properly detach PS or combined PS/CS services on the cell referenced by p_CellId.
 Additionally, if Attach Flag is set, and the UE is in Operation Mode A, then IMSI DETACH INDICATION shall be send by the UE.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_Delay(5000)			Wait before switching off (e.g. in case ATT flag has been previously changed) to allow UE to re-read new SysInfos
2		[pc_SwitchOnOff]			UE can actually be switched off
3		+ts_SetTmpCellInfo (p_CellId)			Get CellInfo to be used later
4		+lt_Init_RRC_RelStatus			
5		+ts_MMI_UE_SwitchOff			
6		+ts_RRC_ConnEst(p_CellId, est_MO, detach)			
7		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_I)]			If UE is in operation mode A and network mode of operation is I, then run combined PS/CS procedures.
8		+lt_Detach_NMO_I			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
9		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
10		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_II)]			If UE is in operation mode A and network mode of operation is II, then run first CS and PS independently
11		+lt_Detach_NMO_II			SS shall accept either PS detach first or IMSI detach first, since this is not clear in the core spec
12		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
13		[tcv_UE_OpMode = opModeC]			If UE is in operation mode C, then run GMM procedure (for PS only detach).
14		+lt_Detach_POnly			
15		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
16		[TRUE]			UE power supply must be removed
17		+ts_MMI_UE_PwrOff lt_Init_RRC_RelStatus			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SC			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		CPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)] (tcv_RRC_RelStatus := cell_Fach_Dcch)			Get CellInfo to be used later
20		[TRUE]			
21		(tcv_RRC_RelStatus := cell_Dch)			Get CellInfo to be used later
22	It_Detach_NMO_I Dc ? RRC_DataInd		car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '011'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST - 'power switched off, GPRS/MSI combined detach'
23	It_Detach_POnly Dc ? RRC_DataInd		car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST - 'power switched off, PS detach'

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
24		It_Detach_NMO_II Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST - 'power switched off, GPRS detach'
25		[tcv_TmpCellInfo.attFlag = tsc_AttOn]			If ATTflag is ON
26		Dc ? RRC_DataInd	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	IMSI DETACH INDICATION
27		[TRUE]			
28		Dc ? RRC_DataInd	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	IMSI DETACH INDICATION
29		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST - 'power switched off, GPRS detach'
Detailed Comments : See 3GPP 24.008 / 4.7.4					

Test Step Dynamic Behaviour

Test Step Name : ts_RegistrationOnCS (p_CellId : INTEGER; p_TMSI : OCTETSTRING)
Group : L3M_MM_GMM_Steps/
Objective : Register to CS services according to 3GPP 34.108 clause 7.2.2.1.
Default : NAS_OtherwiseFail
Comments : Note that it is assumed that the UE has already a DCCH connection. Connection establishment and release have to be managed by the user of this test step.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch SS_Cell_Info table corresponding to the cell
2		+It_ReceiveLocUpdate			LOCATION UPDATING REQUEST
3		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
4		+ts_MM_Authentication(p_CellId)			AUTHENTICATION REQUEST AUTHENTICATION RESPONSE
5		+ts_RRC_Security(p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
6		Dc!RRC_DataReq (tcv_AssignedTMSI := p_TMSI)	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_LocUpdAcpTMSI_2(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, p_TMSI))		LOCATION UPDATING ACCEPT
7		Dc?RRC_DataInd	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLOCATION COMPLETE
		It_ReceiveLocUpdate			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
8		[tcv_UE_Id_IMSI]			Check for UE ID used is IMSI
9		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, c_LocUpdReqAny_IMSI (*))		LOCATION UPDATING REQUEST
10		[TRUE]			
11		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		LOCATION UPDATING REQUEST
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_RRC_ConnRejectGMM_Detach (p_CellId : INTEGER)					
Group : L3M_RRC_Steps/					
Objective : To reject an RRC Connection request with the cause set to 'detach'. If the RRC connection request message is not sent by UE then no action shall be performed.					
Default : RRC_DefConnEst					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly (tsc_WaitDetach)			
2		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_M essage.message.rrcConnectionRequest.initialUE_ Identity) CANCEL t_Dly	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (detach))		
3		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRej(p_CellId, tsc_RB0, cs_108_RRC_ConnRej (tcv_InitialUE_Id, tcv_RRC_Ti, unspecified, 0))		
4		? TIMEOUT t_Dly			
Detailed Comments : 1. Update the cell configuration 2. A RRC connection has already been established.					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel_AfterSwitchOff (p_CellId: INTEGER; p_RRC_RelStatus : RRC_Rel_Status)

Group : L3M_RRC_Steps/

Objective : To release RRC connection to be used in cases where the UE has been switched off (adapted from test step ts_RRC_ConnRel)

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ It_Send_RRC_ConnectionRelease			
4		+ It_RestartCRLC_ForNextConnection			
5		+ ts_SS_ResetSecurityKey			
		It_RestartCRLC_ForNextConnection			
6		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB]			
7		+ ts_CRLC_RelReconfSRB (p_CellId)			
8		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
9		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
10		+ ts_CRLC_RelReconfSRB (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC]			
13		+ ts_CRLC_RelReconfSRB (p_CellId)			
14		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC_NoConn)			
15		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH]			
16		+ ts_CRLC_RelReconfSRB (p_CellId)			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH_NoConn)			
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH]			
19		+ ts_CRLC_RelReconfSRB (p_CellId)			
20		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH_NoConn)			
21		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
22		+ ts_CRLC_RelReconfSRB (p_CellId)			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_NoConn)			
24		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
25		+ ts_CRLC_RelReconfSRB (p_CellId)			
26		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn)			
27		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS)]			
28		+ ts_CRLC_RelReconfSRB (p_CellId)			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn)			
30		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS)]			
31		+ ts_CRLC_RelReconfSRB (p_CellId)			
32		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn)			
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			
34		+ ts_CRLC_RelReconfSRB (p_CellId)			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn)			
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS)]			
37		+ ts_CRLC_RelReconfSRB (p_CellId)			
38		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_ NoConn)			
39		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_PS)]			
40		+ ts_CRLC_RelReconfSRB (p_CellId)			
41		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_ NoConn)			
42		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS)]			
43		+ ts_CRLC_RelReconfSRB (p_CellId)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_ NoConn)			
45		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)]			
46		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
47		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
48	ERR1	[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn)]		I	1.
49	ERR2	[TRUE]		I	
50		lt_Send_RRC_ConnectionRelease [p_RRC_RelStatus= cell_Dch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
51		(tcv_N308 := 2, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
52		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCC H(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
53		START t_Dly(1000)			
54		? TIMEOUT t_Dly		(P)	UE may not send RRC CONNECTION RELEASE COMPLETE
55	TSP1	UM ? RLC_UM_DATA_IND CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
56		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
57		[p_RRC_RelStatus = cell_Fach_Dcch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
58		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
59		START t_Dly(1000)	cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, OMIT))		
60		? TIMEOUT t_Dly		(P)	UE may not send RRC CONNECTION RELEASE COMPLETE
61	TSP2	AM ? RLC_AM_DATA_IND CANCEL t_Dly	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2,	(P)	
62		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)	cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))		
63		[p_RRC_RelStatus = cell_Fach_Ccch]			
64		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0,		
65		[TRUE]	cs_108_RRC_ConnRelCCC H (c_U_RNTI, tcv_RRC_Ti))	I	Programing error
66		lt_RptRcvConnRel			
67	TSF2	START t_Dly		(P)	
68		? TIMEOUT t_Dly (tcv_K := tcv_N308 + 1)			To stop the loop
69	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1,	(P)	Retrans mission
			cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))		
Detailed Comments : Note: Test step copied from original test step ts_RRC_ConnRel and then adapted to consider UEs which do not send RRC CONNECTION RELEASE COMPLETE after switch off.					

Test Step Dynamic Behaviour

Test Step Name : ts_DeactivatePDP_ContextMT(p_CellId: INTEGER ; p_ti: TI; p_smcause: SM_Cause_v)

Group : L3M_SM_Steps/

Objective : To deactivate all the PDP Context active

Default : NAS_OtherwiseFail

Comments : This will be used to deactivate PDP Context from UTRAN Side.

Parameters:

p_ti: The TI value to be set

p_sm_cause: This is the Cause for deactivating the PDP Context.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cs_DeactPDP_ContextReq MT(p_ti, p_smcause))		step 1
2		(tcv_K := 0)			
3		REPEAT localTree1 UNTIL [tcv_K > 4]			
		localTree1			
4		START t_3395			
5	TSP	Dc? RRC_DataInd CANCEL t_3395	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DeactPDP_ContextAccept MO)	(P)	step 2
6		(tcv_K := 5)			
7	TSF	? TIMEOUT t_3395		(F)	step 3
8		(tcv_K := tcv_K + 1)			
9		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cs_DeactPDP_ContextReq MT(p_ti, p_smcause))		step 4.

Detailed Comments : Step 1: Send Deactivate PDP Context with tear down flag set to 1
 Step 2: Receive Deactivate PDP Context Accept.
 Step 3:
 On expiry of T3395, in case network does not receive Deactivate PDP Context Accept, send Deactivate PDP Context request 4 times.
 Step 4:
 Send Deactivate PDP Context with tear down flag set to 1

Test Step Dynamic Behaviour					
Test Step Name : ts_InitialiseDlyAndTrafficClass					
Group : L3M_SM_Steps/					
Objective :					
Default : NAS_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
2		(tcv_DlyClass := '011'B, tcv_TrafficClass := '011'B)			
3		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
4		(tcv_DlyClass := '100'B, tcv_TrafficClass := '100'B)			
5		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SetTI_Rsp(p_tir: TI)					
Group : L3M_SM_Steps/					
Objective : To set the value of TI when a message is sent from the network as a response to a request from the UE					
Default : NAS_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_TI_S.tiFlag := '1'B)			
2		(tcv_TI_S.tiVal := p_tir.tiVal)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB10_TM_Cfg (p_PayLoad: INTEGER)
Group : L3M_SS_ConfigSteps/
Objective : setup radio bearers : RB10. default values from 34.123-1Table 7.2/3A
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info (tsc_CellDedicated , tsc_RB10, p_PayLoad, {uLogicalChannelIdentity tsc_UL_DTCH1, dLogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers : RB10 (TM + DTCH) note: set UE to AM mode correspondingly
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated , tsc_RB10)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB10_ToRB12_TM_Cfg
Group : L3M_SS_ConfigSteps/
Objective : setup radio bearers : RB10, RB11, RB12 for radio beaer subflow#1, subflow#2, subflow#3
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB10, 81, {uLogicalChannelIdentity tsc_UL_DTCH1, dLogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers : RB10 for AMR subflow #1
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB10)		
3		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB11, 103, {uLogicalChannelIdentity tsc_UL_DTCH2, dLogicalChannelIdentity tsc_DL_DTCH2})		cofigure radio bearers : RB11 for AMR subflow #2
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB11)		
5		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB12, 60, {uLogicalChannelIdentity tsc_UL_DTCH3, dLogicalChannelIdentity tsc_DL_DTCH3})		cofigure radio bearers : RB12 for AMR subflow #3
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB12)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_SwitchBackCellOn (p_CellId : INTEGER)
Group : L3M_SS_ConfigSteps/
Objective : To switch the power of the cell back from with special Attenuation value of 123, to the value stored in respective Cell Info record
Default : SS_Def
Comments : p_DedicCh shall be set to TRUE if the cell contains dedicated channel, otherwise FALSE
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch table corresponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	Fatal error: cell not configured (programming error)
3		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
4		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, tcv_TmpCellInfo.attenuationLevel)		
5		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_SwitchCellOff (p_CellId : INTEGER) Group : L3M_SS_ConfigSteps/ Objective : To switch the power of the cell to very low value, with special Attenuation value of 123. This value is not stored in the respective cell record. Default : SS_Def Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch table corresponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	Fatal error: cell not configured (programming error)
3		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
4		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, tsc_AttenuationCellOFF)		
5		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_AT_AnswerCall Group : L3M_UT_Steps/ Objective : To request the UE to answer to a call Default : UT_OtherwiseFail Comments : The A AT command is used (see TS 27.007 clause 6.25) Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("ATA<CR>")		
2		Ut ? AT_CmdCnf	ca_AT_CmdCnfWithString		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_AT_CmdCBST (p_Serv : Services)
Group : L3M_UT_Steps/
Objective : To configure the UE for the selected bearer service, using AT commands.
Default : UT_OtherwiseFail
Comments : First, the UE shall be configured for teh single mode (using the +CMOD AT command see 3G TS 27.007 clause 6.4).
Then, the UE is configured for the selected bearer service, the AT command line shall be created following this syntax: "AT+CBST=<speed>,<name>,<ce>" (See 3G TS 27.001 clause 6.7).
Before calling this test step the tcv_BcapCE test case variables has to be set to correct value.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		0
2		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
3		+ It_BuildAT_Cmd			
4		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1
5		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
6		It_BuildAT_Cmd			2
7		+ It_Speed			
8		+ It_Name			
9		+ It_Ce			
10		It_Speed			
11		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvFTM)]			
12		[px_BcapFNUR = tsc_Bcap9600]			
13		(tcv_AT_Cmd := "AT+CBST=71")			
14		[px_BcapFNUR = tsc_Bcap14400]			
15		(tcv_AT_Cmd := "AT+CBST=75")			
16		[px_BcapFNUR = tsc_Bcap19200]			
17		(tcv_AT_Cmd := "AT+CBST=79")			
18		[px_BcapFNUR = tsc_Bcap28800]			
19		(tcv_AT_Cmd := "AT+CBST=80")			
20		[px_BcapFNUR = tsc_Bcap38400]			
21		(tcv_AT_Cmd := "AT+CBST=81")			
22		[px_BcapFNUR = tsc_Bcap48000]			
23		(tcv_AT_Cmd := "AT+CBST=82")			
24		[px_BcapFNUR = tsc_Bcap56000]			
25		(tcv_AT_Cmd := "AT+CBST=83")			
26		[px_BcapFNUR = tsc_Bcap64000]			
27		(tcv_AT_Cmd := "AT+CBST=84")			
28		[p_Serv = tsc_SrvBTM]			
29		[px_BcapFNUR = tsc_Bcap56000]			
30		(tcv_AT_Cmd := "AT+CBST=115")			
31		[px_BcapFNUR = tsc_Bcap64000]			
32		(tcv_AT_Cmd := "AT+CBST=116")			
33		[p_Serv = tsc_SrvPIAFS]			
34		[px_BcapFNUR = tsc_Bcap32000]			
		(tcv_AT_Cmd := "AT+CBST=120")			
		[px_BcapFNUR = tsc_Bcap64000]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
35		(tcv_AT_Cmd := "AT+CBST=121")			
36		[p_Serv = tsc_SrvV120]			
37		[px_BcapFNUR = tsc_Bcap9600]			
38		(tcv_AT_Cmd := "AT+CBST=39")			
39		[px_BcapFNUR = tsc_Bcap14400]			
40		(tcv_AT_Cmd := "AT+CBST=43")			
41		[px_BcapFNUR = tsc_Bcap19200]			
42		(tcv_AT_Cmd := "AT+CBST=47")			
43		[px_BcapFNUR = tsc_Bcap28800]			
44		(tcv_AT_Cmd := "AT+CBST=48")			
45		[px_BcapFNUR = tsc_Bcap38400]			
46		(tcv_AT_Cmd := "AT+CBST=49")			
47		[px_BcapFNUR = tsc_Bcap48000]			
48		(tcv_AT_Cmd := "AT+CBST=50")			
49		[px_BcapFNUR = tsc_Bcap56000]			
50		(tcv_AT_Cmd := "AT+CBST=51")			
51		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvMmediaCall)]			
52		[px_BcapModemType = tsc_BcapMT_Autobaud1]			
53		(tcv_AT_Cmd := "AT+CBST=0")			
54		[px_BcapFNUR = tsc_Bcap9600]			
55		[px_BcapModemType = tsc_BcapMT_V32]			
56		(tcv_AT_Cmd := "AT+CBST=7")			
57		[px_BcapOtherModemType = tsc_BcapOtherMT_V34]			
58		(tcv_AT_Cmd := "AT+CBST=12")			
59		[px_BcapFNUR = tsc_Bcap14400]			
60		(tcv_AT_Cmd := "AT+CBST=14")			
61		[px_BcapFNUR = tsc_Bcap19200]			
62		(tcv_AT_Cmd := "AT+CBST=15")			
63		[px_BcapFNUR = tsc_Bcap28800]			
64		(tcv_AT_Cmd := "AT+CBST=16")			
65		[px_BcapFNUR = tsc_Bcap38400]			
66		(tcv_AT_Cmd := "AT+CBST=17")			
		lt_Name			
67		[(px_BcapITC = tsc_BcapITC_IntUDI) OR (px_BcapITC = tsc_BcapITC_Int31kHzA)]			
68		[px_BcapSyncAsync = tsc_BcapASync]			
69		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",0"))			
70		[px_BcapSyncAsync = tsc_BcapSync]			
71		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",1"))			
72		[px_BcapITC = tsc_BcapITC_IntRDI]			
73		[px_BcapSyncAsync = tsc_BcapASync]			
74		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",4"))			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
75		[px_BcapSyncAsync = tsc_BcapSync]			
76		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , "5"))			
		lt_Ce			
77		[tcv_BcapCE = tsc_BcapCE_T]			
78		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , "0<CR>"))			
79		[tcv_BcapCE = tsc_BcapCE_NT]			
80		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , "1<CR>"))			
Detailed Comments : 0. Configure UE for a single mode 1. configure the UE for the selected bearer service using the AT command 2. build the AT +CBST command line +CBST=<speed>,<name>,<ce>. See 3G TS 27.001 clause 6.7					

Test Step Dynamic Behaviour					
Test Step Name : ts_AT_InitCallCS Group : L3M_UT_Steps/ Objective : This Step requests the UE to initiate an originating call (CS) Default : UT_OtherwiseFail Comments : the AT Dial command D is used: See TS27.007 clause 6.2 Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_InitAT_Command			
2		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
3		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
4		lt_InitAT_Command [(px_CC_Serv = "Telephony") OR (px_CC_Serv = "EmergencyCall")]			if Telephony or Emergency call append ';' for px_CC_CallDiallingDigits
5		(tcv_AT_Cmd := o_ConcatStrg ("ATD", px_CC_CallDiallingDigits), tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd, ";"), tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd, "<CR>"))			
6		[TRUE]			for other no ;
7		(tcv_AT_Cmd := o_ConcatStrg ("ATD", px_CC_CallDiallingDigits), tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd, "<CR>"))			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_UT_ConfigUE_MO (p_Serv : Services)
Group : L3M_UT_Steps/
Objective : Configure UE for MO call using AT or MMI commands.
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_CheckServSupported (p_Serv)			
2		[p_Serv = tsc_SrvEmgCall]			
3		[tcv_Res]			1
4		+ lt_ConfigEmergencyCall			
5		[NOT tcv_Res]			
6		[p_Serv = tsc_SrvTelephony]			
7		[tcv_Res]			
8		+ lt_ConfigTelephony			
9		[NOT tcv_Res]			
10		[p_Serv = tsc_SrvAltSpeechFax]			
11		[tcv_Res]			
12		+ lt_ConfigTS61			
13		[NOT tcv_Res]			
14		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
15		[tcv_Res]			
16		+ ts_AT_CmdCBST (p_Serv)			
17		[NOT tcv_Res]			
18	ERR1	[TRUE]		I	0
		lt_ConfigTelephony			
19		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		1
20		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
21		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MO Telephony call")		
22		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigEmergencyCall			
23		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		
24		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
25		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an Emergency call")		
26		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigTS61			
27		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=1<CR>")		2

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28		Ut ? AT_CmdCnf	ca_AT_CmdCnf		3
29		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MO Telephony call")		
30		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
Detailed Comments : 0. invalid service 1. Configure UE for a single mode (see 3G TS 27.007 clause 6.4) 2. Configure UE for an alternating voice/fax mode (see 3G TS 27.007 clause 6.4) 3. For TS61, the UE is first configured for Voice					

Test Step Dynamic Behaviour

Test Step Name : ts_UT_ConfigUE_MT (p_Serv : Services)
Group : L3M_UT_Steps/
Objective : Configure UE for MT call using AT or MMI commands.
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_CheckServSupported (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		[tcv_Res]			
4		+ It_ConfigTelephony			
5		[NOT tcv_Res]			
6		[p_Serv = tsc_SrvAltSpeechFax]			
7		[tcv_Res]			
8		+ It_ConfigTS61			
9		[NOT tcv_Res]			
10		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
11		[tcv_Res]			
12		+ ts_AT_CmdCBST (p_Serv)			
13		[NOT tcv_Res]			
14	ERR1	[TRUE]		I	0
		It_ConfigTelephony			
15		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		1
16		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
17		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		
18		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		It_ConfigTS61			
19		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=1<CR>")		2
20		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
21		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		3
22		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments : 0. invalid service
 1. Configure UE for a single mode (see 3G TS 27.007 clause 6.4)
 2. Configure UE for an alternating voice/fax mode (see 3G TS 27.007 clause 6.4)
 3. For TS61, the UE is first configured for Voice

Test Step Dynamic Behaviour

Test Step Name : ts_EmptyPCO_AfterSwitchOff
Group : BasicM_General_Steps/
Objective : Wait 5s and accept all signalling messages from UE and SS, to ensure that all PCO are empty when TC begins.
 This step shall be called at the beginning of the testcase after switching off UE.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly (px_TimerDequeuePCO)			
2	LOOP 1	?TIMEOUT t_Dly			
3		AM? OTHERWISE			
4		GOTO LOOP1			Continue to wait until t_Dly expires
5		UM? OTHERWISE			
6		GOTO LOOP1			Continue to wait until t_Dly expires
7		TM? OTHERWISE			
8		GOTO LOOP1			Continue to wait until t_Dly expires
9		Dc? OTHERWISE			
10		GOTO LOOP1			Continue to wait until t_Dly expires
11		CRCLC? OTHERWISE			
12		GOTO LOOP1			Continue to wait until t_Dly expires
13		CMAC?OTHERWISE			
14		GOTO LOOP1			Continue to wait until t_Dly expires
15		CPHY?OTHERWISE			
16		GOTO LOOP1			Continue to wait until t_Dly expires

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_AssignCN_Domain
Group : BasicM_General_Steps/
Objective : To assign tcv_CN_Domain based on PICS and PIXIT values. This Steps is to be used by test cases written for both cs and ps domains.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_CS AND (px_CN_DomainTested = cs_domain)]			
2		(tcv_CN_Domain := cs_domain)			
3		[pc_PS AND (px_CN_DomainTested = ps_domain)]			
4		(tcv_CN_Domain :=ps_domain)			
5		[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CalculateActTime (p_CellId: INTEGER)
Group : BasicM_General_Steps/
Objective : To calculate the activation time with the tti value corresponding to the actual SS configuration.
Default : SS_Def
Comments : The tti value passed as parameter to ts_CPHY_ActTime is equal to tti/10 (e.g. tti 40 -> 4)
Based on 34.108 on SRB tti.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_Init)]			An RRC connection is established. Use DCCH on DL DPCH1
3		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 4)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
4		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn)]			No RRC connection is established Use CCCH configuration
5		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
6		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			One RRC connection established on FACH
7		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			One RRC connection established on FACH BMC
9		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			
11		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 2)			
12		[(tcv_TmpCellInfo.cellConfig = cell_DCH_HS_DSCH)]			
13		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 4)			
14		[(tcv_TmpCellInfo.cellConfig = cell_NotConfigured)]		I	
15		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CountConfiguredCell					
Group : BasicM_General_Steps/					
Objective : Assign tcv_NumCfgCell to the number of cells already configured.					
Default : SS_Def					
Comments : When a cell is configured, the corresponding receod.cellConfig is set to a different value than cell_NotConfigured					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_NumCfgCell := 0)			
2		+ It_CheckOneCell (tcv_CellInfoA)			
3		+ It_CheckOneCell (tcv_CellInfoB)			
4		+ It_CheckOneCell (tcv_CellInfoC)			
5		+ It_CheckOneCell (tcv_CellInfoD)			
6		+ It_CheckOneCell (tcv_CellInfoE)			
7		+ It_CheckOneCell (tcv_CellInfoF)			
8		+ It_CheckOneCell (tcv_CellInfoG)			
9		+ It_CheckOneCell (tcv_CellInfoH)			
		It_CheckOneCell (p_CellInfo : CellInfoCfg)			
10		[p_CellInfo.cellConfig <> cell_NotConfigured]			
11		(tcv_NumCfgCell := tcv_NumCfgCell + 1)			
12		[p_CellInfo.cellConfig = cell_NotConfigured]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_RRC_Delay (p_Dly: INTEGER)					
Group : BasicM_General_Steps/					
Objective : Realization of a Delay					
Default : RRC_Def1					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly(p_Dly)			
2		?TIMEOUT t_Dly			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariables(p_CellToBeCreated : CellToBeCreated)
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase and Testsuite variables for RRC testcases
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_AssignCN_Domain			
2		[tcv_CN_Domain = cs_domain]			
3		+ ts_RRC_InitVariablesCS			
4		[tcv_CN_Domain = ps_domain]			
5		+ ts_RRC_InitVariablesPS (p_CellToBeCreated)			
6	ERR1	[TRUE]		I	Program ming error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariablesCS
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase and Testsuite variables for RRC testcases
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitVariables			
2		(tcv_CN_Domain := cs_domain, tcv_RAB_Id := tsc_RAB_DefCS)			
3		+ It_RRC_InitServVarCS			
4		It_RRC_InitServVarCS			
5		[(px_RRC_CS_ServTested = speech) AND pc_Conversational]			
6		(tcv_RRC_RAB_Type := cell_DCH_Speech, tcv_RRC_PagingCau := terminatingConversationalCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingConversationalCall)			
7		[(px_RRC_CS_ServTested = conversational_64k) AND pc_Conversational]			
8		(tcv_RRC_RAB_Type := cell_DCH_64kCS_RAB_SRB, tcv_RRC_PagingCau := terminatingConversationalCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingConversationalCall)			
9		[(px_RRC_CS_ServTested = streaming_57_6k) AND pc_Streaming]			
10	ERR1	(tcv_RRC_RAB_Type := cell_DCH_57_6kCS_RAB_SRB, tcv_RRC_PagingCau := terminatingStreamingCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingStreamingCall)		I	Program ming or parameter error
		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariablesPS (p_CellToBeCreated : CellToBeCreated)
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase variables for RRC testcases in the PS_domain
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitVariables			
2		(tcv_CN_Domain := ps_domain, tcv_RAB_Id := tsc_RAB_DefPS)			
3		[p_CellToBeCreated = cell_FACH]			1.
4		(tcv_RRC_RAB_Type := cell_FACH_PS)			
5		+ It_RRC_InitServVarPS			
6		[p_CellToBeCreated = cell_DCH]			
7		(tcv_RRC_RAB_Type := cell_DCH_64kPS_RAB_SRB)			
8		+ It_RRC_InitServVarPS			
		It_RRC_InitServVarPS			
9		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
10		(tcv_RRC_PagingCau := terminatingInteractiveCall, tcv_RRC_EstCauMO := originatingInteractiveCall, tcv_RRC_EstCauMT := terminatingInteractiveCall)			
11		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
12		(tcv_RRC_PagingCau := terminatingBackgroundCall, tcv_RRC_EstCauMO := originatingBackgroundCall, tcv_RRC_EstCauMT := terminatingBackgroundCall)			
13	ERR1	[TRUE]		I	Parameter error

Detailed Comments : 1. In the ps_domain with a cell_FACH configuration, the RAB configuration to be used is cell_FACH_PS

Test Step Dynamic Behaviour

Test Step Name : ts_SaveCellInfo (p_CellId : INTEGER)
Group : BasicM_General_Steps/
Objective : To save in the variable dedicated to the cell p_CellID, the value contained in tcv_TmpCellInfo.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_CellInfoA := tcv_TmpCellInfo)			
3		[p_CellId = tsc_CellB]			
4		(tcv_CellInfoB:= tcv_TmpCellInfo)			
5		[p_CellId = tsc_CellC]			
6		(tcv_CellInfoC:= tcv_TmpCellInfo)			
7		[p_CellId = tsc_CellD]			
8		(tcv_CellInfoD:= tcv_TmpCellInfo)			
9		[p_CellId = tsc_CellE]			
10		(tcv_CellInfoE := tcv_TmpCellInfo)			
11		[p_CellId = tsc_CellF]			
12		(tcv_CellInfoF := tcv_TmpCellInfo)			
13		[p_CellId = tsc_CellG]			
14		(tcv_CellInfoG := tcv_TmpCellInfo)			
15		[p_CellId = tsc_CellH]			
16		(tcv_CellInfoH := tcv_TmpCellInfo)			
17		[TRUE]		I	program ming error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SetAttenuationLevel (p_CellId: INTEGER; p_Attenuation : INTEGER)
Group : BasicM_General_Steps/
Objective : Set attenuation level and also update SSCellInfo of the corresponding cell.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_CellInfoA.attenuationLevel := p_Attenuation)			
3		+It_SetAttLev			
4		[p_CellId = tsc_CellB]			
5		(tcv_CellInfoB.attenuationLevel := p_Attenuation)			
6		+It_SetAttLev			
7		[p_CellId = tsc_CellC]			
8		(tcv_CellInfoC.attenuationLevel := p_Attenuation)			
9		+It_SetAttLev			
10		[p_CellId = tsc_CellD]			
11		(tcv_CellInfoD.attenuationLevel := p_Attenuation)			
12		+It_SetAttLev			
13		[p_CellId = tsc_CellE]			
14		(tcv_CellInfoE.attenuationLevel := p_Attenuation)			
15		+It_SetAttLev			
16		[p_CellId = tsc_CellF]			
17		(tcv_CellInfoF.attenuationLevel := p_Attenuation)			
18		+It_SetAttLev			
19		[p_CellId = tsc_CellG]			
20		(tcv_CellInfoG.attenuationLevel := p_Attenuation)			
21		+It_SetAttLev			
22		[p_CellId = tsc_CellH]			
23		(tcv_CellInfoH.attenuationLevel := p_Attenuation)			
24		+It_SetAttLev			
25	ERR	[TRUE]		I	Fatal error
		It_SetAttLev			
26		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, p_Attenuation)		
27		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_SetCellCfg (p_CellId : INTEGER ; p_CellConfig : RB_ConfigType)					
Group : BasicM_General_Steps/					
Objective : To assign the field cellConfig of the cell given as parameter to the value 'p_CellConfig'. (tcv_CellInfo[p_CellId] := p_CellConfig)					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_TmpCellInfo.cellConfig := p_CellConfig)			
3		+ ts_SaveCellInfo (p_CellId)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SetTmpCellInfo (p_CellId : INTEGER)					
Group : BasicM_General_Steps/					
Objective : To Set global variable tcv_TmpCellInfo to the table corresponding to given cell					
Default : SS_Def					
Comments : This Step helps the programmer when he/she needs to access cell information in a generic test Step.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_TmpCellInfo := tcv_CellInfoA)			
3		[p_CellId = tsc_CellB]			
4		(tcv_TmpCellInfo := tcv_CellInfoB)			
5		[p_CellId = tsc_CellC]			
6		(tcv_TmpCellInfo := tcv_CellInfoC)			
7		[p_CellId = tsc_CellD]			
8		(tcv_TmpCellInfo := tcv_CellInfoD)			
9		[p_CellId = tsc_CellE]			
10		(tcv_TmpCellInfo := tcv_CellInfoE)			
11		[p_CellId = tsc_CellF]			
12		(tcv_TmpCellInfo := tcv_CellInfoF)			
13		[p_CellId = tsc_CellG]			
14		(tcv_TmpCellInfo := tcv_CellInfoG)			
15		[p_CellId = tsc_CellH]			
16		(tcv_TmpCellInfo := tcv_CellInfoH)			
17	ERR	[TRUE]		I	Fatal error
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_InitVariables
Group : BasicM_General_Steps/
Objective : Initialisation of the test case variables tcv_CellInfoX, tcv_SF_Pilot and tcv_SF512.
Default : SS_Def
Comments : tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE and tcv_CellInfoF :
contains the cell information used to configure SS.
tcv_SF_Pilot and tcv_SF512 are assigned based on the capability of the UE.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ It_CalculateFrequencyInfo			
2		+ It_AssignOperationBand			
3		+It_Init_SSInfo_CellA			
4		+It_Init_SSInfo_CellB			
5		+It_Init_SSInfo_CellC			
6		+It_Init_SSInfo_CellD			
7		+It_Init_SSInfo_CellE			
8		+It_Init_SSInfo_CellF			
9		+It_Init_SSInfo_CellG			
10		+It_Init_SSInfo_CellH			
11		+ It_InitPDP_AddressType			
		It_CalculateFrequencyInfo			
12		+ It_CalculateFreqMid			
13		+ It_CalculateFreqHigh			
14		+ It_CalculateFreqLow			
		It_CalculateFreqMid			
15		(tcv_FreqInfoMid := c_FreqInfo (px_UARFCN_D_Mid))			Uplink UARFCN N is OMITTE D
		It_CalculateFreqHigh			
16		(tcv_FreqInfoHigh := c_FreqInfo (px_UARFCN_D_High))			Uplink UARFCN N is OMITTE D
		It_CalculateFreqLow			
17		(tcv_FreqInfoLow := c_FreqInfo (px_UARFCN_D_Low))			Uplink UARFCN N is OMITTE D
		It_CheckFreqSeperation(p_UARFCN_D, p_UARFCN_U:INTEGER)			
18		[px_FDD_OperationBand = 1]			Operatio n Band 1 under test

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		[((p_UARFCN_D - p_UARFCN_U) = 950)]			Default separation
20		(tcv_Res := TRUE)			
21		[TRUE]			Non default separation
22		(tcv_Res := FALSE)			
23		[px_FDD_OperationBand = 2]			Operation Band 2 under test
24		[((p_UARFCN_D - p_UARFCN_U) = 400)]			Default separation
25		(tcv_Res := TRUE)			
26		[TRUE]			Non default separation
27		(tcv_Res := FALSE)			
28		[px_FDD_OperationBand = 3]			Operation Band 3 under test
29		[((p_UARFCN_D - p_UARFCN_U) = 475)]			Default separation
30		(tcv_Res := TRUE)			
31		[TRUE]			Non default separation
32		(tcv_Res := FALSE)			
33		[px_FDD_OperationBand = 4]			Operation Band 4 under test
34		[((p_UARFCN_D - p_UARFCN_U) = 225)]			Default separation
35		(tcv_Res := TRUE)			
36		[TRUE]			Non default separation
37		(tcv_Res := FALSE)			
38		[(px_FDD_OperationBand = 5) OR (px_FDD_OperationBand = 6)]			Operation Band 5 Or 6 under test

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		[((p_UARFCN_D - p_UARFCN_U) = 225)]			Default separation
40		(tcv_Res := TRUE)			
41		[TRUE]			Non default separation
42		(tcv_Res := FALSE)			
43		[TRUE]		I	
44		lt_Init_SSInfo_CellA (tcv_CellInfoA := c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, tcv_FreqInfoMid , px_UL_ScramblingCode))			1.
45		(tcv_CellInfoA.operationBand := tcv_FDD_OperationBand)			
46		lt_Init_SSInfo_CellB (tcv_CellInfoB := c_CellInfoDef (tsc_CellB, ((px_PriScrmCode + 50) MOD 512) , tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, tcv_FreqInfoMid , ((px_UL_ScramblingCode +1000) MOD 16777216)))			2.
47		(tcv_CellInfoB.operationBand := tcv_FDD_OperationBand)			
48		lt_Init_SSInfo_CellC (tcv_CellInfoC := c_CellInfoDef (tsc_CellC, ((px_PriScrmCode + 100) MOD 512), tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, tcv_FreqInfoMid , ((px_UL_ScramblingCode +2000) MOD 16777216)))			3.
49		(tcv_CellInfoC.operationBand := tcv_FDD_OperationBand)			
50		lt_Init_SSInfo_CellD (tcv_CellInfoD := c_CellInfoDef (tsc_CellD, ((px_PriScrmCode + 150) MOD 512), tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +3000) MOD 16777216)))			4.
51		(tcv_CellInfoD.operationBand := tcv_FDD_OperationBand)			
52		lt_Init_SSInfo_CellE (tcv_CellInfoE := c_CellInfoDef (tsc_CellE, ((px_PriScrmCode + 200) MOD 512), tsc_URA_IdCellE, px_TCellE, tsc_SFN_OffsetE, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +4000) MOD 16777216)))			5.
53		(tcv_CellInfoE.operationBand := tcv_FDD_OperationBand) lt_Init_SSInfo_CellF			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
54		(tcv_CellInfoF := c_CellInfoDef (tsc_CellF, ((px_PriScrmCode + 250) MOD 512), tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +5000) MOD 16777216)))			6.
55		(tcv_CellInfoF.operationBand := tcv_FDD_OperationBand)			
		lt_Init_SSInfo_CellG			
56		(tcv_CellInfoG := c_CellInfoDef (tsc_CellG, ((px_PriScrmCode + 300) MOD 512), tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, tcv_FreqInfoMid , ((px_UL_ScramblingCode +6000) MOD 16777216)))			
57		(tcv_CellInfoG.operationBand := tcv_FDD_OperationBand)			
		lt_Init_SSInfo_CellH			
58		(tcv_CellInfoH := c_CellInfoDef (tsc_CellH, ((px_PriScrmCode + 350) MOD 512), tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, tcv_FreqInfoMid , ((px_UL_ScramblingCode +7000) MOD 16777216)))			
59		(tcv_CellInfoH.operationBand := tcv_FDD_OperationBand)			
		lt_InitPDP_AddressType			
60		[px_IP_Version = IPv4]			
61		(tcv_IP_TypeNo := tsc_PDP_TypeNoIPv4, tcv_IPv4_Flag := TRUE, tcv_PDP_Type := "IP")			
62		[px_IP_Version = IPv6]			
63		(tcv_IP_TypeNo := tsc_PDP_TypeNoIPv6, tcv_IPv4_Flag := FALSE, tcv_PDP_Type := "IPV6")			
64		[TRUE]			
		lt_AssignOperationBand			
65		[px_FDD_OperationBand = 1]			
66		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_1)			
67		[px_FDD_OperationBand = 2]			
68		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_2)			
69		[px_FDD_OperationBand = 3]			
70		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_3)			
71		[px_FDD_OperationBand = 4]			
72		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_4)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
73		[px_FDD_OperationBand = 5]			
74		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_5)			
75		[px_FDD_OperationBand = 6]			
76		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_6)			
77		[px_FDD_OperationBand = 7]			
78		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_7)			
79		[px_FDD_OperationBand = 8]			
80		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_8)			
81		[px_FDD_OperationBand = 9]			
82		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_9)			
83		[px_FDD_OperationBand = 10]			
84		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_10)			
85		[px_FDD_OperationBand = 11]			
86		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_11)			
87		[px_FDD_OperationBand = 12]			
88		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_12)			
89		[px_FDD_OperationBand = 13]			
90		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_13)			
91		[px_FDD_OperationBand = 14]			
92		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_14)			
93		[px_FDD_OperationBand = 15]			
94		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_15)			
95		[px_FDD_OperationBand = 16]			
96		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_16)			
97		[px_FDD_OperationBand = 17]			
98		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_17)			
99		[px_FDD_OperationBand = 18]			
100		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_18)			
101		[px_FDD_OperationBand = 19]			
102		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_19)			
103		[px_FDD_OperationBand = 20]			
104		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_20)			
105		[px_FDD_OperationBand = 21]			
106		(tcv_FDD_OperationBand := c_RadioFrequencyBandFDD_21)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
107		[px_FDD_OperationBand = 22]			
108		(tcv_FDD_OperationBand :=			
109		c_RadioFrequencyBandFDD_22) [TRUE]		I	Operatio n Band not supporte d
<p>Detailed Comments : 1. The primary scrambling code of cell A is equal to the pixit value 2. The primary scrmabling code of cell B is equal to the pixit value + 50 3. The primary scrmabling code of cell B is equal to the pixit value + 100 4. Cell A and D do not have the same frequency, the primary scrambling code of cell D is equal to the one of cell A 5. Cell B and E do not have the same frequency, the primary scrambling code of cell E is equal to the one of cell B 6. Cell C and F do not have the same frequency, the primary scrambling code of cell F is equal to the one of cell C</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_Authentication (p_CellId : INTEGER)
Group : BasicM_MM_GMM_Steps/
Objective : Generate authentication paramters and run the GMM Authentication procedure
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Compute all relevant authentication parameters.
2		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cs_AuthAndCiphReq (c_GMM_AuthRAND(tcv_AuthRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), c_GMM_AuthAUTN(tcv_AuthAUTN)))		AUTHENTICATION AND CIPHERING REQUEST using relevant PS keys computed before.
3		Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv,c_AuthCiphRspExtAny))		AUTHENTICATION AND CIPHERING RESPONSE including both Authentication Response parameters (RES and RESext)
4		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authentication Response parameters match expected response.
5	TSF1	[tcv_Res = FALSE]		(F)	

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
6	TSP1	[tcv_Res = TRUE]		(P)	AUTHE NTICATI ON AND CIPHER ING RESPO NSE including only one Authenti cation Respons e paramter s (RES)
7		Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv, -))		
8		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, -, tcv_AuthK, tcv_AuthRAND, FALSE))				Verify that the received Authenti cation Respons e paramter s match expecte d respons e.
9	TSP2	[tcv_Res = FALSE]		(F)	
10	TSP2	[tcv_Res = TRUE]		(P)	AUTHE NTICATI ON AND CIPHER ING Failure, then stop executio n by assignin g INCON CLUSIV E verdict as this might be a USIM issue.
11		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphFailureAny)		
<p>Detailed Comments : See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of authentication paramters for Test USIM) See also the detailed description in test Step ts_MM_Authentication, on which this test Step is based.</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/
Objective : Computation of variables related to the Authentication and Key Agreement procedure for PS domain
Default : NAS_OtherwiseFail
Comments : Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			1. Calculation of AUTN needed for Authentication Request 2. Calculation of other authentication information needed (IK, CK, XRES) 3. Calculation of Kc GSM, using IK and CK
2		+lt_AuthCalcAUTN			
3		+lt_AuthCalcUMTS_Others			
4		+lt_AuthCalcKcGSM			
5		lt_IncrementCiphKeySeqNum			
6		[tcv_PS_KeySeq = '000'B]			
7		(tcv_PS_KeySeq := '001'B)			
8		[tcv_PS_KeySeq = '010'B]			
9		(tcv_PS_KeySeq := '011'B)			
10		[tcv_PS_KeySeq = '100'B]			
11		(tcv_PS_KeySeq := '101'B)			
12		[tcv_PS_KeySeq = '110'B]			
13		(tcv_PS_KeySeq := '111'B)			
14		[TRUE]			
15		(tcv_PS_KeySeq := '000'B)			
16		lt_AuthCalcAUTN			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		(tcv_AuthXDOUT := o_BitstringXOR(tcv_AuthRAND, tcv_AuthK, 128))			XDOUT := RAND XOR K
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN || AMF
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24
23		(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))			AUTN1 := SQN XOR AK
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT
25		(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))			AUTN2 := AMF || MAC
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80))			AUTN := AUTN1 || AUTN2
27		It_AuthCalcUMTS_Others (tcv_PS_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrappin g)

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28		(tcv_PS_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrappin g)
29		(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))			XRES := (n+1) bits of XDOUT starting from offset 0
30		lt_AuthCalcKcGSM (tcv_AuthCK_1 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64
34		(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))			CK_XO R := CK1 XOR CK2
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XO R XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)
Detailed Comments : (see ts_MM_AuthenticationInit)					

Test Step Dynamic Behaviour

Test Step Name : ts_MM_Authentication (p_CellId: INTEGER)
Group : BasicM_MM_GMM_Steps/
Objective : Normal authentication
Default : NAS_OtherwiseFail
Comments : To be used after the synchronization of the authentication in both SS and UE has been achieved.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_AuthenticationInit			1.
2		Dc!RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, c_AuthReq (tcv_CS_KeySeq, tcv_AuthRAND, c_AUTN(tcv_AuthAUTN)))		Authenti cation Request
3		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp, tcv_AuthRspExt := tcv_AuthRspPDU.authRspExt)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyExt)		Authenti cation Respons e with extensio n
4		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			
5	TSF1	[tcv_Res = FALSE]		(F)	
6		[tcv_Res = TRUE]			
7		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyNoExt)		Authenti cation Respons e without extensio n
8		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, FALSE))			
9	TSF2	[tcv_Res = FALSE]		(F)	
10		[tcv_Res = TRUE]			
11	TSF3	Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthFailAny)	(F)	2.

Detailed Comments : Normal authentication to be used after the synchronization between SS and UE has been performed successfully.

1. Authentication request is sent by the network. Key Sequence and RAND as provided by the corresponding variables tcv_KeySeq and tcv_AuthRAND.
2. If the UE generates a response, this response may consist of 2 parts which have to be extracted from the received message.
3. The response is checked against an expected response calculated using a test suite operation.
4. If the comparison of expected and calculated response is not ok, then authentication fails.
5. Otherwise authentication is granted.
6. If the UE sends an Authentication Failure the authentication fails.

Steps:

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour
Detailed Comments : ... <ol style="list-style-type: none">1. Initialization of the authentication variables (see 34.108 cl. 8.1.2)2. Authentication Failure: should not happen because the synchronization has been done already

Test Step Dynamic Behaviour

Test Step Name : ts_MM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/
Objective : Initialization of variables related to authentication.
Default : NAS_OtherwiseFail
Comments : Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			
2		+lt_AuthCalcAUTN			1. Calculati on of AUTN needed for Authenti cation Request
3		+lt_AuthCalcUMTS_Others			2. Calculati on of other authenti cation informati on needed (IK, CK, XRES)
4		+lt_AuthCalcKcGSM			3. Calculati on of Kc GSM, using IK and CK
5		lt_IncrementCiphKeySeqNum			
6		[tcv_CS_KeySeq = '000'B]			
7		(tcv_CS_KeySeq := '001'B)			
8		[tcv_CS_KeySeq = '001'B]			
9		(tcv_CS_KeySeq := '010'B)			
10		[tcv_CS_KeySeq = '010'B]			
11		(tcv_CS_KeySeq := '011'B)			
12		[tcv_CS_KeySeq = '011'B]			
13		(tcv_CS_KeySeq := '100'B)			
14		[tcv_CS_KeySeq = '100'B]			
15		(tcv_CS_KeySeq := '101'B)			
16		[tcv_CS_KeySeq = '101'B]			
17		(tcv_CS_KeySeq := '110'B)			
18		[TRUE]			
19		(tcv_CS_KeySeq := '000'B)			
		lt_AuthCalcAUTN			
		(tcv_AuthXDOUT := o_BitstringXOR(tcv_AuthRAND, tcv_AuthK, 128))			XDOUT := RAND XOR K

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN || AMF
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24
23		(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))			AUTN1 := SQN XOR AK
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT
25		(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))			AUTN2 := AMF || MAC
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80))			AUTN := AUTN1 || AUTN2
27		It_AuthCalcUMTS_Others (tcv_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrappin g)

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28		(tcv_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrappin g)
29		(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))			XRES := (n+1) bits of XDOUT starting from offset 0
30		lt_AuthCalcKcGSM (tcv_AuthCK_1 := o_BitstringXtract(tcv_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64
34		(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))			CK_XO R := CK1 XOR CK2
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XOR R XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)
<p>Detailed Comments : Initialization of the variables needed for authentication. The calculation is done according to the prescription of TS 34.108 cl. 8.1.2. and TS 33.102 cl. 6.8.1.2 The AUTN calculated is used as parameter of the Authentication Request. CK, IK and Kc GSM are used by RRC. XRES is used to check the RES contained in Authentication Response.</p>					

Test Step Dynamic Behaviour					
<p>Test Step Name : ts_MM_PwrOrUSIM_Off (p_USIM_Rmvd : BOOLEAN) Group : BasicM_MM_GMM_Steps/ Objective : Deactivation of the UE Default : NAS_OtherwiseFail Comments : Depending upon UE's properties (USIM removal, switching off or powering off) Description :</p>					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv)]			SIM needs to be removed .
2		+ts_MMI_USIM_Remove			remove SIM card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOff			switch off the UE
5		[TRUE]			
6		+ts_MMI_UE_PwrOff			power off the UE
<p>Detailed Comments : There are 2 types of deactivation required for testing: 1. USIM removal or switching off or removal of the power source 2. Switching off or removal of the power source Parameter p_USIM_Rmvd controls the variant to be applied: 1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be removed if possible</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_MM_PwrOrUSIM_On (p_USIM_Rmvd : BOOLEAN)
Group : BasicM_MM_GMM_Steps/
Objective : Activation of the UE
Default : NAS_OtherwiseFail
Comments : Depending upon the UE's properties (USIM insertion, switching on or powering on)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv)]			USIM has been removed
2		+ts_MMI_USIM_Insert			insert USIM card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOn			switch on the UE
5		[(((NOT p_USIM_Rmvd) OR (NOT pc_USIM_Rmv)) AND (NOT pc_SwitchOnOff))]			
6		+ts_MMI_UE_PwrOn			power on the UE

Detailed Comments : There are 2 types of activation required for testing:

1. USIM insertion or switching on or restoration of the power source
2. Switching on or restoration of the power source

 Parameter p_USIM_Rmvd controls the variant to be applied:

1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be inserted if possible

 This test Step is the counterpart to ts_MM_PwrOrUSIM_Off resp ts_MM_IMSI_Detach.

Test Step Dynamic Behaviour

Test Step Name : po_ConnectionAndSS_Rel (p_CellId : INTEGER)
Group : BasicM_Postambles/
Objective : To release the existing RRC connection and release the channels that are configured in the SS.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
3		+ It_Send_RRC_ConnectionRelease			
4		+ ts_SS_Rel (p_CellId)			
5		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	0.
6		It_Send_RRC_ConnectionRelease [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoC onn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_No Conn)]			3.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		[TRUE]			4.
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_P S) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_P S) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_P S)OR (tcv_TmpCellInfo.cellConfig=cell_FACH_2SCCP CH_StandAlonePCH_PS_2a)]			1.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
9		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCC		
10		AM?RLC_AM_DATA_IND	H(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT)) car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
11		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			
12		[TRUE]			2.
13		(tcv_N308 := 1, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
14		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCC		
15		UM?RLC_UM_DATA_IND	H(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308)) car_RRC_ConnRelCmplUM(tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
16		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
17		It_RptRcvConnRel			
18	TSF2	START t_Dly			
19		? TIMEOUT t_Dly (tcv_K := tcv_N308 + 1)		(F)	To stop the loop

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti))	(P)	Retransmission
Detailed Comments : 0. The cell has not been configured, it shall not be released 1. cell_FACH state 2. cell_DCH state 3. No RRC connection is established 4. An RRC connection is established					

Test Step Dynamic Behaviour					
Test Step Name : po_ConnectionAndSS_Rels Group : BasicM_Postambles/ Objective : To release the existing RRC connection and release the channels that are configured in the SS for all cells. Default : RRC_Def1 Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ It_ReleaseCell (tsc_CellA)			
2		+ It_ReleaseCell (tsc_CellB)			
3		+ It_ReleaseCell (tsc_CellC)			
4		+ It_ReleaseCell (tsc_CellD)			
5		+ It_ReleaseCell (tsc_CellE)			
6		+ It_ReleaseCell (tsc_CellF)			
7		+ It_ReleaseCell (tsc_CellG)			
8		+ It_ReleaseCell (tsc_CellH)			
		It_ReleaseCell (p_CellId : INTEGER)			
9		+ ts_SetTmpCellInfo (p_CellId)			
10		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			1.
11		+ po_ConnectionAndSS_Rel (p_CellId)			
12		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			2.
Detailed Comments : 1. The cell has been configured, then it shall be released 2. The cell has not been configured					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnEst (p_CellId : INTEGER; p_MO_Reg : RegOr_MO; p_EstCause : EstablishmentCause)

Group : BasicM_RRC_Steps/

Objective : The generic Step to establish RRC Connection and bring UE to CELL_FACH or CELL_DCH state.

Default : RRC_DefConnEst

Comments : In this Step , 5 Signalling Radio Bearers with 3.4kbps DL & UL is setup (RB#0, 1, 2, 3,4)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+lt_RcvConnReq			
4		+lt_Send_ConnSetUp			
5		+ ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
6		lt_RcvConnReq			
7		[p_MO_Reg = est_Reg] TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (registration))		
8		[(p_MO_Reg = est_MO) OR (p_MO_Reg = est_MT)]			
9		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (p_EstCause))		
10		lt_Send_ConnSetUp [(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		oConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)] UMIRLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetupFACH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.cRNTI, tcv_TmpCellInfo.uL_ScramblingCode))		
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn]			
13		+ ts_SetCellCfg (p_CellId, cell_FACH)			1.
14		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn]			
15		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC)			1.
16		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn]			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH)			1.
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn]			
19		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH)			1.
20		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn]			
21		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH)			
22		[tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn]			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_MAC_SRB)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn]			
25		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
26		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn]			
27		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2)			
28		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn]			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH)			
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn]			
31		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a)			
32		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_ NoConn]			
33		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)			
34		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_ NoConn]			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)			
36		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_ NoConn]			
37		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)			
38		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
39		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCo de , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_Scrambl ingCode))		
40		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
41		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			
42		[tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn]			
43		+ ts_SetCellCfg (p_CellId, cell_DCH_MAC_SRB)			
44	ERR	[TRUE]		I	2.
Detailed Comments : 1. Update the cell configuration 2. A RRC connection has already been established.					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel (p_CellId: INTEGER; p_RRC_RelStatus : RRC_Rel_Status)

Group : BasicM_RRC_Steps/

Objective : To bring the UE from state CELL_DCH/ CELL_FACH to idle state by releasing the RRC connection

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ It_Send_RRC_ConnectionRelease			
4		+ It_RestartCRLC_ForNextConnection			
5		+ ts_SS_ResetSecurityKey			
		It_RestartCRLC_ForNextConnection			
6		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB]			
7		+ ts_CRLC_RelReconfSRB (p_CellId)			
8		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
9		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
10		+ ts_CRLC_RelReconfSRB (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC]			
13		+ ts_CRLC_RelReconfSRB (p_CellId)			
14		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC_NoConn)			
15		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH]			
16		+ ts_CRLC_RelReconfSRB (p_CellId)			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH_NoConn)			
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH]			
19		+ ts_CRLC_RelReconfSRB (p_CellId)			
20		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH_NoConn)			
21		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
22		+ ts_CRLC_RelReconfSRB (p_CellId)			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_NoConn)			
24		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
25		+ ts_CRLC_RelReconfSRB (p_CellId)			
26		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn)			
27		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS)]			
28		+ ts_CRLC_RelReconfSRB (p_CellId)			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn)			
30		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS)]			
31		+ ts_CRLC_RelReconfSRB (p_CellId)			
32		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn)			
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			
34		+ ts_CRLC_RelReconfSRB (p_CellId)			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn)			
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS)]			
37		+ ts_CRLC_RelReconfSRB (p_CellId)			
38		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_ NoConn)			
39		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_PS)]			
40		+ ts_CRLC_RelReconfSRB (p_CellId)			
41		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_ NoConn)			
42		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS)]			
43		+ ts_CRLC_RelReconfSRB (p_CellId)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_ NoConn)			
45		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			
46		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
47		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
48	ERR1	[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn)]		I	1.
49	ERR2	[TRUE]		I	
50		lt_Send_RRC_ConnectionRelease [p_RRC_RelStatus= cell_Dch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
51		(tcv_N308 := 2, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
52		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
53	TSP1	UM ? RLC_UM_DATA_IND	cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308) car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
54		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
55		[p_RRC_RelStatus = cell_Fach_Dcch]			
56		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
57	TSP2	AM ? RLC_AM_DATA_IND	cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT) car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
58		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
59		[p_RRC_RelStatus = cell_Fach_Ccch]			
60		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0,		
			cs_108_RRC_ConnRelCCC H (c_U_RNTI, tcv_RRC_Ti))		
61		[TRUE]		I	Program ming error
		lt_RptRcvConnRel			
62		START t_Dly			
63	TSF2	? TIMEOUT t_Dly		(F)	
64		(tcv_K := tcv_N308 + 1)			To stop the loop
65	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti))	(P)	Retrans mission
Detailed Comments : 1. No RRC connection is established					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ReceiveConnSetupCmpl (p_CellId : INTEGER)
Group : BasicM_RRC_Steps/
Objective : To receive RRC CONNECTION SETUP COMPLETE message and download SS security keys according to the received information element.
Default : RRC_DefConnEst,RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS)]			
3		START t_WaitMS			
4	TSF1	? TIMEOUT t_WaitMS		(F)	
5	TSP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCC_H_Message.message.rrcConnectionSetupComplete.startList, tcv_CellIndInfo.cipheringAlgorithmCapability := RLC_AM_DATA_IND.aM_message.uL_DCC_H_Message.message.rrcConnectionSetupComplete.ue_RadioAccessCapability.securityCapability.cipheringAlgorithmCap) CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl (tcv_RRC_Ti, ?))	(P)	UE capability is present in a DCH configuration
6		+ lt_GetHFN			
7		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
8		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
9	TSF2	START t_WaitMS ? TIMEOUT t_WaitMS		(F)	
10	TSP2	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCC H_Message.message.rrcConnectionSetupComplete.startList) CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl (tcv_RRC_Ti, ?))	(P)	UE capability is not present in a FACH configuration
11		+ lt_GetHFN			
12		[TRUE] lt_GetHFN		I	
13		(tcv_Count := NUMBER_OF_ELEMENTS (tcv_StartList))			
14		[tcv_Count = 1]			
15		+ lt_FirstValue			
16		[tcv_Count = 2]			
17		+ lt_FirstValue			
18		+ lt_SecondValue			
19	ERR1	[TRUE] lt_FirstValue		F	
20		[tcv_StartList.[0].cn_DomainIdentity = tsc_CS_Domain]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		(tcv_CellIndInfo.start_CS := tcv_StartList.[0].start_Value)			
22		[tcv_StartList.[0].cn_DomainIdentity = tsc_PS_Domain]			
23		(tcv_CellIndInfo.start_PS := tcv_StartList.[0].start_Value)			
24	ERR2	[TRUE] It_SecondValue		F	
25		[tcv_StartList.[1].cn_DomainIdentity = tsc_CS_Domain]			
26		(tcv_CellIndInfo.start_CS := tcv_StartList.[1].start_Value)			
27		[tcv_StartList.[1].cn_DomainIdentity = tsc_PS_Domain]			
28		(tcv_CellIndInfo.start_PS := tcv_StartList.[1].start_Value)			
29	ERR3	[TRUE]		F	
Detailed Comments : 1. Download the START value to SS					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_GetRLC_SeqNumSecurity (p_CellId : INTEGER)
Group : BasicM_Security_Steps/
Objective : To assign the variables to the current RLC sequence number of its corresponding SRB and RAB if configured.
Default : SS_Def_Special
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
3		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB1 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
4		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
5		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB2 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
6		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
7		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB3 := CRLC_SequenceNumber_CNF.count_C_LSB_DL , tcv_RLC_SeqNumUL_RB3 := CRLC_SequenceNumber_CNF.count_C_LSB_UL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
8		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
9		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB4 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
10		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR ((tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)) OR ((tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH _CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH _2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlon ePCH_2a)) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)] CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
12		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
13		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB)AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
14		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
15		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
17		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
18		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
19		CRLC ! CRLC_SequenceNumber_RE Q	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB22)		
20		CRLC ? CRLC_SequenceNumber_C NF (tcv_RLC_SeqNumDL_RB22 := CRLC_SequenceNumber_C NF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB22)		

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)AND(tcv_CellIndInfo.recentSecureDomain =ps_domain)]			
22		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
23		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
24		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
25		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
26		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_InitSystemSpecificCap
Group : BasicM_Security_Steps/
Objective : If UE supports GSM, this step initialises tcv_UE_SystemSpecificCap based on PICS
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_UMTS_GSM]			IF GSM is supported
2		(tcv_UE_SystemSpecificCap := 0)			
3		+lt_A57			
4		+lt_A56			
5		+lt_A55			
6		+lt_A54			
7		+lt_A53			
8		+lt_A52			
9		+lt_A51			
10		[TRUE]			IF GSM not Supported
11		(tcv_UE_SystemSpecificCap := 0)			
		lt_A57			
12		[pc_MS_ClsmkA5_7='1'B]			A5_7 Supported
13		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+64)			
14		[TRUE]			
		lt_A56			
15		[pc_MS_ClsmkA5_6='1'B]			A5_6 Supported
16		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+32)			
17		[TRUE]			
		lt_A55			
18		[pc_MS_ClsmkA5_5='1'B]			A5_5 Supported
19		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+16)			
20		[TRUE]			
		lt_A54			
21		[pc_MS_ClsmkA5_4='1'B]			A5_4 Supported
22		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+8)			
23		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
24		It_A53 [pc_MS_ClsmkA5_3='1'B]			A5_3 Support ed
25		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+4)			
26		[TRUE]			
27		It_A52 [pc_MS_ClsmkA5_2='1'B]			A5_2 Support ed
28		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+2)			
29		[TRUE]			
30		It_A51 [pc_MS_ClsmkA5_1='0'B]			A5_1 Support ed
31		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+1)			
32		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CMACE_DL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER; p_IncrDcr : Increment_Mode)					
Group : BasicM_Security_Steps/					
Objective : Configure ciphering on the MAC layer for DL RBs. This step shall be called when required.					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMACE_DL_CipherActReq (tsc_CellDedicated, tsc_DL_DPCH1, p_CipherMode, p_ActTime, p_IncrDcr)		start, restart or stop cipherin g for TM RB
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMACE_CipherActCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CMACE_UL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER;
 p_IncrDcr : Increment_Mode)
Group : BasicM_Security_Steps/
Objective : Configure ciphering on the MAC layer for UL RBs.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMACE_UL_CipherActReq (tsc_CellDedicated, tsc_UL_DPCH1, p_CipherMode, p_ActTime , p_IncrDcr)		start, restart or stop ciphering
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMACE_UL_CipherActCnf (tsc_CellDedicated, tsc_UL_DPCH1)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_DL_CipherCfgRB (p_CipherMode: CipheringModeCommand; p_RbType : RB_ConfigType ;p_IncMode : RLC_IncMode)
Group : BasicM_Security_Steps/
Objective : Configure ciphering for RLC layer for configured AM/UM RAB's
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_RbType = cell_DCH_64kPS_RAB_SRB) OR (p_RbType = cell_FACH_PS) OR (p_RbType = cell_Two_DTCH_CS_PS) OR (p_RbType = cell_Four_DTCH_CS_PS) OR (p_RbType = cell_PDCP_AM_RAB)OR (p_RbType = cell_PDCP_UM_RAB)OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_Cnfg1_PS) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_PS)OR (p_RbType = cell_FACH_3_SCCPCH_3_FACH_CTCH_PS) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
2		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
3		[(p_RbType = cell_PDCP_UM_RAB)]			
4		+ It_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
5		[(p_RbType = cell_PDCP_AM_UM_RAB)]			
6		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
7		+ It_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
8		[(p_RbType = cell_DCH_2AM_PS) OR (p_RbType = cell_DCH_2_PS_Call)]			
9		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
10		+ It_RLC_Activate (tsc_RB22, tcv_RLC_SeqNumDL_RB22)			
11		[(p_RbType = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_PS) OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_PS) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_PS)]			
12		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
13		+ It_RLC_Activate (tsc_RB24, tcv_RLC_SeqNumDL_RB24)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
14		[TRUE] It_RLC_Activate (p_rblId : INTEGER ; p_SeqNum : RLC_SequenceNumber)			
15		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated , ps_domain , p_rblId , p_CipherMode, p_SeqNum , p_IncMode)		configure ciphering for signaling radio bearers
16		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_DL_CipherCfgSRB (p_CipherMode: CipheringModeCommand;p_IncMode : RLC_IncMode) Group : BasicM_Security_Steps/ Objective : Configure ciphering for RLC layer for RB1, RB2, RB3 and RB4 Default : SS_Def Comments : CRLC is configured with cellId -1 (tsc_CellDedicated) Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ It_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1)			
2		+ It_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2+2)			
3		+ It_RLC_Activate (tsc_RB3 , tcv_RLC_SeqNumDL_RB3)			
4		+ It_RLC_Activate (tsc_RB4 , tcv_RLC_SeqNumDL_RB4)			
5		It_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber) CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated , tcv_CellIndInfo, recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq, p_IncMode)		configure ciphering for signaling radio bearers
6		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_DL_Integrity (p_IntegrityProtectionModelInfo : IntegrityProtectionModelInfo)					
Group : BasicM_Security_Steps/					
Objective : To start the integrity protection					
Default : SS_Def					
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_DL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_IntegrityProtectionModelInfo)		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_UL_CipherCfg (p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList ;p_IncMode : RLC_IncMode)					
Group : BasicM_Security_Steps/					
Objective : Configure ciphering for RLC layer					
Default : SS_Def					
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_UL_CipherActReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_RB_ActivationTimeInfoList ,p_IncMode)		configure ciphering for signaling radio bearers
2		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_UL_Integrity (p_IntegrityProtActivationInfo : IntegrityProtActivationInfo)					
Group : BasicM_Security_Steps/					
Objective : To start the integrity protection					
Default : SS_Def					
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo.recentSecureDomain, c_RestRB_IntegrityProtActivationInfoList(p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[0], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[1], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[3], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[4]))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_ResetSecurityKey					
Group : BasicM_Security_Steps/					
Objective : To download all security keys to CMAC (for DCH cell configurations only) and CRLC.					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_CellIndInfo:=c_CellIndInfoDef)			
2		[pc_UEA1_Supp]			
3		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
4		[NOT (pc_UEA1_Supp)]			
5		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_DownloadSecurityKey (p_CellId : INTEGER; p_KC : KeyCiphering; p_IK : IntegrityKey; p_GSM_ck : GSM_CipheringKey; p_CN_Domain : CN_DomainIdentity)

Group : BasicM_Security_Steps/

Objective : To download all security keys to CMAC (for DCH cell configurations only) and CRLC.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_CipheringOnOff]			
3		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR			Cell FACH

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
4		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)] + It_DownloadKeyCRLC (tcv_HFN, p_KC, p_IK)			
5		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]			Cell DCH no TM RAB
6		+ It_DownloadKeyCRLC (tcv_HFN, p_KC,p_IK)			
7		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			cell DCH with TM RAB
8		+ It_DownloadKeyCRLC (tcv_HFN,p_KC,p_IK)			
9		+ It_DownloadKeyCMAC (tcv_HFN, p_KC)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		[TRUE]			
11		[NOT px_CipheringOnOff]			
12		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)O R (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			Cell FACH
13		+ lt_DownloadKeyCRLC (tcv_HFN,OMIT,p_IK)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
14		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]			Cell DCH no TM RAB
15		+ It_DownloadKeyCRLC (tcv_HFN ,OMIT, p_IK)			
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			cell DCH with TM RAB
17		+ It_DownloadKeyCRLC (tcv_HFN,OMIT, p_IK)			
18		[TRUE] It_DownloadKeyCMAC (p_HFN : B20; p_KC_LT : KeyCiphering)			
19		CMAC ! CMAC_SecurityMode_Config_REQ	ca_CMAC_SecurityModeCfgReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, OMIT, OMIT)		Download security keys for MAC
20		CMAC ? CMAC_SecurityMode_Config_CNF It_DownloadKeyCRLC (p_HFN : B20; p_KC_LT : KeyCiphering; p_IK_LT : IntegrityKey)	ca_CMAC_SecurityModeCfgCnf (tsc_CellDedicated)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		CRLC ! CRLC_SecurityMode_Config_REQ	ca_CRLC_SecurityModeCfg Req (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, p_IK_LT, OMIT)		Download security keys for RLC. CRLC is configur ed with cellId -1 (tsc_Cell Dedicate d)
22		CRLC ? CRLC_SecurityMode_Config_CNF	ca_CRLC_SecurityModeCfg Cnf (tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_SecurityDownloadStart (p_domain : CN_DomainIdentity ; p_StartValue : B20)					
Group : BasicM_Security_Steps/					
Objective : To download a new START value In the cell Independent Record					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_domain = cs_domain]			
2		(tcv_CellIndInfo.start_CS := p_StartValue)			
3		[p_domain = ps_domain]			
4		(tcv_CellIndInfo.start_PS := p_StartValue)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SetDL_RRC_MessageSN (p_ActCell : INTEGER)
Group : BasicM_Security_Steps/
Objective : To Set the Message sequence number in DL to all 0 for RB0 to RB4
Default : SS_Def
Comments : This step to be used when Integrity is to be started
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ (p_ActCell, tsc_RB0, 0)		
2		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (p_ActCell, tsc_RB0)		
3		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB1, 0)		
4		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB2, 0)		
6		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB3, 0)		
8		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB3)		
9		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB4, 0)		
10		CRLC ?CRLC_SetRRC_MessageSN_CN F	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB4)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RB2_UL_IntegrityActivate(p_RRCSN : RRC_MessageSequenceNumber)
Group : BasicM_Security_Steps/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo.recentSecureDomain, c_RB2_IntegrityProtActivationInfoList(p_RRCSN))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_CipherCfg (p_CellId : INTEGER;p_CalcNewActTime : BOOLEAN; p_CipherMode: CipheringModeCommand; p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective : To Configure the MAC Layer with the

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		<pre> [((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS)) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain)] </pre>			
3		+It_CalcActivationTime			
4		+ts_CMAC_DL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)			
5		+ts_CMAC_UL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)			
6		[TRUE]		(P)	No TM RAB configured
7		It_CalcActivationTime			
8		[p_CalcNewActTime = TRUE]			
9		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
10		<pre> CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber) (tcv_CipherActTime := (256 + tcv_FrameNumber- (tcv_FrameNumber MOD 8 +8)) MOD 256) </pre>	car_GetFrameNum(p_CellId, tsc_DL_DPCH1)		Calculate the Ciphering Activation Time
11		[p_CalcNewActTime = FALSE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GetRRC_MessageSN(p_CellId : INTEGER)
Group : BasicM_Security_Steps/
Objective : To Calculate the Message sequence numbers for RB0 to RB4 and store in TCV's.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB0)		
2		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB0 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB0)		
3		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB1)		
4		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB1 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB2)		
6		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB2 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL, tcv_RRC_MSN_RB2_UL := CRLC_RRC_MessageSN_CNF.count_I_LSB_UL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB3)		
8		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB3 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB3)		
9		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB4)		
10		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB4 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB4)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Security (
 p_CellId : INTEGER;
 p_KC : KeyCiphering;
 p_IK : IntegrityKey;
 p_GSM_ck : GSM_CipheringKey;
 p_NewKey : BOOLEAN;
 p_CN_Domain : CN_DomainIdentity)
Group : BasicM_Security_Steps/
Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		+ ts_SetTmpCellInfo (p_CellId)				
2		+ It_RRC_InitVariables				
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)				
4		+ It_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2	
5		+It_RB2_UL_IntegrityActivate				
6		+ It_StartSecurity_UE				
7		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo.recentSecureDomain = ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = cs_domain))]				
8		+ ts_CRLC_ResumeSecurity (p_CellId)				
9		[TRUE]				
10		It_RB2_UL_IntegrityActivate [tcv_Int_ModifyFlag]				If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
11		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)				
12		[NOT tcv_Int_ModifyFlag]				If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
13		+ ts_RB2_UL_IntegrityActivate(0) It_ActivateSecurity_DL_SS				
14		+ It_InitialiseRRC_MSN				

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
16		[[(tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo.recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain =cs_domain))]			
17		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
18		+ It_AssignRB_ActivationTimeInfoList			
19		+ ts_CRLC_SuspendSecurity (p_CellId)			Suspend SRBs 1, 3 and 4
20		+ ts_CRLC_DL_CipherCfgSRB (tcv_CellIndInfo.dL_CipherMode,notInc)			Configure ciphering for RLC (RBs 1, 2, 3 and 4)
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			
22		+ ts_CMAC_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[px_PreCfgSRB3Ciph]			If preconfiguration of SRB3 is wanted
24		+ ts_CRLC_UL_CipherCfg (c_RB_ActivationTimeInfoList_RB3(tcv_RLC_SeqNumUL_RB3) ,notInc)			
25		[NOT px_PreCfgSRB3Ciph]			If preconfiguration of SRB3 is NOT wanted
26		[TRUE]			If no New Ciphering config
		It_InitialiseRRC_MSN			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
27		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
28		+ ts_SetDL_RRC_MessageSN (p_CellId)			
29		[tcv_Int_ModifyFlag]			
		It_StartSecurity_UE			
30		+ It_SendSecurityModeCommand			
31		[px_CipheringOnOff]			Ciphering and Integrity
32	TSP1	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.uL_Int egProtActivationInfo, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.rb_U L_CiphActivationTimeInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , ?))	(P)	UL ciphering information is present
33		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode ,notInc)			
34		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)			
35	TSP1	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti , ?))	(F)	
36		[NOT (px_CipheringOnOff)]			Integrity only no ciphering
37	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.uL_Int egProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , OMIT))	(P)	No UL Ciphering information
38		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)			
39	TSP2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti , ?))	(F)	
		It_SendSecurityModeCommand			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
40		[pc_UMTS_GSM]			Branching if GSM Supported
41		[px_CipheringOnOff]			Ciphering ON and integrity ON
42		<pre> [((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS))) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)] </pre>			Ciphering on TM RAB present, hence include Ciphering activation time
43		AMIRLC_AM_DATA_REQ	<pre> cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7))))) </pre>		Ciphering for signalling RBs 1 to 4
44		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
45		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,cs_UE_Sys SpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		Cipherin g for signallin g RBs 1 to 4
46		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF
47		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		
48		[NOT pc_UMTS_GSM]			Branchin g if GSM Not Support ed

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		[px_CipheringOnOff]			Ciphering ON and integrity ON
50		<pre> [((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS))) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)] </pre>			Ciphering on TM RAB present, hence include Ciphering activation time
51		AM!RLC_AM_DATA_REQ	<pre> cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT))) </pre>		Ciphering for signalling RBs 1 to 4
52		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
53		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		Cipherin g for signallin g RBs 1 to 4
54		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF
55		AMIRLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		
56		lt_RRC_InitVariables			
57		+ lt_InitCipherMode			
58		+ lt_InitIntegrity			
59		+ ts_InitSystemSpecificCap			
60		+ ts_SaveCellInfo (p_CellId) [p_NewKey = TRUE]			Authenti cation was done, reset HFN
61		(tcv_HFN := '00000000000000000000'B)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
62		[p_CN_Domain = cs_domain]			
63		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
64		[p_CN_Domain = ps_domain]			
65		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
66		[p_NewKey = FALSE]			
67		[p_CN_Domain = cs_domain]			
68		(tcv_HFN := tcv_CellIndInfo.start_CS)			
69		[p_CN_Domain = ps_domain]			
70		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitCipherMode			
71		[px_CipheringOnOff = TRUE]			
72		[pc_UEA1_Supp]			
73		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Switch On cipherin g
74		[p_CN_Domain = cs_domain]			
75		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
76		[p_CN_Domain = ps_domain]			
77		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
78		[NOT (pc_UEA1_Supp)]			
79		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			Switch On cipherin g
80		[p_CN_Domain = cs_domain]			
81		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
82		[p_CN_Domain = ps_domain]			
83		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
84		[NOT (px_CipheringOnOff)]			
85		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			
86		[pc_UEA1_Supp]			
87		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
88		[NOT (pc_UEA1_Supp)]			
89		(tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
		lt_InitIntegrity			
90		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
91		[tcv_CellIndInfo.integrityStarted]			
92		+ts_GetRRC_MessageSN (p_CellId)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
93		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_P(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3, tcv_RRC_MSN_RB4) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
94		[NOT tcv_CellIndInfo.integrityStarted]			
95		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dL_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
96		It_AssignRB_ActivationTimeInfoList [((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)) AND (p_CN_Domain = ps_domain)]			
97		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20))			
98		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (p_CN_Domain = ps_domain)]			
99		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB21))			
100		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) AND (p_CN_Domain = ps_domain)]			
101		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB21))			
102		[((tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)) AND (p_CN_Domain = ps_domain)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
103		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_22 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB22))			
104		[TRUE]			
105		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2 +2, tcv_RLC_SeqNumDL_RB3 , tcv_RLC_SeqNumDL_RB4))			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour					
Test Step Name : ts_CMACEl (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity) Group : BasicM_SS_Configuration_Steps/ Objective : To request to release the Radio Link Default : SS_Def Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Config_REQ	cas_MAC_Rel (p_CellId , p_PhyCH)		
2		CMAC ? CMAC_Config_CNF	ca_CMACEl_CfgCnf (p_CellId , p_PhyCH)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CPHY_ActTime (p_CellId: INTEGER; p_PhysicalChannelIdentity : PhysicalChannelIdentity; p_ttiValue : INTEGER) Group : BasicM_SS_Configuration_Steps/ Objective : To calculate the activation time based on CHY frame number Default : SS_Def Comments : p_ttiValue : is equal to tti/10 The following tcv are assigned: tcv_FrameNumber, tcv_ActTime Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
2		CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber)	car_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
3		(tcv_ActTime := (256 + tcv_FrameNumber- (tcv_FrameNumber MOD 8 +8)) MOD 256, tcv_TGCFN := (tcv_FrameNumber+(256-p_ttiValue)) MOD 256)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CPHY_TrChRelDCH_NoSHO (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity) Group : BasicM_SS_Configuration_Steps/ Objective : To request to release the Radio Link Default : SS_Def Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqDCH_NoSHO (p_CellId , p_PhyCH)		
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CPHY_TrChRelNonDch (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)					
Group : BasicM_SS_Configuration_Steps/					
Objective : To request to release the Radio Link					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqNonDch (p_CellId , p_PhyCH)		
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_Rel (p_CellId : INTEGER; p_RB_Id : INTEGER)					
Group : BasicM_SS_Configuration_Steps/					
Objective : To release RLC entity.					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_CRLC_RB_RelReq (p_CellId, p_RB_Id)		release radio bearer
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (p_CellId, p_RB_Id)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CRLC_RelReconfSRB (p_CellId : INTEGER)					
Group : BasicM_SS_Configuration_Steps/					
Objective : To release RLC counter sequence number for SRB 1 to 4, by first releasing them and then setting them up again.					
Default : SS_Def					
Comments : This step is used only in conjunction with the RRC Connexion Release step. The configuration for SRBs 1 to 4 is the same as the one used for cell_DCH and cell_FACH.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
2		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
3		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
4		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
5		+ ts_SS_RB1_ToRB4_Cfg			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_ResumeSecurity (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : resume radio bearers for the security procedure
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Switchch On cipherin g
2		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB1)		
3		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB1)		
4		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB3)		
5		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB3)		
6		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB4)		
7		CRLC ? CRLC_Resume_CNF (tcv_RB_SigResumed := TRUE)	car_ResumeRB(tsc_CellDedicated , tsc_RB4)		
8		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAloneP CH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CT CH)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
9		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
10		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
11		[tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
12		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB21)		
13		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]			
15		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
16		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
17		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB21)		
18		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB21)		
19		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)]			
20		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
21		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
22		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB22)		
23		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB22)		
24		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_SuspendSecurity (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : suspend radio bearers for the security procedure
Default : SS_Def_Special
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Switch On ciphering
2		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB1, tcv_RLC_SeqNumDL_RB1)		2
3		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB1)		
4		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB3, tcv_RLC_SeqNumDL_RB3)		2
5		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB3)		
6		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB4, tcv_RLC_SeqNumDL_RB4)		2
7		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB4)		
8		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FA			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
9		CH_3_SCCPCH_3_FACH_CTCH)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)] CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
10		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
11		[[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
12		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
13		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
15		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
16		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
17		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
18		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
19		[[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
20		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
21		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB22, tcv_RLC_SeqNumDL_RB22)		2
23		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB22)		
24		[TRUE]			
Detailed Comments : 1. Get the RLC sequence number 2. suspend the SRB at the current RLC sequence number					

Test Step Dynamic Behaviour

Test Step Name : ts_ReconfigFACH_ToNoDedicated (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To reconfig the cell from cell_FACH to cell_FACH_NoDedicated.
Default : SS_Def
Comments : In cell_FACH_NoDedicated, no DCCH/DTCH are configured: no C-RNTI nor U-RNTI are downloaded to CMAC.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		+ lt_RelBCCH_FACH			
4		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_S_CCPCH1, c_UE_Info(OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FACH_CellDCH)		map PCCH to PCH, CCCH to FACH
5		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
6		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH
7		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
8	ERR1	[px_RAT = tdd]		|	
9	ERR2	[TRUE]		|	
10		lt_RelBCCH_FACH [(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
11		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
12		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Cfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : to configure physical channel DPCH1 and connect DCH5 to the physical channel, then map DCCH1-4 on to the DCH5 transport channel. Used for setting up stand-alone UL:13.6 DL:13.6 kbps SRBs
Default : SS_Def
Comments : The transport channel DCH5 carries only dedicated control channels. MAC-d is configured with cellId -1 (tsc_CellDedicated).
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_RL_Setup_REQ	ca_DL_DPCH_Info (p_CellId, tsc_DL_DPCH1, cb_DL_DPCH_SRB_StandAloneDPCH_Offset (tcv_TmpCellInfo.dl_DPCH_2ndScrCode))		1.
5		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_DL_DPCH1)		
6		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId, tsc_DL_DPCH1)		2.
7		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
8		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_13_6_StandAlone, c_TrLogMappingDL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH
9		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
10		CPHY!CPHY_RL_Setup_REQ	ca_UL_DPCH_Info(p_CellId, tsc_UL_DPCH1, c_UL_DPCH_13_6_StandAlone(tcv_TmpCellInfo.ul_ScramblingCode))		1.
11		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_UL_DPCH1)		
12		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId, tsc_UL_DPCH1)		2.
13		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
14		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_13_6_StandAlone, c_TrLogMappingUL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
16	ERR1	[px_RAT = tdd]		|	
17	ERR2	[TRUE]		|	
Detailed Comments : 1. configure physical channel DPCH1. 2. connect DCH5 to DPCH1. 3. map logical channels: DCCH1-4 to DCH5. MAC-d is to be configured with cellId -1.					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_2DCH_Modify (p_CellId : INTEGER; p_UL_TrChConfig: CphyTrchConfigReq; p_DL_TrChConfig: CphyTrchConfigReq; p_UL_TrCHInfo, p_DL_TrCHInfo: TrCHInfo; p_UL_TrLogMapping, p_DL_TrLogMapping: TrCH_LogCHMappingList1; p_ActTime: ActivationTime; p_DL_DPCHInfo : DL_DPCHInfo; p_UL_DPCH_Info : UL_DPCH_Info)

Group : BasicM_SS_Configuration_Steps/

Objective : to modify physical channel DPCH1 and connect DCH1 and DCH5 to the physical channel, then map DCCH1–4 on to the DCH5 transport channel and map DTCH1 to the DCH1 transport channel. used for RLC testing.

Default : SS_Def

Comments : SS is in TM mode different from the mode of UE.
Transport channel configuration is parameter (of type: CphyTrchConfigReq); DPCH is 64 kbps physical channel.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, p_DL_DPCHInfo, p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_TrChCfgInfo(p_CellId, tsc_DL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_DL_TrChConfig)		3.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated , tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), p_DL_TrCHInfo, p_DL_TrLogMapping, p_ActTime)		4. U–RNTI and C–RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo(p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info, p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_TrChCfgInfo (p_CellId, tsc_UL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_UL_TrChConfig)		2.
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_UL_DPCH1)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated , tsc_UL_DPCH1, c_UE_Info(OMIT, OMIT), p_UL_TrCHInfo, p_UL_TrLogMapping,p_Act Time)		4. U-RNTI and C-RNTI are not needed on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		|	
16	ERR2	[TRUE]		|	
Detailed Comments : 1. configure DPCH1 supporting 64 kspb data rate. 2. connect uplink DCH1 and DCH5 to DPCH1. 3. connect downlink DCH1 and DCH5 to DPCH1. 4. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_AddDPCH (p_CellId : INTEGER) Group : BasicM_SS_Configuration_Steps/ Objective : To reconfigure the cell p_CellId from cell_NoDPCH to cell_DCH_StandaloneSRB_NoConn. Default : SS_Def Comments : The following channels need to be created: physical channels: DPCH; transport channels: DCH logical channels: DCCH; and signalling radio bearer: signalling bearer RB1, RB2, RB3, RB4 on DCH.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
2		+ts_SS_RB1_ToRB4_Cfg			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_BCH_SCH_CPICH_Cfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To configure P-CCPCH, P-SCH, S-SCH and P-CPICH physical channels. To map BCH to P-PCCPCH, then to map logical channel BCCH to transport channel BCH.
Default : SS_Def
Comments : To configure P-CCPCH, P-SCH, S-SCH and P-CPICH physical channels and map BCH to P-PCCPCH, then to map logical channel BCCH to transport channel BCH.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_pCPICH_Info (p_CellId, (tcv_TmpCellInfo.powerpCPICH))		p-CPICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CPICH)		
5		CPHY!CPHY_RL_Setup_REQ	ca_pSCH_Info (p_CellId, (tcv_TmpCellInfo.powerpSCH))		p-SCH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_SCH)		
7		CPHY!CPHY_RL_Setup_REQ	ca_sSCH_Info (p_CellId, (tcv_TmpCellInfo.powersSCH))		s-SCH
8		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_S_SCH)		
9		CPHY!CPHY_RL_Setup_REQ	ca_pCCPCH_Info (p_CellId, (tcv_TmpCellInfo.powerpCCPCH))		p-CCPCH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CCPCH)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_BCH_InfoActNow (p_CellId)		BCH connected to p-CCPCH
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_P_CCPCH)		
13		CMAC!CMAC_Config_REQ	ca_CMAC_CfgInfo(p_CellId, tsc_P_CCPCH, c_UE_Info (OMIT, OMIT), c_TrChInfoBCH1, c_TrLogMappingBCH1)		mapping BCCH to BCH. C-RNTI and U-RNTI are not needed on P-CCPCH
14		CMAC?CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId, tsc_P_CCPCH)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CellCfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To setup the cell parameter in CPHY, if the cell 'p_CellId' is the first one to be created, then CPHY shall be initialised using CHY_INIT_Req ASP.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch table corresponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]		I	Fatal error: cell already configured
3		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			Cell not yet configured
4		+ It_CellsAlreadyStarted			
5		[px_RAT = fdd]			
6		CPHY!CPHY_Cell_Config_REQ	ca_CellCfgReq(p_CellId, tcv_TmpCellInfo.tCell, tcv_TmpCellInfo.frequencyInfo, tcv_TmpCellInfo.priScrmCode, tcv_TmpCellInfo.attenuationLevel, tcv_TmpCellInfo.sfnOffset, tcv_TmpCellInfo.cellTxPowerLevel, tcv_FDD_OperationBand)		
7		CPHY?CPHY_Cell_Config_CNF	ca_CellCfgCnf(p_CellId)		
8		+ ts_SaveCellInfo (p_CellId)			
9	ERR2	[px_RAT = tdd]		I	
10	ERR3	[TRUE]		I	
11		It_CellsAlreadyStarted			
12		+ ts_CountConfiguredCell			
13		[tcv_NumCfgCell = 0]			1.
14		+ts_MM_PwrOrUSIM_Off(tsc_USIM_NeedRmv)			1. Deactivate the UE
15		+ ts_EmptyPCO_AfterSwitchOff			
16		[tcv_DefaultRadioCnf = TRUE]			3.
17		CPHY ! CPHY_Ini_REQ	cas_InitReqDef		
18		CPHY ? CPHY_Ini_CNF	car_IniCnf		
19		(tcv_TmpCellInfo.tCell := 0)			
20		[tcv_DefaultRadioCnf = FALSE]			4.
20		CPHY ! CPHY_Ini_REQ	cas_InitReqNonDef		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		CPHY ? CPHY_Ini_CNF	car_IniCnf		
22		(tcv_TmpCellInfo.tCell := 0)			
23		[tcv_NumCfgCell <> 0]			2.
Detailed Comments :					
1. The cell 'p_CellId' is the first one to be created					
2. The cell 'p_CellId' is not the first one to be created					
3. CPHY_Init_Request is sent with a defaultRadioEnvironment value					
4. CPHY_Init_Request is sent with a nonDefaultMultiCell value					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreateCellDCH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : This test Step sets up a cell with stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH which consists of the following:
 For a first cell:
 physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH and DPCH;
 transport channels: BCH, FACH, PCH, RACH, DCH;
 logical channels: BCCH, CCCH, PCCH, DCCH; and
 signalling radio bearer RB0 on FACH and RACH; signalling bearer RB1, RB2, RB3, RB4 on DCH.

For cells other than the first cell
 physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH (no DPCH)
 transport channels: BCH, FACH, PCH, RACH (no DCH)
 logical channels: BCCH, CCCH, PCCH (no DCCH)
 signalling radio bearer RB0 on FACH and RACH (not RB1 RB2 RB3 RB4 on DCH)

Default : InitOtherwiseFail

Comments : Cell configuration supporting UL:3.4 DL:3.4 kbps stand-alone signalling RB.
 CRLC is configured with cellId -1 (tsc_CellDedicated)
 CMAC for DCCH (MAC-d) is configured with cellId -1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ts_SS_PCH_FACH_CCCH_Cfg(p_CellId)			
4		+ts_SS_RACH_CCCH_Cfg(p_CellId)			
5		+ ts_CountConfiguredCell			
6		[tcv_NumCfgCell = 0]			First cell to be created
7		+ts_SS_1DCH_DCCH_Cfg(p_CellId)			
8		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
9		+ts_SS_RB_PCCH_Cfg(p_CellId)			
10		+ts_SS_RB0_Cfg (p_CellId)			
11		+ts_SS_RB1_ToRB4_Cfg			
12		(tcv_TmpCellInfo.DL_DPCH_S HO := TRUE, tcv_TmpCellInfo.UL_DPCH_S HO := TRUE, tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_No Conn)			
13		+ ts_SaveCellInfo (p_CellId)			1.
14		[tcv_NumCfgCell <> 0]			Next cell to be created
15		+ ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
16		+ ts_SS_RB_PCCH_Cfg(p_CellId)			
17		+ ts_SS_RB0_Cfg(p_CellId)			
18		+ ts_SetCellCfg (p_CellId, cell_NoDPCH)			1.

Detailed Comments : 1. Set the cell configuration in the CellInfoCfg record

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreateCellFACH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To setup a baseline cell which consists of the following:
 For a first cell_FACH cell
 physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH and PRACH;
 transport channels: BCH, FACH, PCH, RACH;
 logical channels: BCCH, CCCH, PCCH, DCCH; and
 signalling radio bearer RB0(CCCH), RB1(UM DCCH), RB2(AM DCCH), RB3(AM DCCH for NAS high priority), RB4(AM DCCH for NAS low priority) on FACH and RACH, RB-3(TM BCCH FACH) on FACH, RB20(AM DTCH) on FACH and RACH, RB-1 (TM, BCCH) on BCH, RB-2 (TM, PCCH, PCH)

For cells other than the first cell
 Same physical channels as for the first cell (p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH and PRACH);
 Same transport channels as for the first cell (BCH, FACH, PCH, RACH);
 Logical channels: BCCH, CCCH, PCCH, no DCCH
 Signalling radio bearer RB0(CCCH), RB-3(TM BCCH FACH) on FACH, RB-1 (TM, BCCH) on BCH, RB-2 (TM, PCCH, PCH)

Default : InitOtherwiseFail

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ ts_CountConfiguredCell			
4		[tcv_NumCfgCell = 0]			First cell to be created
5		+ts_SS_PCH_2FACH_CCCH_DCCH_BCCH_DTCH_Cfg (p_CellId)			
6		+ts_SS_RACH_CCCH_DCCH_DTCH_Cfg (p_CellId)			
7		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
8		+ts_SS_RB_PCCH_Cfg(p_CellId)			
9		+ts_SS_RB0_Cfg(p_CellId)			
10		+ts_SS_RB1_ToRB4_Cfg			
11		+ts_SS_RB_BCCH_FACH_Cfg(p_CellId)			RB9 is on BCCH-FACH
12		+ts_SS_RB20_AM_PS_Cfg (320)			
13		+ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
14		[tcv_NumCfgCell <> 0]			Not first cell to be created
15		+ts_SS_PCH_FACH_CCCH_Cfg (p_CellId)			
16		+ ts_SS_RACH_CCCH_Cfg (p_CellId)			
17		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
18		+ts_SS_RB_PCCH_Cfg(p_CellId)			
19		+ts_SS_RB0_Cfg(p_CellId)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		+ ts_SetCellCfg (p_CellId, cell_FACH_NoDedicated)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PCH_2FACH_CCCH_DCCH_BCCH_DTCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure a secondary CCPCH (tsc_S_CCPCH1), then connect PCH and 2 FACH's to the secondary CCPCH . finally to map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH1 and DTCH to FACH2.

Default : SS_Def

Comments : one secondary CCPCH(tsc_S_CCPCH1) for PCH and FACH. PCCH mapping to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH1, and DTCH to FACH2.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_sCCPCH_Info(p_CellId, tsc_S_CCPCH1, tsc_S_CCPCH_2ndScrCode, tsc_S_CCPCH1_ChC, tcv_TmpCellInfo.slotFormat sCCPCH1, (tcv_TmpCellInfo.powersCCPCH1), tcv_TmpCellInfo.timingsCCPCH1)		s-CCP CH1
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_S_CCPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_PCH_2_FACH_InfoAct Now (p_CellId, tsc_S_CCPCH1)		connect PCH and FACH to s-CCP CH1
6		CPHY ? CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_S_CCPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH_PS , c_TrLogMappingPCH_FACH_PS)		map PCCH to PCH, and map CCCH, BCCH, DTCH and DCCH's to FACH. C-RNTI and U-RNTI are needed when DCCH/ DTCH are mapped on S-CCP CH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
9		CPHY!CPHY_RL_Setup_REQ	ca_PICH_Info (p_CellId, c_PichInfo, (tcv_TmpCellInfo.powerPICH),tsc_S_CCPCH1)		PICH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PICH1)		
11	ERR1	[px_RAT = tdd]		|	
12	ERR2	[TRUE]		|	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PCH_FACH_CCCH_Cfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To configure a secondary CCPCH (tsc_S_CCPCH1), then connect PCH and FACH to the secondary CCPCH .(34.108 cl. 4.2.1), finally to map PCCH to PCH and CCCH to FACH.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_sCCPCH_Info(p_CellId, tsc_S_CCPCH1, tsc_S_CCPCH_2ndScrCode, tsc_S_CCPCH1_ChC, tcv_TmpCellInfo.slotFormat sCCPCH1, (tcv_TmpCellInfo.powersCCPCH1), tcv_TmpCellInfo.timingsCCPCH1)		s-CCPCH1
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_S_CCPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_PCH_2_FACH_InfoAct Now (p_CellId, tsc_S_CCPCH1)		connect PCH and FACH to s-CCPCH1
6		CPHY ? CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_S_CCPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_S_CCPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FACH_CellDCH)		map PCCH to PCH. U-RNTI and C-RNTI are not needed (no DCCH/DTCH)
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId, tsc_S_CCPCH1)		
9		CPHY!CPHY_RL_Setup_REQ	ca_PICH_Info(p_CellId, c_PichInfo, (tcv_TmpCellInfo.powerPICH), tsc_S_CCPCH1)		PICH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PICH1)		
11	ERR1	[px_RAT = tdd]		|	
12	ERR2	[TRUE]		|	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PrepareCellRRC_ConnEst (p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To reconfigure the cell if it is not ready for an RRC connection establishment.
4 cases are handled:
1> the cell is already configure (cell_DCH_StandAloneSRB_NoConn OR cell_FACH_NoConn OR cell_FACH_BMC_NoConn OR cell_FACH_2PRACH_NoConn OR cell_FACH_2_SCCPCH_NoConn)
2> the cell is configured to cell_NoDPCH, then remove the DPCH from the 'old' cell and configure the DPCH in the cell p_CellId
3> the cell is configured to cell_FACH_NoDedicated , then reconfigure the old cell where the
4> the configuration of the cell to not allow an RRC connection establishment -> error case

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)]			0

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
3		<pre> [[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB)]] </pre>			1
4		+ It_ReconfOldDPCH_Cell			
5		+ ts_SS_AddDPCH(p_CellId)			
6		<pre> (tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_NoConn, tcv_TmpCellInfo.DL_DPCH_SHO := TRUE, tcv_TmpCellInfo.UL_DPCH_SHO := TRUE) </pre>			
7		+ ts_SaveCellInfo (p_CellId)			
8		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			2
9		+ It_ReconfOldFACH_Cell			
10		+ ts_SS_ReconfNoDedicatedToCellFACH (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12	ERR	[TRUE]		I	Program ming error
		It_ReconfOldFACH_Cell			
13		<pre> [(tcv_CellInfoA.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoA.cellConfig = cell_FACH) OR (tcv_CellInfoA.cellConfig = cell_FACH_PS)] </pre>			
14		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellA)			
15		(tcv_CellInfoA.cellConfig := cell_FACH_NoDedicated)			
16		<pre> [(tcv_CellInfoB.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoB.cellConfig = cell_FACH) OR (tcv_CellInfoB.cellConfig = cell_FACH_PS)] </pre>			
17		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellB)			
18		(tcv_CellInfoB.cellConfig := cell_FACH_NoDedicated)			
19		<pre> [(tcv_CellInfoC.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoC.cellConfig = cell_FACH) OR (tcv_CellInfoC.cellConfig = cell_FACH_PS)] </pre>			
20		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellC)			
21		(tcv_CellInfoC.cellConfig := cell_FACH_NoDedicated)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		[(tcv_CellInfoD.cellConfig = cell_FACH_NoConn) OR			
		(tcv_CellInfoD.cellConfig = cell_FACH) OR			
		(tcv_CellInfoD.cellConfig = cell_FACH_PS)]			
23		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellD)			
24		(tcv_CellInfoD.cellConfig := cell_FACH_NoDedicated)			
25		[(tcv_CellInfoE.cellConfig = cell_FACH_NoConn) OR			
		(tcv_CellInfoE.cellConfig = cell_FACH) OR			
		(tcv_CellInfoE.cellConfig = cell_FACH_PS)]			
26		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellE)			
27		(tcv_CellInfoE.cellConfig := cell_FACH_NoDedicated)			
28		[(tcv_CellInfoF.cellConfig = cell_FACH_NoConn) OR			
		(tcv_CellInfoF.cellConfig = cell_FACH) OR			
		(tcv_CellInfoF.cellConfig = cell_FACH_PS)]			
29		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellF)			
30		(tcv_CellInfoF.cellConfig := cell_FACH_NoDedicated)			
31		[(tcv_CellInfoG.cellConfig = cell_FACH_NoConn) OR			
		(tcv_CellInfoG.cellConfig = cell_FACH) OR			
		(tcv_CellInfoG.cellConfig = cell_FACH_PS)]			
32		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellG)			
33		(tcv_CellInfoG.cellConfig := cell_FACH_NoDedicated)			
34		[(tcv_CellInfoH.cellConfig = cell_FACH_NoConn) OR			
		(tcv_CellInfoH.cellConfig = cell_FACH) OR			
		(tcv_CellInfoH.cellConfig = cell_FACH_PS)]			
35		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellH)			
36		(tcv_CellInfoH.cellConfig := cell_FACH_NoDedicated)			
37	ERR1	[TRUE] lt_ReconfOldDPCH_Cell		I	

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		[(tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_UM_RAB)]			
39		+ ts_SS_ReIDPCH (tsc_CellA)			
40		(tcv_CellInfoA.cellConfig := cell_NoDPCH, tcv_CellInfoA.DL_DPCH_SHO := FALSE, tcv_CellInfoA.UL_DPCH_SHO := FALSE)			
41		[(tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_Four_DTCH_PS_CS)]			
42		+ ts_SS_ReIDPCH (tsc_CellB)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		(tcv_CellInfoB.cellConfig := cell_NoDPCH , tcv_CellInfoB.DL_DPCH_SHO := FALSE, tcv_CellInfoB.UL_DPCH_SHO := FALSE)			
44		[(tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoC.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoC.cellConfig = cell_PDCP_AM_UM_RAB)]			
45		+ ts_SS_ReIDPCH (tsc_CellC)			
46		(tcv_CellInfoC.cellConfig := cell_NoDPCH, tcv_CellInfoC.DL_DPCH_SHO := FALSE, tcv_CellInfoC.UL_DPCH_SHO := FALSE)			
47		[(tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_UM_RAB)]			
48		+ ts_SS_ReIDPCH (tsc_CellD)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		(tcv_CellInfoD.cellConfig := cell_NoDPCH, tcv_CellInfoD.DL_DPCH_SHO := FALSE, tcv_CellInfoD.UL_DPCH_SHO := FALSE)			
50		[(tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoE.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoE.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoE.cellConfig = cell_PDCP_AM_UM_RAB)]			
51		+ ts_SS_ReIDPCH (tsc_Celle)			
52		(tcv_CellInfoE.cellConfig := cell_NoDPCH, tcv_CellInfoE.DL_DPCH_SHO := FALSE, tcv_CellInfoE.UL_DPCH_SHO := FALSE)			
53		[(tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_UM_RAB)]			
54		+ ts_SS_ReIDPCH (tsc_CellF)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
55		(tcv_CellInfoF.cellConfig := cell_NoDPCH, tcv_CellInfoF.DL_DPCH_SHO := FALSE, tcv_CellInfoF.UL_DPCH_SHO := FALSE)			
56		[(tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoG.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoG.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoG.cellConfig = cell_PDCP_AM_UM_RAB)]			
57		+ ts_SS_ReIDPCH (tsc_CellG)			
58		(tcv_CellInfoG.cellConfig := cell_NoDPCH, tcv_CellInfoG.DL_DPCH_SHO := FALSE, tcv_CellInfoG.UL_DPCH_SHO := FALSE)			
59		[(tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_UM_RAB)]			
60		+ ts_SS_ReIDPCH (tsc_CellH)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
61		(tcv_CellInfoH.cellConfig := cell_NoDPCH, tcv_CellInfoH.DL_DPCH_SHO := FALSE, tcv_CellInfoH.UL_DPCH_SHO := FALSE)			
62		[TRUE]			
<p>Detailed Comments : 0. No reconfiguration of the cell is needed before RRC connection establishment 1. Reconfigure the cell p_CellId to cell_DCH_StandAloneSRB_NoConn and reconfigure the cell set to cell_DCH_StandAloneSRB_NoConn to cell_NoDPCH 2. Reconfigure the cell p_CellId to cell_FACH_NoConn and reconfigure the cell set to cell_FACH_NoConn to cell_FACH_NoDedicated</p>					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RACH_CCCH_Cfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To configure AICH and PRACH physical channels and connect RACH onto PRACH, then map one logical channel (CCCH) to RACH
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_AichInfo (p_CellId, tsc_AICH1, c_AICH_Info, tcv_TmpCellInfo.powerAICH)		AICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_AICH1)		
5		CPHY!CPHY_RL_Setup_REQ	ca_PRACH_Info (p_CellId, tsc_PRACH1, tsc_PRACH1_Signatures, tsc_PRACH1_ScrC, tcv_TmpCellInfo.puncLimit, tcv_TmpCellInfo.sf_PRACH , tcv_SubChNum)		PRACH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_PRACH1)		
7		CPHY!CPHY_TrCH_Config_REQ	cab_RACH_InfoActNow (p_CellId, tsc_PRACH1)		connect RACH to PRACH
8		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_PRACH1)		
9		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_PRACH1, c_UE_Info (OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH. C-RNTI and U-RNTI are not needed on
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId, tsc_PRACH1)		
11	ERR1	[px_RAT = tdd]		|	
12	ERR2	[TRUE]		|	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RACH_CCCH_DCCH_DTCH_Cfg (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To configure AICH and PRACH physical channels and connect RACH onto PRACH, then map five logical channels (CCCH, DCCH1, DCCH2, DCCH3, DCCH4) to RACH
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_AichInfo(p_CellId, tsc_AICH1, c_AICH_Info, (tcv_TmpCellInfo.powerAICH))		AICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_AICH1)		
5		CPHY!CPHY_RL_Setup_REQ	ca_PRACH_Info(p_CellId, tsc_PRACH1, tsc_PRACH1_Signatures, tsc_PRACH1_ScrC, tcv_TmpCellInfo.puncLimit, tcv_TmpCellInfo.sf_PRACH, tcv_SubChNum)		PRACH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PRACH1)		
7		CPHY!CPHY_TrCH_Config_REQ	cab_RACH_InfoActNow (p_CellId, tsc_PRACH1)		connect RACH to PRACH
8		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_PRACH1)		
9		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo(p_CellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DTCH)		CCCH, DCCH1, DCCH2, DCCH3, DCCH4 to RACH. Only C-RNTI is used for DCCH/DTCH on PRACH
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId, tsc_PRACH1)		
11	ERR1	[px_RAT = tdd]		|	
12	ERR2	[TRUE]		|	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB0_Cfg(p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : to setup radio bearers : RB0 (the downlink is UM + CCCH + FACH + sCCPCH1 and uplink is TM + CCCH + RACH + PRACH).The configuration is adapted from 34.108 cl. 6.10.2.4.3 and 6.10.2.4.4
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_DL_Info(p_CellId, tsc_RB0, {dLogicalChannelIdentity tsc_DL_CCCH5})		configure radio bearers (downlink): RB0 (UM + CCCH + FACH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		
3		CRLC ! CRLC_Config_REQ	ca_RB_TM_UL_Info(p_CellId, tsc_RB0, 166, {uLogicalChannelIdentity tsc_UL_CCCH5})		configure radio bearers (uplink): RB0 (TM + CCCH + RACH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB1_ToRB4_Cfg
Group : BasicM_SS_Configuration_Steps/
Objective : To setup radio bearers : RB1, RB2, RB3, RB4. default values from 34.123-1
Default : SS_Def
Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_Info (tsc_CellDedicated , tsc_RB1, {uLogicalChannelIdentity tsc_UL_DCCH1, dLogicalChannelIdentity tsc_DL_DCCH1})		cofigure radio bearers : RB1 (UM + DCCH) and (UM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB1)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB2, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLogicalChannelIdentity tsc_UL_DCCH2, dLogicalChannelIdentity tsc_DL_DCCH2}, 128)		cofigure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
5		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB3, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLogicalChannelIdentity tsc_UL_DCCH3, dLogicalChannelIdentity tsc_DL_DCCH3}, 128)		cofigure radio bearers : RB3 (AM + DCCH) and (AM + DCCH)
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		
7		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB4, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLogicalChannelIdentity tsc_UL_DCCH4, dLogicalChannelIdentity tsc_DL_DCCH4}, 128)		cofigure radio bearers : RB4(AM + DCCH) and (AM + DCCH)
8		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB4)		

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_RB20_AM_PS_Cfg (p_Payloadsize: INTEGER) Group : BasicM_SS_Configuration_Steps/ Objective : setup radio bearers : RB20. default values from 34.108 cl. 6.10.2.4.4 and 6.10.2.4.3.3 Default : SS_Def Comments : CRLC is configured with cellId -1 (tsc_CellDedicated) Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_RAB (tsc_CellDedicated, tsc_RB20, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollISDU, tcv_PollWindow, {uLogicalChannelIdentity tsc_UL_DTCH1, dLogicalChannelIdentity tsc_DL_DTCH1},p_Payload size)		cofigure radio bearers : RB20 (AM + DTCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB20)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_RB_BCCH_BCH_Cfg(p_CellId : INTEGER) Group : BasicM_SS_Configuration_Steps/ Objective : to setup the radio bearer (RB_BCCH) which is used for sending system information blocks. Default : SS_Def Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC!CRLC_Config_REQ	ca_RB_BCCH_Info(p_CellId, tsc_RB_BCCH, {dLogicalChannelIdentity tsc_BCCH1})		configure radio bearer (RB_BCCH) for BCCH on TM + BCCH + BCH, used for sending system information blocks
2		CRLC?CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_RB_BCCH_FACH_Cfg (p_CellId: INTEGER)					
Group : BasicM_SS_Configuration_Steps/					
Objective : setup radio bearers : RB9 (downlink only) this bearer is for BCCH-FACH (TM + BCCH + FACH + sCCPCH1). The configuration is adapted from 34.108 cl. 6.10.2.4.3.					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_DL_InfoNoSeg (p_CellId, tsc_RB_BCCH_FACH, 166, {dLlogicalChannelIdentity tsc_BCCH6})		configure radio bearers (downlink): RB9 (TM + BCCH + FACH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH_FACH)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_RB_PCCH_Cfg(p_CellId: INTEGER)					
Group : BasicM_SS_Configuration_Steps/					
Objective : to setup radio bearer (RB_PCCH) used for paging message sending					
Default : SS_Def					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_PCCH_Info(p_CellId, tsc_RB_PCCH, {dLlogicalChannelIdentity tsc_PCCH1})		configure radio bearer (RB_PCCH) on TM + PCCH + PCH, used for sending paging message
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_PCCH)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_ReconfNoDedicatedToCellFACH (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To reconfig the cell from cell_FACH_NoDedicated to cell_FACH.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH_PS , c_TrLogMappingPCH_FACH_PS)		map PCCH to PCH, and map CCCH, BCCH, DTCH and DCCH's to FACH
4		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
5		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DTCH)		CCCH, DCCH1, DCCH2, DCCH3, DCCH4 to RACH
6		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
7		+ lt_RB_BCCH_FACH_Cfg			
8	ERR1	[px_RAT = tdd]		|	
9	ERR2	[TRUE]		|	
10		lt_RB_BCCH_FACH_Cfg [tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			
11		+ts_SS_RB_BCCH_FACH_Cfg(p_CellId)			Config BCCH on FACH
12		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_ReconfigRAB_ToSRB (p_CellId: INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To reconfigure SS from a configuration including RABS to cell_DCH.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_SS_ReIDPCH (p_CellId)			
3		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
4		+ ts_SS_RB1_ToRB4_Cfg			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Rel (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To release all channels that are configured in the SS.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
3		+ ts_SS_RelDPCH (p_CellId)			
4		+ lt_ReleaseCommonCh			
5		+ lt_Release_BCCH			
6		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
7		[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH)]			
8		+ lt_ReleaseCommonCh			
9		+ lt_Release_BCCH			
10		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
11		[(tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn)]			
12		+ lt_RelSRB1_4			

1.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB20)			
14		+ ts_CRRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
15		+ It_ReleaseCommonCh			
16		+ It_Release_BCCH			
17		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)]			
19		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
20		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB2)			
21		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_FACH_MAC)			
22		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB4)			
23		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB20)			
24		+ ts_CRRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
25		+ It_ReleaseCommonCh			
26		+ It_Release_BCCH			
27		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
28		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn)]			
29		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
30		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB2)			
31		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB3)			
32		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB4)			
33		+ ts_CRRLC_Rel (tsc_CellDedicated, tsc_RB20)			
34		+ ts_CRRLC_Rel (p_CellId, tsc_RB_CCCH_FACH_MAC)			
35		+ It_ReleaseCommonCh			
36		+ It_Release_BCCH			
37		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
38		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			
39		+ It_RelSRB1_4			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
40		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
42		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
43		[TRUE]			
44		+ It_ReleaseCommonCh			
45		+ It_Release_BCCH			
46		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
47		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH)]			
48		+ It_RelSRB1_4			
49		+ ts_CRLC_Rel (p_CellId , tsc_RB_2ndCCCH)			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
52		+ It_ReleaseCommonCh			
53		+ ts_CMAC_Rel (p_CellId, tsc_PRACH2)			
54		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH2)			
55		+ ts_SS_StopRL (p_CellId , tsc_PRACH2)			
56		+ ts_SS_StopRL (p_CellId , tsc_AICH2)			
57		+ It_Release_BCCH			
58		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
59		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)]			
60		+ It_RelSRB1_4			
61		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
62		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
63		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
64		+ ts_CRLC_Rel (p_CellId, tsc_RB31)			
65		+ ts_CRLC_Rel (p_CellId, tsc_RB_2ndPCCH)			
66		+ It_ReleaseCommonCh			
67		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
68		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
69		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
70		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
71		+ It_Release_BCCH			
72		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
73		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)]			
74		+ It_ReleaseCommonCh			
75		+ It_Release_BCCH			
76		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
77		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
78		+ It_RelSRB1_4			
79		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
80		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
81		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
82		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
83		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
84		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
85		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
86		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
87		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
88		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
89		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
90		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
91		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
92		+ ts_CPHY_TrChRelNon Dch (p_CellId , tsc_S_CCPCH2)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
93		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
94		+ lt_Release_BCCH			
95		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
96		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			
97		+ lt_RelSRB1_4			
98		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
99		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
100		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
101		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
102		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
103		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
104		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
105		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
106		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
107		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
108		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
109		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
110		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
111		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
112		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
113		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
114		+ It_Release_BCCH			
115		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
116		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)]			
117		+ It_RelSRB1_4			
118		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
119		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			
120		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
121		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
122		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
123		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
124		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
125		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
126		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
127		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
128		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
129		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
130		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
131		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
132		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
133		+ ts_CPHY_TrChRel NonDch (p_CellId , tsc_S_CCPCH2)			
134		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
135		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH 3)			
136		+ ts_CPHY_TrC hRelNonDch (p_CellId , tsc_S_CCPC H3)			
137		+ ts_SS_Stop RL (p_CellId , tsc_S_CCP CH3)			
138		+ It_Release_ BCCH			
139		+ ts_SetCe llCfg (p_CellId, cell_Not Configur ed)			
140		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)]			
141		+ It_RelSRB1_4			
142		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
143		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			
144		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			
145		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
146		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
147		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
148		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
149		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
150		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
151		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
152		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
153		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
154		+ ts_CPHY_TrChRelNonD ch (p_CellId , tsc_S_CCPCH1)			
155		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
156		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
157		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
158		+ts_CPHY_TrCh RelNonDch(p_CellId , tsc_S_CCPCH2)			
159		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)			
160		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H3)			
161		+ ts_CPHY_Tr ChRelNonDc h(p_CellId , tsc_S_CCP CH3)			
162		+ ts_SS_Sto pRL (p_CellId , tsc_S_CC PCH3)			
163		+ It_Releas e_BCCH			
164		+ ts_Set CellCfg (p_Celll d, cell_No tConfig ured)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
165		[tcv_TmpCellInfo.cellConfig = cell_Two_DTCH]			
166		+ It_RelSRB1_4			
167		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
168		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
169		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
170		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
171		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
172		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
173		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
174		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
175		+ It_ReleaseCommonCh			
176		+ It_Release_BCCH			
177		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
178		[tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS]			
179		+ It_RelSRB1_4			
180		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
181		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
182		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
183		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB13)			
184		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
185		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
186		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
187		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
188		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
189		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
190		+ It_ReleaseCommonCh			
191		+ It_Release_BCCH			
192		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
193		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)]			
194		+ It_RelSRB1_4			
195		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
196		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
197		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
198		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
199		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
200		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
201		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
202		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
203		+ It_ReleaseCommonCh			
204		+ It_Release_BCCH			
205		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
206		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			
207		+ It_RelSRB1_4			
208		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
209		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
210		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
211		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
212		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
213		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
214		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
215		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
216		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
217		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
218		+ It_ReleaseCommonCh			2.
219		+ It_Release_BCCH			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
220		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
221		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH)]			
222		+ It_RelSRB1_4			
223		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
224		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
225		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
226		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
227		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			
228		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
229		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
230		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
231		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
232		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
233		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
234		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
235		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
236		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
237		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
238		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
239		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
240		+ It_ReleaseCommonCh			

2.

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
241		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H2)			
242		+ ts_CPHY_Tr ChRelNonDc h (p_CellId ,			
243		tsc_S_CCP CH2) + ts_SS_Sto pRL (
244		p_CellId , tsc_S_CC PCH2) + ts_SS_S topRL (
245		p_CellId , tsc_PIC H2) + It_Relea se_BC CH			
246		+ ts_Se tCellC fg (
247		p_Cell Id, cell_N otCo nfigur ed)			
248		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_N oConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_ NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
249		+ It_RelSRB1_4			
250		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
251		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
252		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			
253		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
253		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
254		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			2.
255		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			
256		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
257		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
258		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
259		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
260		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
261		+ ts_CPHY_TrChRelNonD ch (p_CellId , tsc_S_CCPCH1)			
262		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
263		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
264		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
265		+ ts_CPHY_TrChR elNonDch (p_CellId , tsc_S_CCPCH2)			
266		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)			
267		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H3)			
268		+ ts_CPHY_Tr ChRelNonDc h (p_CellId , tsc_S_CCP CH3)			
269		+ ts_SS_Sto pRL (p_CellId , tsc_S_CC PCH3)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
270		+ It_Releas e_BCCH			
271		+ ts_Set CellCfg (p_Celll d, cell_No tConfig ured)			
272		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_N oConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			
273		+ It_RelSRB1_4			
274		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
275		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
276		+ ts_CRLC_Rel (p_Cellld, tsc_RB30)			
277		+ ts_CRLC_Rel (p_Cellld, tsc_RB29)			
278		+ ts_CRLC_Rel (p_Cellld , tsc_RB_BCCH_FACH)			
279		+ ts_CRLC_Rel (p_Cellld , tsc_RB_BCCH_FACH_RAB)			
280		+ ts_CRLC_Rel (p_Cellld , tsc_RB_PCCH)			
281		+ ts_CRLC_Rel (p_Cellld, tsc_RB0)			2.
282		+ ts_CMAC_Rel (p_Cellld, tsc_PRACH1)			
283		+ts_CPHY_TrChRelNonDch (p_Cellld , tsc_PRACH1)			
284		+ ts_SS_StopRL (p_Cellld , tsc_PRACH1)			
285		+ ts_SS_StopRL (p_Cellld , tsc_AICH1)			
286		+ ts_CMAC_Rel (p_Cellld, tsc_S_CCPCH1)			
287		+ ts_CPHY_TrChRelNon Dch (p_Cellld , tsc_S_CCPCH1)			
288		+ ts_SS_StopRL (p_Cellld , tsc_S_CCPCH1)			
289		+ ts_SS_StopRL (p_Cellld , tsc_PICH1)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
290		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
291		+ts_CPHY_TrC hRelNonDch(p_CellId , tsc_S_CCPCH 2)			
292		+ ts_SS_StopR L (p_CellId , tsc_S_CCPC H2)			
293		+ ts_CMAC_R el (p_CellId, tsc_S_CCP CH3)			
294		+ ts_CPHY_ TrChRelNo nDch(p_CellId , tsc_S_CC PCH3)			
295		+ ts_SS_S topRL (p_CellId , tsc_S_C CPCH3)			
296		+ It_Relea se_BC CH			
297		+ ts_Se tCellC fg (p_Cell Id, cell_N otCo nfigur ed)			
298	[TRUE]				
		It_Release_BCCH			
299		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH)			
300		+ ts_CMAC_Rel (p_CellId, tsc_P_CCPCH)			
301		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_P_CCPCH)			
302		+ ts_SS_StopRL (p_CellId, tsc_S_SCH)			
303		+ ts_SS_StopRL (p_CellId, tsc_P_SCH)			
304		+ ts_SS_StopRL (p_CellId , tsc_P_CCPCH)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
305		+ ts_SS_StopRL (p_CellId, tsc_P_CPICH)			
306		CPHY ! CPHY_Cell_Release_REQ	ca_CPHY_Cell_Release_RE Q(p_CellId)		
307		CPHY ? CPHY_Cell_Release_CNF	ca_CPHY_Cell_Release_CN F(p_CellId)		
		It_ReleaseCommonCh			
308		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
309		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
310		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
311		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
312		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
313		+ ts_CRLC_Rel (p_CellId, tsc_RB_PCCH)			3.
314		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
315		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
316		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
317		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
		It_RelSRB1_4			
318		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
319		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
320		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
321		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
Detailed Comments : 1. Release DPCH 2. Release PRACH 3. Release S-CCPCH					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RelDPCH (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To release the DPCH channel.
Default : SS_Def
Comments : The following channels need to be removed:
physical channels: DPCH;
transport channels: DCH
logical channels: DCCH; and
signalling radio bearer: signalling bearers on DCH radio access bearer on DCH.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)]			
3		+ It_RelSRB1_4			
4		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
5		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
6		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
7		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
8		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
9		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech)]			
11		+ It_RelSRB1_4			
12		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
13		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
14		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
15		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
16		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
17		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
18		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_UL_DPCH1)			
19		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
20		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
21		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		+ lt_RelSRB1_4			
23		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
24		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
25		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
26		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
27		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
28		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
29		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
30		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB)]			
31		+ lt_RelSRB1_4			
32		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
33		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
34		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
35		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
36		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
37		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
38		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
39		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB)]			
40		+ lt_RelSRB1_4			
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)			
42		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
43		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
44		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
45		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
46		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
47		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
48		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		+ lt_RelSRB1_4			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)			
52		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
53		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
54		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
55		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
56		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
57		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
58		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
59		+ lt_RelSRB1_4			
60		+ lt_ReleaseRLC_RB			
61		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
62		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
63		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
64		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
65		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
66		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
67		[(tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
68		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
69		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
70		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_DCH_MAC)			
71		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
72		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
73		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
74		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_DL_DPCH1)			
75		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
76		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
77		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
78		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_2_PS_Call)]			
79		+ It_RelSRB1_4			
80		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
81		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB22)			
82		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
83		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
84		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
85		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
86		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
87		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
88		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			
89		+ It_RelSRB1_4			
90		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
91		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
92		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
93		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
94		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
95		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_UL_DPCH1)			
96		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
97		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
98		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			
99		+ It_RelSRB1_4			
100		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
101		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
102		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
103		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
104		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
105		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
106		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
107		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
108		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
109		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
110		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB_HS)]			
111		+ It_RelSRB1_4			
112		+ts_CRLC_Rel (tsc_CellDedicated, tsc_RB25)			
113		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
114		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
115		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
116		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
117		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
118		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
119	ERR	[TRUE] It_ReleaseRLC_RB		I	
120		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis)]			
121		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_15_RLC)			
122		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis)]			
123		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_7_RLC)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
124		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)]			
125		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_15_RLC)			
126		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
127		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_7_RLC)			
		lt_RelSRB1_4			
128		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
129		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
130		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
131		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_StopRL(p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)					
Group : BasicM_SS_Configuration_Steps/					
Objective : To stop transmission and receiving on the specified physical channel					
Default : SS_Def					
Comments : To release (stop transmission and receiving) the specified physical channel					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY!CPHY_RL_Release_REQ	ca_RL_RelReq(p_CellId, p_PhyCH)		
2		CPHY?CPHY_RL_Release_CNF	ca_RL_RelCnf(p_CellId, p_PhyCH)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CellDependentPara (p_CellID : INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective : To set cell dependent parameters
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellID)			
2		[p_CellID = tsc_CellA]			
3		(tcv_SIB3.cellIdentity := tsc_CellIdCellA, tcv_SIB4.cellIdentity := tsc_CellIdCellA)			
4		[p_CellID = tsc_CellB]			
5		(tcv_SIB3.cellIdentity := tsc_CellIdCellB, tcv_SIB4.cellIdentity := tsc_CellIdCellB)			
6		[p_CellID = tsc_CellC]			
7		(tcv_SIB3.cellIdentity := tsc_CellIdCellC, tcv_SIB4.cellIdentity := tsc_CellIdCellC)			
8		[p_CellID = tsc_CellD]			
9		(tcv_SIB3.cellIdentity := tsc_CellIdCellD, tcv_SIB4.cellIdentity := tsc_CellIdCellD)			
10		[p_CellID = tsc_CellE]			
11		(tcv_SIB3.cellIdentity := tsc_CellIdCellE, tcv_SIB4.cellIdentity := tsc_CellIdCellE)			
12		[p_CellID = tsc_CellF]			
13		(tcv_SIB3.cellIdentity := tsc_CellIdCellF, tcv_SIB4.cellIdentity := tsc_CellIdCellF)			
14		[p_CellID = tsc_CellG]			
15		(tcv_SIB3.cellIdentity := tsc_CellIdCellG, tcv_SIB4.cellIdentity := tsc_CellIdCellG)			
16		[p_CellID = tsc_CellH]			
17		(tcv_SIB3.cellIdentity := tsc_CellIdCellH, tcv_SIB4.cellIdentity := tsc_CellIdCellH)			
18		[TRUE]		I	no such cell

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_ChangeMIB_ValueTag Group : BasicM_SysInfoHandling_Steps/ Objective : To increment MIBValueTag if tcv_MIB_ValueTagChanged = FALSE. Default : InitOtherwiseFail Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_MIB_ValueTagChanged = FALSE]			
2		(tcv_MIB.mib_ValueTag := (tcv_MIB.mib_ValueTag) MOD 8 + 1, tcv_MIB_ValueTagChanged := TRUE)			
3		[tcv_MIB_ValueTagChanged = TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_ChangeSB1_ValueTag Group : BasicM_SysInfoHandling_Steps/ Objective : To increment SB1ValueTag if tcv_SB1_ValueTagChanged = FALSE. Default : InitOtherwiseFail Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_SB1_ValueTagChanged = FALSE]			
2		(tcv_SB1_ValueTag := (tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sysInfoTypeSB1) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sysInfoTypeSB1 := tcv_SB1_ValueTag, tcv_SB1_ValueTagChanged := TRUE)			
3		+ts_ChangeMIB_ValueTag			
4		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_Scheduling(p_CellId: INTEGER; p_REP : INTEGER; p_POS : INTEGER; p_Timing : INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective :
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_BCCH_ModifyTime := p_Timing)			
2		[p_Timing >= 512]			
3		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulNow (p_CellId, p_REP, p_POS)		
4		[p_Timing <= 511]			
5		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulLater(p_CellId, p_REP, p_POS, p_Timing)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendMIB(p_MIB: MasterInformationBlock; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective : To deliver the MIB to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mcc := o_HexToDigitsMCC (tcv_TmpCellInfo.mcc), tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mnc := o_HexToDigitsMNC (tcv_TmpCellInfo.mnc))			
3		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (mIB : tcv_MIB))			1.
4		[tcv_Segs.segCount <>1]		I	2.
5		[tcv_Segs.segCount =1]			
6		+ts_Scheduling(p_CellId, 3, 0, p_Timing)			3.
7		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf (p_CellId, tsc_RB_BCCH)		
8		+It_CompleteSIB(masterInformationBlock)			4.
9		(tcv_MIB_ValueTagChanged := FALSE)			
10		It_CompleteSIB(p_SIBType : SIB_Type)			
11		[LENGTH_OF(tcv_Segs.seg1) = 226]			
11		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl (p_SIBType, tcv_Segs.seg1))		4.
12		[TRUE]			
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the MIB then segmentation.
 2. The result of segmentation shall be one segment for the MIB (current assumption).
 3. Send the scheduling info to SS.(one segment; REP=8; POS=0)
 4. Construct the system information message containing MIB and sent to SS.

Test Step Dynamic Behaviour					
Test Step Name : ts_UTRAN_GERAN_ParaInit (p_CellId: INTEGER)					
Group : BasicM_SysInfoHandling_Steps/					
Objective : Initialize default parameters for different region					
Default : InitOtherwiseFail					
Comments : currently only UTRAN and UTRAN/GERAN are defined					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_UTRAN_GERAN = "UTRAN and GERAN"]			
3		(tcv_SIB3 := cb_SIB3_DefUTRAN_GERAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN_GERAN (tcv_TmpCellInfo))			
4		[px_UTRAN_GERAN = "UTRAN only"]			
5		(tcv_SIB3 := cb_SIB3_DefUTRAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN (tcv_TmpCellInfo))			
6		[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_AT_TriggerGMM_Attach					
Group : BasicM_UT_Steps/					
Objective : Trigger UE to start GMM Attach procedure via AT command +CGATT					
Default : UT_OtherwiseFail					
Comments : (see 3GPP 27.007 / 10.1.9)					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CGATT=1<CR>")		
2		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_UE_PwrOff					
Group : BasicM_UT_Steps/					
Objective : To make the operator power off the UE					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please power off the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_UE_PwrOn					
Group : BasicM_UT_Steps/					
Objective : To make the operator power on the UE					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please power on the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON
5		[TRUE]			UE is Already ON
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_UE_SwitchOff					
Group : BasicM_UT_Steps/					
Objective : To make the operator switch off the UE					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please switch off the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_UE_SwitchOn					
Group : BasicM_UT_Steps/					
Objective : To make the operator switch on the UE					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please switch on the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON
5		[TRUE]			UE is Already ON
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_USIM_Insert					
Group : BasicM_UT_Steps/					
Objective : To make the operator insert the USIM card					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please insert the USIM card into the UE")		
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_MMI_USIM_Remove					
Group : BasicM_UT_Steps/					
Objective : To make the operator remove the USIM card					
Default : UT_OtherwiseFail					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please remove the USIM card from the UE")		
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CreateCell_GSM_Comb (p_CellId : CellId) Group : M_RAT_HO_CellConfig/ Objective : Default : SS_Def,IntersystemDef Comments : Create a GERAN cell which contains a physical channel carrying FCCH, SCH, BCCH, CCCH and SDCCH4 logical channels (CCCH and SDCCH combined). All parameters, except CellId, are taken from tcv_G_CellConfigInfo. Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SetBS_IdCode(p_CellId, tcv_G_CellConfigInfo.ncc, tcv_G_CellConfigInfo.bcc, tcv_G_CellConfigInfo.timingAdvance)			
3		(tcv_G_CellConfigInfo.cipherMode.startingCipher := '0'B)			
4		+ts_SS_CreatePhyChOfCombType5(p_CellId, tsc_PhyCh0)			
5		+ts_SendGSMSACCHSysInfo(p_CellId, tsc_PhyCh0, 5)			Make sure SI5 & 6 are sent on SACCH
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SetBS_IdCode(p_CellId : CellId;p_NCC, p_BCC : B3; p_TA :O1) Group : M_RAT_HO_CellConfig/ Objective : Default : SS_Def,IntersystemDef Comments : Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateCell_REQ	ca_CellId(p_CellId, p_NCC, p_BCC, p_TA)		
2		G_CL1?G_CL1_CreateCell_CNF	ca_CellIdCnf(p_CellId)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GERANCreateCell(p_CellId : CellId; b_PBCCH : GPRSCellConfiguration; b_SI2quarter : SI2quarterConfiguration; b_PSI5 : PSI5Configuration)
Group : M_RAT_HO_CellConfig/
Objective :
Default :
Comments : Expects variables to already be initialised.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_CreateCell(c_PacketChDescr(tcv_ARFCN))			
2		[b_PSI5 = psi5]			
3		(tcv_PSI_LowRate := INT_TO_BIT((1 + BIT_TO_INT(tcv_PSI_LowRate)), 6))			Increment LR Count if PSI5 sent
4		+lt_SendSysInfo			
5		[TRUE]			
6		+lt_SendSysInfo			
7		lt_SendSysInfo			
8		+ts_SendGSMsInfo(p_CellId, tsc_PhyCh0, gprs, b_PBCCH, b_SI2quarter)			
9		[b_PBCCH = pbcch]			
10		+ts_SendDefPacketSysInfo(p_CellId, tsc_PhyCh1, c_PBCCH_Info_Def(tcv_PSI_LowRate), tcv_PCCCHParams, tcv_G_CellConfigInfo, tcv_RAC, b_PSI5)			This creates the RLCMAC Entity first
11		+ts_Create_LLE_Entity(p_CellId, tsc_LLEEntity)			
12		[b_PBCCH = bcch]			
13		+ts_CreateRLC_MAC_Entity(p_CellId)			Need to ensure RLCMAC Entity created before doing GPRS Attach
14		+ts_Create_LLE_Entity(p_CellId, tsc_LLEEntity)			
15		lt_CreateCell(p_PacketChDescr : PacketChDescr)			
16		+ts_CreateCell_GSM_Comb (p_CellId)			GSM Control Channel
17		[b_PBCCH = pbcch]			
18		+ts_SS_CreatePhyChOfCombType11(p_CellId, tsc_PhyCh1, tcv_PBCCHFreqInfo, p_PacketChDescr.tN, p_PacketChDescr.tSC, tcv_PCCCHParams, c_PBCCH_Info_Def(tcv_PSI_LowRate))			
19		[b_PBCCH = bcch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		+ts_SS_CreatePhyChOfCombType13(p_CellId , tsc_Phych1, c_FreqInfoBCCH(tcv_ARFCN), p_PacketChDescr.tN, p_PacketChDescr.tSC)			
Detailed Comments :					

Test Step Dynamic Behaviour					
<p>Test Step Name : ts_SS_CreatePhyChOfCombType11(p_CellId : CellId; p_PhychId : PhysicalChId; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC; p_PCCHParams : PCCCH_OrganisationParameters; p_PBCCHInfo : PBCCH_Info)</p> <p>Group : M_RAT_HO_ChannelConfig/</p> <p>Objective :</p> <p>Default : SS_Def,IntersystemDef</p> <p>Comments : PBCCH + PCCCH + PDTCH/F + PACCH/F + PTCCH/F</p> <p>Description :</p>					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType11 (p_CellId, p_PhychId, tcv_G_CellConfigInfo, p_FreqInfo, p_TimeSlot, p_Tsc, p_PCCHParams, p_PBCCHInfo)		
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhychId)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfCombType5 (p_CellId : CellId; p_PhychId : PhysicalChId)
Group : M_RAT_HO_ChannelConfig/
Objective :
Default : SS_Def,IntersystemDef
Comments : FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType5(p_CellId, p_PhychId, tcv_G_CellConfigInfo, tcv_AuthKcGSM)		
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhychId)		
3		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 5, 0, FALSE)		Turn Meas Rpts Off
4		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
5		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 5, 1, FALSE)		Turn Meas Rpts Off
6		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
7		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 5, 2, FALSE)		Turn Meas Rpts Off
8		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
9		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 5, 3, FALSE)		Turn Meas Rpts Off
10		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfTrafficChType(p_CellId : CellId; p_PhychId : PhysicalChId; p_TimeSlot: TN; p_ChMode:ChMode; p_ChannelType:ChannelCombination)

Group : M_RAT_HO_ChannelConfig/

Objective :

Default : SS_Def,IntersystemDef

Comments : TCH/F + FACCH/F + SACCH/F or
TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1) or
TCH/F + FACCH/F + SACCH/M or
TCH/F + SACCH/M or
TCH/F + SACCH/MD or
TCH/F + SACCH/MD or
E-TCH/F + E-IACCH/F + E-FACCH/F + E-SACCH/TF or
E-TCH/F + E-IACCH/F + E-FACCH/F + E-SACCH/M or
E-TCH/F + E-IACCH/F + E-SACCH/M or
E-TCH/F + E-IACCH/F + E-SACCH/MD

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		[p_ChannelType = tsc_BasicPhyChCombType1]			
3		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType1(p_CellId, p_PhychId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode, tcv_AuthKcGSM)		
4		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhychId)		
5		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhychId, 10)			
6		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 10, 0, FALSE)		Turn Meas Rpts Off
7		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
8		[p_ChannelType = tsc_BasicPhyChCombType2]			
9		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType2(p_CellId, p_PhychId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode, tcv_AuthKcGSM)		
10		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhychId)		
11		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhychId, 13)			
12		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 13, 0, FALSE)		Turn Meas Rpts Off
13		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
14		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 13, 1, FALSE)		Turn Meas Rpts Off
15		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
16		[p_ChannelType = tsc_BasicPhyChCombType8]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType8(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
18		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
19		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			
20		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off
21		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
22		[p_ChannelType = tsc_BasicPhyChCombType9]			
23		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType9(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
24		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
25		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			
26		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off
27		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
28		[p_ChannelType = tsc_BasicPhyChCombType10]			
29		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType10(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
30		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
31		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 25)			
32		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 25, 0, FALSE)		Turn Meas Rpts Off
33		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
34		[p_ChannelType = tsc_BasicPhyChCombType18]			
35		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType18(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
36		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
37		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 10)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 10, 0, FALSE)		Turn Meas Rpts Off
39		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
40		[p_ChannelType = tsc_BasicPhyChCombType19]			
41		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType19(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
42		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
43		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			
44		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off
45		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
46		[p_ChannelType = tsc_BasicPhyChCombType20]			
47		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType20(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
48		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
49		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			
50		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off
51		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
52		[p_ChannelType = tsc_BasicPhyChCombType21]			
53		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType21(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
54		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
55		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 25)			
56		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 25, 0, FALSE)		Turn Meas Rpts Off
57		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
58		[TRUE]		I	the traffic channel types not supported by this test step.
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_CreatePhyChOfCombType13(p_CellId : CellId; p_PhychId : PhysicalChId; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC) Group : M_RAT_HO_ChannelConfig/ Objective : Default : SS_Def,IntersystemDef Comments : PDTCH/F + PACCH/F + PTCCH/F Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType13 (p_CellId, p_PhychId, tcv_G_CellConfigInfo, p_FreqInfo, p_TimeSlot, p_Tsc)		
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhychId)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendGSMSysInfo(p_CellId: INTEGER; p_PhyCh : PhysicalChId; b_GPRS : GSM_GPRSConfiguration; b_PBCCH :GPRSCellConfiguration; b_SI2quater : SI2quaterConfiguration)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType1 (p_CellId, p_PhyCh)			
3		+ts_SendSysInfoType2 (p_CellId, p_PhyCh)			
4		+lt_SendOthers			SI2 Quarter giving 3G neighbour cell information
5		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
6		+ts_SendSysInfoType2bis(p_CellId, p_PhyCh, 0)			Send a SI2bis if PGSM or EGSM only
7		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test)]			
8		+ts_SendSysInfoType15 (p_CellId, p_PhyCh, '0'B, c_SI15_RO ('0110'B))			
9		[(px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
10		+ts_SendSysInfoType15 (p_CellId, p_PhyCh, '0'B, c_SI15_RO ('0111'B))			
11		[TRUE]			
		lt_SendOthers			
12		[b_GPRS = gprs]			
13		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_GPRS)			
14		+lt_SendSI13			
15		[b_SI2quater = si2quater]			
16		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3RO_GPRS_SI2quater)			
17		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			SI2 Quarter giving 3G neighbour cell information
18		[b_SI2quater = nosi2quater]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_GPRS)			
20		[b_GPRS = gsmonly]			
21		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_Spare)			
22		[b_SI2quater = si2quater]			
23		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quater('0'B))			no GPRS, only SI2quater
24		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			SI2quater giving 3G neighbo ur cell informati on
25		[b_SI2quater = si2ter]			
26		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2ter)			SI2ter giving neighbo ur cell info (SI2ter sent outside of this test step)
27		[b_SI2quater = si2terand2quater]			
28		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quater('1'B))			SI2ter and SI2quater giving neighbo ur cell info (SI2ter sent outside of this test step)
29		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			
30		[b_SI2quater = nosi2quater]			
31		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_Spare)			nothing
32		lt_SendSI13 [b_PBCCH = pbcch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
33		[[px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			DCS and PCS have sized GPRS Allocation All the other bands have another
34		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_DCS)			
35		[TRUE]			
36		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_GSM)			
37		[b_PBCCH = bcch]			
38		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_GPRS(tcv_RAC, tcv_NMO))			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendGSMSysInfo_SI2qBCCHExt(p_CellId: INTEGER; p_PhyCh : PhysicalChId; b_GPRS : GSM_GPRSConfiguration; b_PBCCH :GPRSCellConfiguration; b_SI2quarter : SI2quarterConfiguration)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default : IntersystemDef
Comments : Created for 20.25.3 which requires SI2quarter sent on BCCH Extended
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType1 (p_CellId, p_PhyCh)			
3		+ts_SendSysInfoType2 (p_CellId, p_PhyCh)			
4		+lt_SendOthers			SI2 Quarter giving 3G neighbour cell information
5		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
6		+ts_SendSysInfoType2bis(p_CellId, p_PhyCh, 0)			Send a SI2bis if PGSM or EGSM only
7		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test)]			
8		+ts_SendSysInfoType15 (p_CellId, p_PhyCh, '0'B, c_SI15_RO ('0110'B))			
9		[(px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
10		+ts_SendSysInfoType15 (p_CellId, p_PhyCh, '0'B, c_SI15_RO ('0111'B))			
11		[TRUE]			
		lt_SendOthers			
12		[b_GPRS = gprs]			
13		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_GPRS)			
14		+lt_SendSI13			
15		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3RO_GPRS_SI2quarter)			
16		+ts_SendSysInfoType2quarter(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quarterRO)			SI2 Quarter giving 3G neighbour cell information
17		[b_GPRS = gsmonly]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_Spare)			
19		[b_SI2quater = si2quater]			
20		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quaterBCCHExt('0'B))			no GPRS, only SI2quater
21		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '1'B, tcv_SI2quaterRO)			SI2quater giving 3G neighbour cell information
22		[b_SI2quater = si2terand2quater]			
23		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quaterBCCHExt('1'B))			SI2ter and SI2quater giving neighbour cell info (SI2ter sent outside of this test step)
24		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '1'B, tcv_SI2quaterRO)			
25		[TRUE]		(I)	This step must send SI2quater
26		lt_SendSI13 [b_PBCCH = pbcch]			
27		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			DCS and PCS have sized GPRS Allocation
28		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_DCS)			
29		[TRUE]			All the other bands have another
30		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_GSM)			
31		[b_PBCCH = bcch]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
32		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_GPRS(tcv_RAC, tcv_NMO))			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendGSMsACCHSysInfo (p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType) Group : M_RAT_HO_SysInfoBroadcastGSM/ Objective : Default : IntersystemDef Comments : To send SI5 & SI6 on SACCH Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType5 (p_CellId, p_PhyCh, p_LogicChType)			
3		+ts_SendSysInfoType6 (p_CellId, p_PhyCh, p_LogicChType, c_SI6_RO_Spare(tcv_G_CellConfigInfo.bandIndicator))			
4		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
5		+ts_SendSysInfoType5bis (p_CellId, p_PhyCh, p_LogicChType)			
6		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType1(p_CellId: INTEGER; p_PhyCh : PhysicalChId)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments : no NCH position, all other parameters are taken from tcv_CellConfigInfo.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo1(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.cellAllocation, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestablish, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1), tcv_G_CellConfigInfo.bandIndicator)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType13(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_BCCHExt : B1; p_SI13RO : SI13RO)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo13(p_CellId, p_PhyCh, p_BCCHExt, p_SI13RO)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType15(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_BCCHExt : B1; p_SI15RO : SI15RO)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo15(p_CellId, p_PhyCh, p_BCCHExt, p_SI15RO)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType2(p_CellId: INTEGER; p_PhyCh : PhysicalChId)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.neighBCCHFreqList, tcv_G_CellConfigInfo.nccPermitted, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestablish, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1))		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType2bis(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_InstanceIndex : INTEGER)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2bis(p_CellId, p_PhyCh, p_InstanceIndex, tcv_G_CellConfigInfo.extN eighBCCHFReqList, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_B AR_ACCESS, tcv_G_CellConfigInfo.callRe estab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emer gencyCall, tcv_G_CellConfigInfo.accessControlClass1))		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType2quater(p_CellId: INTEGER; p_PhyCh : PhysicalChId;p_InstanceIndex : INTEGER; p_BCCHExt : B1; p_SI2quaterRO: SI2quaterRO)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2quater(p_CellId, p_PhyCh, p_InstanceIndex, p_BCCHExt, p_SI2quaterRO)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType3(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_SI3RO : SI3RO)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo3(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.cellId entity, c_LAI(o_ConvtPLMN(tcv_ G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_ControlChDescr(tcv_G_CellConfigInfo.attFla g, tcv_G_CellConfigInfo.bS_A G_BLK_RES, tcv_G_CellConfigInfo.cCC H_CONF, tcv_G_CellConfigInfo.bS_P A_MFRMS, tcv_G_CellConfigInfo.cellBa rQualify2, tcv_G_CellConfigInfo.t321 2), c_CellOptionBCCH(tcv_G_CellConfigInfo.dN_I nd, tcv_G_CellConfigInfo.pwrc, tcv_G_CellConfigInfo.dTX, tcv_G_CellConfigInfo.radio LinkTimeout), c_CellSelParam(tcv_G_CellConfigInfo.cELL _RESELECT_HYSTERESIS , tcv_G_CellConfigInfo.mS_T XPWR_MAX_CCH, tcv_G_CellConfigInfo.aCS, tcv_G_CellConfigInfo.nECI, tcv_G_CellConfigInfo.rXLE V_ACCESS_MIN), c_RACH_ControlParam(tcv _G_CellConfigInfo.maxRetr ans, tcv_G_CellConfigInfo.txInt eger, tcv_G_CellConfigInfo.cell_B AR_ACCESS, tcv_G_CellConfigInfo.callRe estab, tcv_G_CellConfigInfo.acces sControlClass2, tcv_G_CellConfigInfo.emer gencyCall, tcv_G_CellConfigInfo.acces sControlClass1), p_SI3RO)		

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType4(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_SI4RO: SI4RO)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo4(p_CellId, p_PhyCh, c_LAI(o_ConvtPLMN(tcv_G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_CellSelParam(tcv_G_CellConfigInfo.cELL_RESELECT_HYSTERESIS, tcv_G_CellConfigInfo.mS_TXPWR_MAX_CCH, tcv_G_CellConfigInfo.aCS, tcv_G_CellConfigInfo.nECI, tcv_G_CellConfigInfo.rXLEV_ACCESS_MIN), c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestablish, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1), p_SI4RO)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType5(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo5(p_CellId, p_PhyCh, p_LogicChType, tcv_G_CellConfigInfo.neighBCCHFreqList)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType5bis(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2IG_L2_SYSINFO_REQ	ca_SysInfo5bis(p_CellId, p_PhyCh, p_LogicChType, tcv_G_CellConfigInfo.extN eighBCCHFReqList)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SendSysInfoType6(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType; p_SI6RO : SI6RO)					
Group : M_RAT_HO_SysInfoBroadcastGSM/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2IG_L2_SYSINFO_REQ	ca_SysInfo6(p_CellId, p_PhyCh, p_LogicChType, tcv_G_CellConfigInfo.cellId entity, c_LAI(o_ConvtPLMN(tcv_G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_CellOptionSACCH(tcv_G_CellConfigInfo.dtx8, tcv_G_CellConfigInfo.pwrc, tcv_G_CellConfigInfo.dtx6 5, tcv_G_CellConfigInfo.radio LinkTimeout), tcv_G_CellConfigInfo.nccP ermitted, p_SI6RO)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendDefPacketSysInfo(p_CellId: INTEGER ; p_PhyCh : PhysicalChId; p_PBCCHInfo : PBCCH_Info; p_PCCCHParams : PCCCH_OrganisationParameters; p_CellCnfgInfo : G_CellConfigInfo; p_RAC : O1; p_MeasOrder : PSI5Configuration)

Group : M_RAT_HO_SysInfoBroadcastGPRS/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_CreateRLC_MAC_Entity(p_CellId)			
2		+lt_SendPSI5and1			
3		+lt_SendPSI2_1st			
4		+ts_SendPacketSysInfoType(p_CellId, p_PhyCh, tsc_HR_Category, tsc_Position1, c_PacketSysInfoType2_2nd (tcv_PSI2_Instance2.rFL_Contents_Len, tcv_PSI2_Instance2.rFL_Contents, tcv_PSI2_Instance2.mALen, tcv_PSI2_Instance2.mABitmap))			PSI2 2nd Instance
5		+ts_SendPacketSysInfoType(p_CellId, p_PhyCh, tsc_HR_Category, tsc_Position2, c_PacketSysInfoType2_3rd(tcv_PSI2_Instance3.rFL_Contents_Len, tcv_PSI2_Instance3.rFL_Contents, tcv_PSI2_Instance3.mALen, tcv_PSI2_Instance3.mABitmap))			PSI2 3rd Instance
6		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position3, c_PacketSysInfoType3(tcv_PSI3_Instance1.startFreq, tcv_PSI3_Instance1.freqDiffLen, tcv_PSI3_Instance1.freqDiff))			PSI3
7		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position0, c_PacketSysInfoType3bis(INT_TO_BIT(tsc_Position0, 4), tcv_PSI3_Instance2.startFreq, tcv_PSI3_Instance2.freqDiffLen, tcv_PSI3_Instance2.freqDiff))			PSI3bis 1st Instance
8		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position1, c_PacketSysInfoType3bis(INT_TO_BIT(tsc_Position1, 4), tcv_PSI3_Instance3.startFreq, tcv_PSI3_Instance3.freqDiffLen, tcv_PSI3_Instance3.freqDiff))			PSI3bis 2nd Instance
9		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position2, c_PacketSysInfoType3bis(INT_TO_BIT(tsc_Position2, 4), tcv_PSI3_Instance4.startFreq, tcv_PSI3_Instance4.freqDiffLen, tcv_PSI3_Instance4.freqDiff))			PSI3bis 3rd Instance
		lt_SendPSI5and1			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		[p_MeasOrder = psi5]			
11		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position3, c_PacketSysInfoType5)			PSI5
12		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, 0, 31, c_PacketSysInfoType1(p_PBCCHInfo, p_PCCCHParams, p_CellCnfgInfo, tcv_NMO, '1'B))			Send PSI1 Message For PSI1, Positionl nList is not applicabl e and set to 31.
13		[p_MeasOrder = nopsi5]			
14		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh,0, 31, c_PacketSysInfoType1(p_PBCCHInfo, p_PCCCHParams, p_CellCnfgInfo, tcv_NMO, '0'B))			Send PSI1 Message For PSI1, Positionl nList is not applicabl e and set to 31.
15		It_SendPSI2_1st [tcv_AddPSIMsgs]			
16		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position0, c_PacketSysInfoType2_1st(p_CellCnfgInfo.mcc, p_CellCnfgInfo.mnc, p_CellCnfgInfo.lac, p_RAC, '1'B, c_AddPSI3quater))			PSI2 1st instance
17		[TRUE]			
18		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position0, c_PacketSysInfoType2_1st(p_CellCnfgInfo.mcc, p_CellCnfgInfo.mnc, p_CellCnfgInfo.lac, p_RAC, '0'B, OMIT))			PSI2 1st instance
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendPacketSysInfoType(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_Category :
 PSI_Category; p_Index : PositionInList; p_PSI : PDU)
Group : M_RAT_HO_SysInfoBroadcastGPRS/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_RLC ! G_RLC_PSI_REQ	ca_G_RLC_PSI_REQ(p_CellId , p_PhyCh, p_Category, p_Index, p_PSI)		Send a PSI Message

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_DetachOnSwitchOff (p_CellId : INTEGER)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_SwitchOnOff]			UE can actually be switched off
2		+ts_MMI_UE_SwitchOff			
3		[tcv_NMO = '00'B]			
4		+lt_Detach_NMO1			Combined Detach
5		[tcv_NMO = '01'B]			
6		+lt_Detach_NMO2			SS shall accept either PS detach first or IMSI detach first, since this is not clear in the core spec
7		[TRUE]		1	
8		[TRUE]			UE power supply must be removed
9		+ts_MMI_UE_PwrOff lt_Detach_NMO2			
10		+ts_G_IMSIDetach (p_CellId)			
11		[pc_GPRS]			
12		+ts_UplinkTBFOnePhase(p_CellId, tsc_PhyCh1)			
13		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_DetachReq (c_DetachType('1'B, '001'B), ?, ?))		DETACH REQUEST - 'power switched off, GPRS detach'
14		[TRUE]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		+ts_UplinkTBFOnePhase(p_CellId, tsc_PhyCh1)			
16		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_DetachReq (c_DetachType('1'B, '001'B), ?, ?))		DETAC H REQUE ST – 'power switched off, GPRS detach'
17		[pc_G_operation_mode_C]			That's it, don't do anything else
18		[TRUE]			
19		+ts_G_IMSIDetach (p_CellId)			
		lt_Detach_NMO1			
20		+ts_UplinkTBFOnePhase(p_CellId, tsc_PhyCh1)			GPRS DETAC H
21		[pc_G_operation_mode_C]			
22		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_DetachReq (c_DetachType('1'B, '001'B), ?, ?))		DETAC H REQUE ST – 'power switched off, GPRS detach'
23		[TRUE]			
24		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_DetachReq (c_DetachType('1'B, '011'B), ?, ?))		DETAC H REQUE ST – 'power switched off, combine d detach'
25		+ts_G_IMSIDetach (p_CellId)			Should only do this if no GPRS cell configur ed
Detailed Comments : See 3GPP 24.008 / 4.7.4					

Test Step Dynamic Behaviour

Test Step Name : ts_ULTBFOnePhase_PBCCH(p_CellId : CellId; p_PhysicalChId : PhysicalChId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Ensure tcv_GPRS_CiphAlg, tcv_RR_RA and tcv_RR_RFN are set to the correct value before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_UL_TBF_Config_REQ	ca_ActivateTBF_UplinkDyn (p_CellId, tsc_RlcMode_Ack, 1)		Configure the Uplink TBF for Dynamic Allocation, USF 0 on timeslot 4
2		G_CRLC ? G_CRLC_UL_TBF_Config_CNF	ca_Activate_UL_TBF_CNF		
3		(tcv_RR_RA := (BIT_TO_INT (tcv_PacketChRequest.estCauRandomRef)))			
4		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_PAGCH(p_CellId, p_PhysicalChId, tsc_uplinkTFI, '1'B, c_G_RFN_Omit, c_PacketUplinkAssignment_Dynamic_OnePhase(c_PacketRequestReference(tcv_RR_RA, tcv_RR_RFN)))		Set S/P bit so that a PCA is received
5		G_RLC ? G_RLC_ControlMsg_IND (tcv_TmpPktCtrlAckPdu := G_RLC_ControlMsg_IND.msg)	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		Extract the TLLI
6		[tcv_TmpPktCtrlAckPdu.tLLI = tcv_TLLI]			if the TLLI hasn't changed, don't bother calling LLCAssignReq
7		[TRUE]			this TLLI is new
8		(tcv_oldTLLI := tcv_TLLI, tcv_Count := 0, tcv_TLLI := tcv_TmpPktCtrlAckPdu.tLLI)			
9		+ts_LLC_TLLI_Assign(p_CellId, tcv_oldTLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			Assign the value received from the MS

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId : CellId; p_PhysicalChId : PhysicalChId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Ensure tcv_GPRS_CiphAlg is set to the correct value before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_RLC?G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, cr_11BitPRACH_MMProc)		
2		+lt_createULTBF			
3		G_RLC?G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, cr_8BitPRACH_MMProc)	(F)	Don't the PSI messages say 11 bits?
4		+lt_createULTBF			
5		G_RLC ? G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, ?)	(F)	Must be requesting some other sort of procedure
6		+lt_createULTBF			
7		lt_createULTBF			
7		(tcv_RR_RA := (BIT_TO_INT (tcv_PacketChRequest.estCauRandomRef)))			
8		+ts_ULTBFOnePhase_PBCCH(p_CellId, p_PhysicalChId)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ULTBFOnePhase(p_CellId : CellId; p_PhysicalChId : PhysicalChId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Ensure tcv_GPRS_CiphAlg, tcv_RR_RA and tcv_RR_RFN are set to the correct value before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_ComingFN_REQ	c_G_CL1_ComingFN_REQ(p_CellId, tsc_PhyCh1, tsc_PACCH_F)		
2		G_CL1 ? G_CL1_ComingFN_CNF (tcv_StartingTime := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		
3		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId, tsc_PhyCh0, tsc_AGCH, 15, c_G_RFN_Omit, cs_P_ImmediateAssignment ('0'B, tcv_ARFCN , tcv_RR_RA , tcv_RR_RFN, c_IARO_PUA(tcv_Gamma, o_BitstringConcat(o_BitstringConcat(tcv_StartingTime.t1_, tcv_StartingTime.t3, 5, 6), tcv_StartingTime.t2, 11, 5))))		Set Poll bit so that a PCA is received
4		G_CRLC ! G_CRLC_UL_TBF_Config_REQ	ca_ActivateTBF_UplinkDyn (p_CellId, tsc_RlcMode_Ack, 1)		Configure the Uplink TBF for Dynamic Allocation, USF 0 on timeslot 4
5		G_CRLC ? G_CRLC_UL_TBF_Config_CNF	ca_Activate_UL_TBF_CNF		
6		G_RLC ? G_RLC_ControlMsg_IND (tcv_TmpPktCtrlAckPdu := G_RLC_ControlMsg_IND.msg)	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		Extract the TLLI
7		[tcv_TmpPktCtrlAckPdu.tLLI = tcv_TLLI]			if the TLLI hasn't changed , don't bother calling LLCAssignmentReq
8		[TRUE]			this TLLI is new
9		(tcv_oldTLLI := tcv_TLLI, tcv_Count := 0, tcv_TLLI := tcv_TmpPktCtrlAckPdu.tLLI)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		+ts_LLC_TLLI_Assign(p_CellId, tcv_oldTLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			Assign the value received from the MS
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_UplinkTBFOnePhase(p_CellId : CellId; p_PhysicalChId : PhysicalChId) Group : M_RAT_HO_GPRS_Specific/ Objective : Default : IntersystemGPRS Comments : Ensure tcv_GPRS_CiphAlg is set to the correct value before entering this test step Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst)	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , cr_ChReqOnePhase)		Receive CHANNEL
2		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			REQUEST message
3		[(tcv_RR_RA > 119) AND (tcv_RR_RA < 127)]		(P)	establishment cause = one phase packet access
4		+ts_ULTBFOnePhase(tsc_GSM_CellA, tsc_PhyCh1)			
5		[TRUE]		(F)	Wrong establishment cause
6		+ts_ULTBFOnePhase(tsc_GSM_CellA, tsc_PhyCh1)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_DownlinkTBFEstablishment(p_CellId : CellId; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly(250)			start small timer
2		G_RLC ? G_RLC_ControlMsg_IND CANCEL t_Dly	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		wait for PCa from previous UL TBF (if there was one)
3		+!t_DLTBF			
4		?TIMEOUT t_Dly			otherwise, carry on anyway
5		+!t_DLTBF			
6		!t_DLTBF G_CRLC ! G_CRLC_DL_TBF_Config_REQ	ca_ActivateTBF_Downlink(p_CellId, p_PhysicalChId, tsc_RlcMode_Ack, tcv_USFRate)		
7		G_CRLC ? G_CRLC_DL_TBF_Config_CNF	ca_Activate_DL_TBF_CNF		
8		[b_PBCCH = pbcc]			
9		(tcv_M := (12 – BIT_TO_INT(tcv_PCCCHParams.bS_PAG_B LKS_RES) – BIT_TO_INT(tcv_PCCCHParams.bS_PBCC H_BLKS))*64)			for PCCCH
10		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_Paging(p_CellId, p_PhysicalChId, tsc_downlinkTFI, '1'B, px_IMSI_Def, 1, tcv_M, 1, 0, tcv_SplitPGCycle.splitPGcycleCode, c_PacketDownlinkAssignment(tcv_TLLI, tsc_downlinkTFI, tcv_Gamma))		p_KC_Conf = 1 – only one GPRS physical channel, N = 1 for PCCCH Request PCA
11		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		
12		[b_PBCCH = bcch]			

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		[(tcv_SplitPGCycle.splitPGcycleCode = '0000000'B) OR (tcv_SplitPGCycle.splitOnCCCH = '0'B)]			
14		(tcv_K := o_PagingGroupCalculate(px_IMSI_Def, tcv_G_CellConfigInfo.cCH_CONF, 6))			use calculation in clause 6.5.2
15		+lt_SendIA			
16		[TRUE]			use calculation in clause 6.5.6
17		(tcv_M := (3 - BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_BLK_RES))*64)			for CCCH/SDCCH combined
18		(tcv_K := o_PacketPagingGroupCalculate(px_IMSI_Def, BIT_TO_INT(tcv_G_CellConfigInfo.cCH_CONF), tcv_M, (3 - BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_BLK_RES))* BIT_TO_INT(tcv_G_CellConfigInfo.bS_PA_MFRMS), tcv_SplitPGCycle.splitPGcycleCode))			for CCCH/SDCCH combined
19		+lt_SendIA			
20		lt_SendIA G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ (p_CellId, tcv_K, cs_P_ImmediateAssignment ('1'B, tcv_ARFCN, 0, c_RFN_0, c_IARO_PDA(tcv_TLLI, tcv_Gamma)))		Send immediate assignment message in slot corresponding to appropriate CCCH or PCCCH group
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_U2GCellChange_RAUpdate(p_CellId : CellId; p_PhysicalChId : PhysicalChId; p_FOR : B1; p_Type : B3)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Assumes channel combination 13 (no PBCCH)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpRAU_ReqPDU := G_LLC_UNITDATA_IND.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(p_FOR, p_Type), ?, ?))		ROUTING AREA UPDATE REQUEST
3		+lt_SendAccept			
4		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
5		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_RA_UpdComplete)		Receive RAU Complete
6		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpRAU_ReqPDU := G_LLC_UNITDATA_IND.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?, ?, ?))	(F)	ROUTING AREA UPDATE REQUEST wrong update type
7		+lt_SendAccept			
8		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
9		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_RA_UpdComplete)		Receive RAU Complete
10		lt_SendAccept			
11		+lt_ChkUpdateType [NOT px_CipheringOnOff]			
12		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, bcch)			

Continued on next page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, tsc_LLC_NoCiph, cs_RA_UpdAcc3 (c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_G_CellInfoA.mcc, tcv_G_CellInfoA.mnc, tcv_G_CellInfoA.lac, tcv_RAC), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def, -))		ROUTIN G AREA UPDAT E ACCEP T Send back appropri ate update type
14		[px_CipheringOnOff]			
15		+ts_LLC_TLLI_Assign(tsc_GSM_CellA, tcv_TLLI, tcv_TLLI, px_GPRS_CipherAlg)			don't change the TLLI, only the cipherin g algorith m
16		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, bcch)			
17		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, tsc_LLC_Cipher, cs_RA_UpdAcc3 (c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_G_CellInfoA.mcc, tcv_G_CellInfoA.mnc, tcv_G_CellInfoA.lac, tcv_RAC), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def, -))		ROUTIN G AREA UPDAT E ACCEP T Send back appropri ate update type
18		lt_ChkUpdateType			
19		[tcv_TmpB3 = '000'B]			
20		[TRUE]			
		(tcv_TmpB3 := '001'B)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_Delete_GPRS_Entities (p_CellId : CellId; p_PhyChId : PhysicalChId; p_LLMEEntity : LLMEId)					
Group : M_RAT_HO_GPRS_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_DeleteRLC_MAC_REQ	ca_G_CRLC_DeleteRLC_M AC_REQ(p_CellId)		
2		G_CRLC ? G_CRLC_DeleteRLC_MAC_CNF	ca_G_CRLC_DeleteRLC_M AC_CNF		
3		G_CLLC ! G_CLLC_DeleteLLE_REQ	ca_G_CLLC_DeleteLLE_RE Q(p_LLMEEntity)		
4		G_CLLC ? G_CLLC_DeleteLLE_CNF	ca_G_CLLC_DeleteLLE_C NF		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : po_GPRS_SS_CellRelease (p_CellId : CellId)					
Group : M_RAT_HO_GPRS_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_ REQ (p_CellId , tsc_PhyCh0)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_ CNF (p_CellId , tsc_PhyCh0)		
3		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_ REQ (p_CellId , tsc_PhyCh1)		
4		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_ CNF (p_CellId , tsc_PhyCh1)		
5		G_CL1 ! G_CL1_DeleteCell_REQ	ca_G_CL1_DeleteCell_REQ (p_CellId)		
6		G_CL1 ? G_CL1_DeleteCell_CNF	ca_G_CL1_DeleteCell_CNF (p_CellId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_CreateRLC_MAC_Entity(p_cellId: CellId)					
Group : M_RAT_HO_GPRS_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_CreateRLC_MAC_REQ	ca_G_CRLC_CreateRLC_M AC_REQ(p_cellId)		
2		G_CRLC ? G_CRLC_CreateRLC_MAC_CNF	ca_G_CRLC_CreateRLC_M AC_CNF(p_cellId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_Create_LLE_Entity(p_cellId : CellId; p_LLMEId: LLMEId)					
Group : M_RAT_HO_GPRS_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CLLC ! G_CLLC_CreateLLE_REQ	ca_G_CLLC_CreateLLE_R EQ(p_LLMEId, p_cellId)		
2		G_CLLC ? G_CLLC_CreateLLE_CNF	ca_G_CLLC_CreateLLE_C NF(p_LLMEId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_LLC_TLLI_Assign(p_cellId : CellId; p_oldTLLI, p_newTLLI: TLLI; p_CipherAlg : GPRS_CipherAlg)					
Group : M_RAT_HO_GPRS_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CLLC ! G_CLLC_Assign_REQ	ca_G_CLLC_Assign_Req(p _cellId , p_oldTLLI, p_newTLLI, p_CipherAlg, tcv_AuthKcGSM)		
2		G_CLLC ? G_CLLC_Assign_CNF	ca_G_CLLC_Assign_CNF(?)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_LLC_XID(p_CellId : INTEGER; p_PhysicalChId : PhysicalChId; p_SAPI : SAPI)
Group : M_RAT_HO_GPRS_Specific/
Objective : Wait to see if UE sends any XID parameters
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitS(5)			
2		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			XID sent, so start TBF
3		G_LLC ? G_LLC_XID_IND CANCEL t_WaitS	c_G_LLC_XID_IndAny		If an XID is not included, it means that it's negotiated value is accepted, so don't include any – i.e. accept them all!
4		G_LLC ! G_LLC_XID_RES	c_G_LLC_XID_Res(tsc_LLEntity, tcv_TLLI, p_SAPI, -)		
5		?TIMEOUT t_WaitS			No XID coming

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Assignment (p_GCellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Assignment of Traffic Channel
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_GCellId, 0, tsc_PhyCh0 , tcv_RR_ChannelType , tcv_RR_Subchannel, c_G_RFN_Omit, tcv_AssignmentCommand)		Send Assignment Command
2		START t_ReceiveMessageTimer(33)			
3		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType2 := G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel2 := G_L2_L2Estab_IND.subChannel) CANCEL t_ReceiveMessageTimer	cabr_G_L2_L2Estab_IND (p_GCellId , ? , ? , ? , ?)	(P)	Receive Establishment Indication
4		START t_ReceiveMessageTimer(33)			
5		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	car_G_L2_DATA_IND_Gen (p_GCellId, ?, tsc_G_TrchId1, ? , ? , ? , cr_G_AssignmentComplete)	(P)	Receive Assignment Complete
6		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	Assignment failed
7		?TIMEOUT t_ReceiveMessageTimer		(F)	
8		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_CMServiceReq_MO (p_CellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Receive CM Service Request for MO
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[TRUE]			
2	LAB	START t_T3101			
3		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType,tcv_RR_Subchannel:= G_L2_L2Estab_IND.subChannel)	car_G_L2_L2Estab_IND (p_CellId, cb_CM_ServReqAny(?))	(P)	Receive CM Service Request
4		CANCEL t_T3101 G_L2 ? G_L2_ACCESS_IND CANCEL t_T3101	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , ?)		skip any further channel request message by discarding Random Access Indication
5		->LAB			
6		G_L2?OTHERWISE CANCEL t_T3101		(F)	
7		?TIMEOUT t_T3101		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_IMSIDetach(p_CellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemGPRS
Comments : Assume UE already switched off
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst, tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , cr_ChanReqOtherProc)		Receive CHANNEL REQUEST for IMSI Detach second
2		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId , tsc_PhyCh0 , 3 , 15 , c_G_RFN_Omit , cs_ImmediateAssignment (tcv_G_CellConfigInfo.bCCH_H_Freq , tcv_G_CellConfigInfo.bcc , tcv_RR_RA , tcv_RR_RFN))		Assign a GSM Channel
3		G_L2 ? G_L2_L2Estab_IND	car_G_L2_L2Estab_IND (p_CellId , c_IMSI_DetachIndAny)		IMSI Detach Indication
4		+ts_G_ChannelRelease (p_CellId , tsc_PhyCh0)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Rcv_SetUp (p_CellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Call Initiation and User Alert
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_ReceiveMessageTimer (33)			Start 33 secs timer for receiving message . If the timer expires before any response give FAIL verdict
2		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType := G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_DATA_IND.subChannel, tcv_SetupMOr := G_L2_DATA_IND.msg) CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId , cr_G_SetupUL_MO)	(P)	Receive SETUP and determine the value of Transaction Id and sets the flag of the TI in the other direction is set to 1.
3		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
4		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_InitAssignmentCmd (p_ChMode : ChMode)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[[px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
2		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
3		[[px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test]]			
4		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 9) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_9, tcv_G_CellInfoA.cipherMode))			
5		[[px_GSM_BandUnderTest = tsc_GSM_450Band_Test]]			
6		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
7		[[px_GSM_BandUnderTest =tsc_GSM_480Band_Test]]			
8		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
9		[[px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test]]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 9) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_9, tcv_G_CellInfoA.cipherMode))			
11		[[px_GSM_BandUnderTest =tsc_GSM_850Band_Test]]			
12		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
13		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_G_DisableCipherng(p_CellId : INTEGER; p_PhyCh : PhysicalChId; p_ChType : G_LogicChType; p_SubCh : SubChannelNumber)					
Group : M_RAT_HO_GSM_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_GSM_CipherngOnOff='1'B]			
2		G_CL1 ! G_CL1_CipherModeModify_REQ	ca_G_CL1_CipherModeModify_REQ(p_CellId, tsc_PhyCh0, p_ChType, p_SubCh, c_CipherModeSetting('0'B))		
3		G_CL1 ? G_CL1_CipherModeModify_CNF	ca_G_CL1_CipherModeModify_CNF		
4		G_CL1 ! G_CL1_CipherModeModify_REQ	ca_G_CL1_CipherModeModify_REQ(p_CellId, tsc_PhyCh0, (p_ChType +1), p_SubCh, c_CipherModeSetting('0'B))		
5		G_CL1 ? G_CL1_CipherModeModify_CNF	ca_G_CL1_CipherModeModify_CNF		
6		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_G_Disconnect(p_CellId : INTEGER; p_PhyCh : PhysicalChId)					
Group : M_RAT_HO_GSM_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cs_Disc (tcv_TI_S))		
2	TSP	G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (p_CellId, ?, p_PhyCh, ?, ?, ?, cr_Rel (tcv_TI_R))	(P)	
3		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cs_RelCmpl (tcv_TI_S))		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_GSM_SetChPowerLevel(p_CellId : CellId ; p_PhyChId : PhysicalChId ; p_txPow : TX_Power)					
Group : M_RAT_HO_GSM_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_ChangePowerLevel_REQ	c_G_CL1_ChangePowerLevel_REQ (p_CellId , p_PhyChId , p_txPow)		
2		G_CL1 ? G_CL1_ChangePowerLevel_CNF	c_G_CL1_ChangePowerLevel_CNF (p_CellId , p_PhyChId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_G_SetTmpCellConfigInfo (p_CellId : CellId)					
Group : M_RAT_HO_GSM_Specific/					
Objective : To Set global variable tcv_G_CellConfigInfo to the table corresponding to given cell					
Default : SS_Def					
Comments : This Step helps the programmer when he/she needs to access cell information in a generic test Step.					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_GSM_CellA]			
2		(tcv_G_CellConfigInfo := tcv_G_CellInfoA)			
3		[p_CellId = tsc_GSM_CellB]			
4		(tcv_G_CellConfigInfo := tcv_G_CellInfoB)			
5		[p_CellId = tsc_GSM_CellC]			
6		(tcv_G_CellConfigInfo := tcv_G_CellInfoC)			
7	ERR	[TRUE]		I	Fatal error
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_G_ReceiveOptSuspend(p_PhyId :PhysicalChId ; p_LogType :G_LogicChType)					
Group : M_RAT_HO_GSM_Specific/					
Objective : This step waits for some time to receive the Suspend Message from UE					
Default : IntersystemGPRS					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitS(5)			start timer for 5 seconds
2	TBP1	G_L2 ? G_L2_DATA_IND CANCEL t_WaitS	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, p_PhyId, p_LogType ,?, ? , cr_GPRS_SUSPENSIONR EQ(?,?,?))	(P)	to Receive Suspensi on Msg
3		? TIMEOUT t_WaitS		(P)	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_GSM_ChannelRelease (p_CellId : CellId; p_PhyChId : PhysicalChId)					
Group : M_RAT_HO_GSM_Specific/					
Objective :					
Default :					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , p_PhyChId)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF CANCEL t_Release	ca_G_CL1_DeleteChannel_CNF (p_CellId , p_PhyChId)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : po_GSM_SS_CellRelease (p_CellId : CellId)					
Group : M_RAT_HO_GSM_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , tsc_PhyCh0)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_CNF (p_CellId , tsc_PhyCh0)		
3		G_CL1 ! G_CL1_DeleteCell_REQ	ca_G_CL1_DeleteCell_REQ (p_CellId)		
4		G_CL1 ? G_CL1_DeleteCell_CNF	ca_G_CL1_DeleteCell_CNF (p_CellId)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_Authentication (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_AuthenticationInit			
2		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId , 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit , c_AuthReq(tcv_CS_KeySeq , tcv_AuthRAND, c_AUTN(tcv_AuthAUTN)))		Send Authentication Request
3		START t_ReceiveMessageTimer (33)			
4		G_L2 ? G_L2_DATA_IND (tcv_AuthRspPDU := G_L2_DATA_IND.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp, tcv_AuthRspExt := tcv_AuthRspPDU.authRspExt) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthRspAnyExt)	(P)	Receive Authentication Response with extension
5		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			
6		[tcv_Res = FALSE]		(F)	
7		[tcv_Res = TRUE]			
8		G_L2 ? G_L2_DATA_IND (tcv_AuthRspPDU := G_L2_DATA_IND.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthRspAnyNoExt)	(P)	Receive Authentication Response without extension
9		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, FALSE))			
10		[tcv_Res = FALSE]		(F)	
11		[tcv_Res = TRUE]			
12		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthFailAny)	(F)	
13		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_ChannelRelease (p_CellId : INTEGER; p_PhyId :PhysicalChId)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : removed optional G_L2_Release_IND – now handled in default behaviour
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_PhyId = tsc_PhyCh0]			
2		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyId, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit , c_G_ChReleaseNormal)		Send Channel Release
3		[TRUE]			
4		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyId, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit , c_G_ChReleaseNormal)		Send Channel Release

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Ciphering_Mode_Setting (p_CellId : INTEGER; p_PhyCh : PhysicalChId)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : Currently turns ciphering on if px_CipheringOnOff is set to TRUE
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_GSM_CipheringOnOff='1'B]			
2		G_CL1 ! G_CL1_CipheringControl_REQ	ca_G_CL1_CipheringControl_REQ(p_CellId, p_PhyCh, '1'B)		Turn Ciphering On
3		G_CL1 ? G_CL1_CipheringControl_CNF	ca_G_CL1_CipheringControl_CNF(p_CellId, p_PhyCh)		
4		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_CipheringModeCommand('1'B))		Turn Ciphering ON – algorithm set to px_Ciph Alg
5		START t_ReceiveMessageTimer(33)			
6		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType:= G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel:= G_L2_DATA_IND.subChannel) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ? , p_PhyCh, ?, ?, ? , cr_G_CipheringModeComplete)	(P)	Receive Ciphering Mode Complete
7		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
8		?TIMEOUT t_ReceiveMessageTimer		(F)	
9		[TRUE]			no Ciphering

Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_G_Loc_UpdatingAccept (p_CellId : INTEGER)					
Group : IdleUpdate/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAccept (tcv_G_CellConfigInfo, c_MM_MS_Identity))		Send Location Updating Accept
2		START t_ReceiveMessageTimer(33)			
3		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType:= G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel:= G_L2_DATA_IND.subChannel)	cr_G_L2_DATA_IND (p_CellId, ?, ?, ?, ?, c_TMSI_ReallocCmpl)	(P)	Receive TMSI Reallocation Complete
4		CANCEL t_ReceiveMessageTimer ?TIMEOUT t_ReceiveMessageTimer		(F)	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_G_Loc_UpdatingRequest (p_CellId : INTEGER)					
Group : IdleUpdate/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_T3101			
2		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel)	car_G_L2_L2Estab_IND (p_CellId, cb_LocUpdReqAny(?))	(P)	Service Request (Location Updating Request)
		CANCEL t_T3101			
3		G_L2?OTHERWISE CANCEL t_T3101		(F)	
4		?TIMEOUT t_T3101		(F)	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_LocationUpdate (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : MS performs a location update
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_G_RR_Con_Est (p_CellId)			Establis h RR Connect ion and Receieve Service Request
3		+ts_G_Loc_UpdatingRequest (p_CellId)			Receive Location Updatin g Request
4		+ts_G_Authentication (p_CellId)			Send Authenti cation Request and receive Authenti cation Respons e
5		+ts_G_Ciphering_Mode_Setting (p_CellId, tsc_PhyCh0)			Send Cipherin g Mode Comman d and receive Cipherin g Mode Comple te
6		+ts_G_Loc_UpdatingAccept (p_CellId)			Send Location Updatin g Accept and receive TMSI Reallocat ion Comple te

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		+ts_G_ChannelRelease (p_CellId, tsc_PhyCh0)			Send Channel Release and receive Release Data Link Indicatio n
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_RR_Con_Est (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_CampResponseTimer(120)			Start 2min timer for camping to ensure don't just wait for t_Guard in UE doesn't respond.
2		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst) CANCEL t_CampResponseTimer	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , c_G_ChannelReq_Any)		Receive CHANN EL REQUE ST message MS camped on cell1.
3		(tcv_RR_RA := (BIT_TO_INT (
4		tcv_ChRequest.estCauRandomRef)) G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId , tsc_PhyCh0 , 3, 15,c_G_RFN_Omit , cs_ImmediateAssignment (tcv_G_CellConfigInfo.bCC H_Freq , tcv_G_CellConfigInfo.bcc, tcv_RR_RA , tcv_RR_RFN))		Send immediate assignment message
5		?TIMEOUT t_CampResponseTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesSpecific26_6_5_1_2 (p_CellId : CellId)
Group : Other/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[[px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]]			
2		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_900_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation := c_CellAllocGSM900HO)			
3		[[px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]]			
4		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (9, tsc_G_HSN, c_G_FreqList_GSM_1800_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation := c_CellAllocGSM1800HO_256F, tcv_G_CellInfoA.bCCH_Freq:='1011101011'B)			
5		[[px_GSM_BandUnderTest = tsc_GSM_450Band_Test)]]			
6		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_450_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM450HO_128F)			
7		[[px_GSM_BandUnderTest =tsc_GSM_480Band_Test)]]			
8		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_480_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM480HO_128F)			
9		[[px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]]			
10		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (9, tsc_G_HSN, c_G_FreqList_GSM_1900_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM1900HO_256F, tcv_G_CellInfoA.bCCH_Freq:='1010000111'B)			
11		[[px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]]			
12		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFReqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_700_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM700HO_128F)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		[(px_GSM_BandUnderTest =tsc_GSM_850Band_Test)]			
14		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_850_26_6_5_1_2) , tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM850HO_128F)			
15		[TRUE]		(I)	Inconclu sive
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesAllBands
Group : Other/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SI2quarterRO := c_SI2quarterRO('1'B, c_SI2quarter_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quarterMeasParams3G_ISHO, '0'B, OMIT))			Set up default value of SI2quarter
2		+ts_MM_AuthenticationInit			To initialise tcv_AuthKcGSM to correct value
3		[[px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
4		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM900)			
5		[[px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]			
6		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM1800)			
7		[[px_GSM_BandUnderTest = tsc_GSM_450Band_Test)]			
8		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM450)			
9		[[px_GSM_BandUnderTest = tsc_GSM_480Band_Test)]			
10		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM480)			
11		[[px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
12		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM1900)			
13		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
14		(tcv_G_CellInfoA := c_G_CellConfigInfoGPRS700_CellA(tsc_CCCHConf_Combined))			
15		[[px_GSM_BandUnderTest = tsc_GSM_850Band_Test)]			
16		(tcv_G_CellInfoA := c_G_CellConfigInfoGPRS850_CellA(tsc_CCCHConf_Combined))			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesSpecific40
Group : Other/
Objective :
Default : IntersystemDef
Comments : Defaults specific to section 40 tests, from 51.010 clause 40.2.1 Assumed tcv_CellInfoA already using c_G_CellConfigInfoGSM900
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_G_CellInfoA.nECI := '1'B, tcv_G_CellInfoA.bs_AG_BLKs_RES := '010'B, tcv_G_CellInfoA.bs_PA_MFRMS := '100'B)			None freq dependa nt paramet ers
2		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
3		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS900, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS900)			
4		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]			
5		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS1800, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS1800_1900)			
6		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
7		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS1900, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS1800_1900)			
8		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			
9		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS700, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS700)			
10		[(px_GSM_BandUnderTest =tsc_GSM_850Band_Test)]			
11		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS850, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS850)			
12		[(px_GSM_BandUnderTest =tsc_GSM_450Band_Test)]			
13		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS450)			
14		[(px_GSM_BandUnderTest =tsc_GSM_480Band_Test)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS480)			
16		[TRUE]		(I)	Inconclu sive
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GPRS_InitVariablesDef
Group : Other/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_PSI2_Instance3 := tcv_PSI2_Instance2, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM, tcv_PBCCHFreqInfo := c_PBCCHFreqInfo(c_PBCCHoppingFreqList_GSM900))			Instance 3 same as instance 2 except RFL. If changing PBCCH params, check PSI13, S113 and Channel Config
2		[[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]]			
3		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_5, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_75, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_90, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_100, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_122, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_2bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_2)			
4		[[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]]			
5		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_DCSPCS, tcv_PSI2_Instance2.mALen := tsc_MALen_7, tcv_PSI2_Instance2.mABitmap := tsc_PSI2_MABitmap2_DCSPCS)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
6		(tcv_PSI2_Instance3.rFL_Contents_Len := tsc_RFLContentsLen_6, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_DCSPCS, tcv_PSI2_Instance3.mALen := tsc_MALen_3, tcv_PSI2_Instance2.mABitmap := tsc_PSI2_MABitmap3_DCSPCS)			
7		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_515, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_85, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_700, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_8bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_170, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_780, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_875, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_10)			
8		(tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_DCSPCS, tcv_ARFCN := INT_TO_BIT(650, 10))			
9		(tcv_Gamma := '00011'B)			
10		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
11		(tcv_PSI3_Instance2.startFreq := tsc_StartFreq_655, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_155, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_700, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_80, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_875, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_30)			Most parameters are same as DCS, only these are different
12		[(px_GSM_BandUnderTest = tsc_GSM_710Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_750Band_Test) OR (px_GSM_BandUnderTest = tsc_T_GSM_810Band_Test)]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_GSM700, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM700)			Everything is same as GSM except RFLs
14		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_438, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_9, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_467, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_477, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_502, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_3bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_5)			
15		(tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_GSM700, tcv_ARFCN := INT_TO_BIT(467,10))			
16		[(px_GSM_BandUnderTest =tsc_GSM_850Band_Test)]			
17		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_GSM850, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM850)			Everything is same as GSM except RFLs
18		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_137, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_20, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_207, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_217, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFr			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		eq_177, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_20) (tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_GSM850, tcv_ARFCN := INT_TO_BIT(157,10))			
20		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_GERANCreateCell_DTM(p_CellId : CellId; b_PBCCH : GPRSCellConfiguration; b_SI2quarter : SI2quarterConfiguration; p_Timeslot: B3) Group : M_RAT_HO_DTM_Specific/ Objective : Default : Comments : Expects variables to already be initialised. Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+lt_CreateCell(c_PacketChDescrHopping(p_Timeslot, tcv_G_CellConfigInfo))			hopping channel
3		+ts_SendGSMSysInfo_DTM(p_CellId, tsc_PhyCh0, gprs, b_PBCCH, b_SI2quarter)			
4		+ts_CreateRLC_MAC_Entity(p_CellId)			Need to ensure RLCMAC Entity created before doing GPRS Attach
5		+ts_Create_LLE_Entity(p_CellId, tsc_LLEEntity)			
6		lt_CreateCell(p_PacketChDescr : PacketChDescr) +ts_CreateCell_GSM_Comb (p_CellId)			GSM Control Channel
7		+ts_SendSysInfoType6 (p_CellId, tsc_PhyCh0, 5, c_SI6_RO_DTM(tcv_G_CellConfigInfo.bandIndicator, o_OctToBit(tcv_RAC), '111'B))			indicate DTM supported on SACCH 4
8		+ts_SS_CreatePhyChOfCombType13(p_CellId, tsc_PhyCh1, tcv_G_CellConfigInfo.tCH_Freq, p_PacketChDescr.tN, p_PacketChDescr.tSC)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfTrafficChType_DTM(p_CellId : CellId; p_PhychId : PhysicalChId; p_TimeSlot: TN; p_ChMode:ChMode; p_ChannelType:ChannelCombination)
Group : M_RAT_HO_DTM_Specific/
Objective :
Default : SS_Def,IntersystemDef
Comments : TCH/F + FACCH/F + SACCH/F
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		[p_ChannelType = tsc_BasicPhyChCombType1]			
3		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType1(p_CellId, p_PhychId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode, tcv_AuthKcGSM)		
4		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhychId)		
5		+lt_SendSACCH(10)			
6		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhychId, 10, 0, FALSE)		Turn Meas Rpts Off
7		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
8		[TRUE]		I	the traffic channel types not supported by this test step.
9		lt_SendSACCH(p_LogicChType: G_LogicChType)			
10		+ts_SendSysInfoType5 (p_CellId, p_PhychId, p_LogicChType)			
11		+ts_SendSysInfoType6 (p_CellId, p_PhychId, p_LogicChType, c_SI6_RO_DTM(tcv_G_CellConfigInfo.bandIndicator, o_OctToBit(tcv_RAC), '111'B))			indicate DTM supported
12		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
13		+ts_SendSysInfoType5bis (p_CellId, p_PhychId, p_LogicChType)			
13		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendGSMSysInfo_DTM(p_CellId: INTEGER; p_PhyCh : PhysicalChId; b_GPRS : GSM_GPRSConfiguration; b_PBCCH :GPRSCellConfiguration; b_SI2quarter : SI2quarterConfiguration)
Group : M_RAT_HO_DTM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType1 (p_CellId, p_PhyCh)			
3		+ts_SendSysInfoType2 (p_CellId, p_PhyCh)			
4		+lt_SendOthers			SI2 Quarter giving 3G neighbour cell information
5		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
6		+ts_SendSysInfoType2bis(p_CellId, p_PhyCh, 0)			Send a SI2bis if PGSM or EGSM only
7		[TRUE] lt_SendOthers			
8		[b_GPRS = gprs]			
9		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_GPRS)			
10		+lt_SendSI13			
11		[b_SI2quarter = si2quarter]			
12		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3RO_GPRS_SI2quarter)			
13		+ts_SendSysInfoType2quarter(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quarterRO)			SI2 Quarter giving 3G neighbour cell information
14		[b_SI2quarter = nosi2quarter]			
15		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_GPRS)			
16		[b_GPRS = gsmonly]			
17		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_Spare)			
18		[b_SI2quarter = si2quarter]			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quarter('0'B))			no GPRS, only SI2quarter
20		+ts_SendSysInfoType2quarter(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quarterRO)			SI2quarter giving 3G neighbour cell information
21		[b_SI2quarter = si2ter]			
22		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2ter)			SI2ter giving neighbour cell info (SI2ter sent outside of this test step)
23		[b_SI2quarter = si2terand2quarter]			
24		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quarter('1'B))			SI2ter and SI2quarter giving neighbour cell info (SI2ter sent outside of this test step)
25		+ts_SendSysInfoType2quarter(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quarterRO)			
26		[b_SI2quarter = nosi2quarter]			
27		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_Spare)			nothing
28		lt_SendSI13 [b_PBCCH = pbcch]			
29		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			DCS and PCS have sized GPRS Allocation
30		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_DCS)			

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
31		[TRUE]			All the other bands have another
32		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_GSM)			
33		[b_PBCCH = bcch]			
34		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_DTM(tcv_RAC, tcv_NMO))			, Indicate DTM Support
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_ULTBFOnePhase_DTM(p_CellId : CellId; p_PhysicalChId : PhysicalChId; p_Timeslot : B3)
Group : M_RAT_HO_DTM_Specific/
Objective :
Default : IntersystemGPRS
Comments : Ensure tcv_GPRS_CiphAlg, tcv_RR_RA and tcv_RR_RFN are set to the correct value before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		G_CL1 ! G_CL1_ComingFN_REQ	c_G_CL1_ComingFN_REQ(p_CellId, tsc_PhyCh1, tsc_PACCH_F)		
3		G_CL1 ? G_CL1_ComingFN_CNF (tcv_StartingTime := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		
4		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId, tsc_PhyCh0, tsc_AGCH, 15, c_G_RFN_Omit, cs_P_ImmediateAssignment Hopping ('0'B, p_Timeslot, tcv_G_CellConfigInfo, tcv_RR_RA , tcv_RR_RFN, c_IARO_PUA(tcv_Gamma, o_BitstringConcat(o_BitstringConcat(tcv_StartingTime.t1_, tcv_StartingTime.t3, 5, 6), tcv_StartingTime.t2, 11, 5))))		Set Poll bit so that a PCA is received
5		G_CRLC ! G_CRLC_UL_TBF_Config_REQ	ca_ActivateTBF_UplinkDyn (p_CellId, tsc_RlcMode_Ack, 1)		Configure the Uplink TBF for Dynamic Allocation, USF 0 on timeslot 4
6		G_CRLC?	ca_Activate_UL_TBF_CNF		
7		G_CRLC_UL_TBF_Config_CNF G_RLC ? G_RLC_ControlMsg_IND (tcv_TmpPktCtrlAckPdu := G_RLC_ControlMsg_IND.msg)	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		Extract the TLLI
8		[tcv_TmpPktCtrlAckPdu.tLLI = tcv_TLLI]			if the TLLI hasn't changed, don't bother calling LLCAssignReq
9		[TRUE]			this TLLI is new

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		(tcv_oldTLLI := tcv_TLLI, tcv_Count := 0, tcv_TLLI := tcv_TmpPktCtrlAckPdu.tLLI)			
11		+ts_LLC_TLLI_Assign(p_CellId, tcv_oldTLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			Assign the value received from the MS
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_UplinkTBFOnePhase_DTM(p_CellId : CellId; p_PhysicalChId : PhysicalChId; p_Timeslot : B3)					
Group : M_RAT_HO_DTM_Specific/					
Objective :					
Default : IntersystemGPRS					
Comments : Ensure tcv_GPRS_CiphAlg is set to the correct value before entering this test step					
Description :					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst)	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , cr_ChanReqOnePhase)		Receive CHANNEL message
2		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			
3		[(tcv_RR_RA > 119) AND (tcv_RR_RA < 127)]		(P)	establishment cause = one phase packet access
4		+ts_ULTBFOnePhase_DTM(tsc_GSM_CellA, tsc_PhyCh1, p_Timeslot)			
5		[TRUE]		(F)	Wrong establishment cause
6		+ts_ULTBFOnePhase_DTM(tsc_GSM_CellA, tsc_PhyCh1, p_Timeslot)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_DownlinkTBFEstablishment_DTM(p_CellId : CellId; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration; p_Timeslot : B3)
Group : M_RAT_HO_DTM_Specific/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		START t_Dly(250)			start small timer
3		G_RLC ? G_RLC_ControlMsg_IND CANCEL t_Dly	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		wait for PCa from previous UL TBF (if there was one)
4		+lt_DLTBF			
5		?TIMEOUT t_Dly			otherwise, carry on anyway
6		+lt_DLTBF lt_DLTBF			
7		G_CRLC ! G_CRLC_DL_TBF_Config_REQ	ca_ActivateTBF_Downlink(p_CellId, p_PhysicalChId, tsc_RlcMode_Ack, tcv_USFRate)		
8		G_CRLC ? G_CRLC_DL_TBF_Config_CNF	ca_Activate_DL_TBF_CNF		
9		[(tcv_SplitPGCycle.splitPGcycleCode = '0000000'B) OR (tcv_SplitPGCycle.splitOnCCCH = '0'B)]			
10		(tcv_K := o_PagingGroupCalculate(px_IMSI_Def, tcv_G_CellConfigInfo.cCCH_CONF, 6))			use calculation in clause 6.5.2
11		+lt_SendIA			
12		[TRUE]			use calculation in 6.5.6
13		(tcv_M := (3 - BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_B LKS_RES))*64)			for CCCH/SDCCH combined

Continued on next page

Continued from previous page

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
14		(tcv_K := o_PacketPagingGroupCalculate(px_IMSI_De- f, BIT_TO_INT(tcv_G_CellConfigInfo.cCCH_ CONF), tcv_M, (3 – BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_ BLKS_RES))* BIT_TO_INT(tcv_G_CellConfigInfo.bS_PA_ MFRMS), tcv_SplitPGCycle.splitPGcycleCode))			for CCCH/ SDCCH combine d
15		+lt_SendIA lt_SendIA			
16		G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ (p_CellId , tcv_K, cs_P_ImmediateAssignment Hopping ('1'B, p_Timeslot, tcv_G_CellConfigInfo , 0, c_RFN_0, c_IARO_PDA(tcv_TLLI, tcv_Gamma)))		Send immediat e assignm ent message in slot correspo nding to appropri ate CCCH or PCCCH group
Detailed Comments :					

Default Dynamic Behaviour

Default Name : InitOtherwiseFail
Group : Init_Defaults/
Objective :
Comments : Handle any irrelevant sync/outsync indications during cell setup
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
2		RETURN			
3		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
4		RETURN			
5		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
6	DFF1	[tcv_CellIndInfo.integrityStarted]		(F)	
7		RETURN			
8		[NOT tcv_CellIndInfo.integrityStarted]			
9		RETURN			
10		?TIMEOUT			
11		[tcv_TestBody = FALSE]			
12	DFI8	CANCEL		(I)	
13		[tcv_TestBody = TRUE]			
14	DFF8	CANCEL		(F)	

Detailed Comments :

Default Dynamic Behaviour

Default Name : NAS_OtherwiseFail
Group : NAS_Defaults/
Objective : To match unexpected events and fail the test case.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			1.
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI1	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF1	CANCEL		(F)	
8		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		6.
9		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		7.
10		RETURN			
11		?TIMEOUT t_TimeoutInDefault			
12		(tcv_TimeoutInDefault := TRUE)			
13		RETURN			
14		?TIMEOUT			
15		[tcv_TestBody = FALSE]			
16	DFI8	CANCEL		(I)	
17		[tcv_TestBody = TRUE]			
18	DFF8	CANCEL		(F)	
19		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requested
20		RETURN			
21		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
22		RETURN			

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v, ?))		ROUTING AREA UPDATE REQUEST
24		RETURN			
25		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETACH REQUEST
26		RETURN			
27	DFI2	Dc?OTHERWISE [tcv_TestBody = FALSE]		(I)	2.
28		CANCEL			3.
29	DFF2	Dc?OTHERWISE [tcv_TestBody = TRUE]		(F)	5.
30		CANCEL			3.
31		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
32	DFF3	[tcv_CellIndInfo.integrityStarted]		(F)	
33		RETURN			
34		[NOT tcv_CellIndInfo.integrityStarted]			
35		RETURN			
<p>Detailed Comments :</p> <ol style="list-style-type: none"> 1. The guard timer times out, inconclusive. 2. If unexpected data is received in the preambles or postambles, a preliminary inconclusive verdict is assigned, and the test case is terminated. 3. Cancel of all running timers. 4. Depending upon the context appropriate measures may differ: the guard timer duration may be increased, operator action during a test may be speeded up, ... 5. If unexpected data is received in the test body, a preliminary failure verdict is assigned, and the test case is terminated. 6. ATTACH REQUEST with any contents received during MM_TestExecution 7. ATTACH REJECT with cause 'GPRS services not allowed' 8. DETACH REQUEST received during MM_TestExecution 9. DETACH ACCEPT 					

Default Dynamic Behaviour

Default Name : RRC_Def1
Group : RRC_Defaults/
Objective : To match unexpected events and fail the test case.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RxStatus [tcv_RLC_IgnoreStatus = TRUE]	car_StatusInd(tsc_RB_AM_7_RLC)		
2		RETURN			
3		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST - Extract Attach type requested
4		RETURN			
5		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v, ?))		ROUTING AREA UPDATE REQUEST
6		RETURN			
7		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETACH REQUEST
8		RETURN			
9	AM?RLC_AM_DATA_IND		car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
10		RETURN			
11	AM?RLC_AM_DATA_IND		car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
12		RETURN			
13	UM?RLC_UM_DATA_IND		car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
14		RETURN			
15	AM?RLC_AM_DATA_CNF		car_AM_DataCnf(?, tsc_RB2)		
16		RETURN			
17	CPHY?CPHY_Sync_IND CANCEL t_T312		ca_SyncInd (tsc_UL_DPCH1)		
18		RETURN			
19	CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312		ca_OutOfSyncInd (tsc_UL_DPCH1)		

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		RETURN			
21		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
22	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
23		RETURN			
24		[NOT tcv_CellIndInfo.integrityStarted]			
25		RETURN			
26		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		
27		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		
28		RETURN			
29		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
30		RETURN			
31		?TIMEOUT t_Guard			
32		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
33		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
34		[tcv_TestBody = FALSE]			
35	DF11	CANCEL		(I)	
36		[tcv_TestBody = TRUE]			
37	DFF1	CANCEL		(F)	
38		?TIMEOUT t_TimeoutInDefault			
39		(tcv_TimeoutInDefault := TRUE)			
40		RETURN			
41		?TIMEOUT			
42		[tcv_TestBody = FALSE]			
43	DF18	CANCEL		(I)	
44		[tcv_TestBody = TRUE]			
45	DFF8	CANCEL		(F)	
46		AM?OTHERWISE [tcv_TestBody = FALSE]			
47	DF12	CANCEL		(I)	
48		UM?OTHERWISE [tcv_TestBody = FALSE]			
49	DF13	CANCEL		(I)	
50		TM?OTHERWISE [tcv_TestBody = FALSE]			
51	DF14	CANCEL		(I)	

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
52		Dc?RRC_DataInd [tcv_TestBody = FALSE]	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextReq_MO(?))	(I)	2.
53	DFI5	CANCEL			3.
54		AM?OTHERWISE [tcv_TestBody = TRUE]			
55	DFF2	CANCEL		(F)	
56		UM?OTHERWISE [tcv_TestBody = TRUE]			
57	DFF3	CANCEL		(F)	
58		TM?OTHERWISE [tcv_TestBody = TRUE]			
59	DFF4	CANCEL		(F)	
60		Dc?RRC_DataInd [tcv_TestBody = TRUE]	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextReq_MO(?))	(F)	5.
61	DFF5	CANCEL			3.
62		CRLC?OTHERWISE			
63	DFI6	CANCEL		(I)	
64		CMAC?OTHERWISE			
65	DFI7	CANCEL		(I)	
66		CPHY?OTHERWISE			
67	DFI9	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : RRC_DefConnEst
Group : RRC_Defaults/
Objective : To match unexpected events during an RRC connection establishment i.e to match the repetition of RRC CONNECTION REQUEST.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?, tsc_RB0, cr_RRC_RrcConnReqAny)		
2		RETURN			
3		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
4		RETURN			
5		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
6		RETURN			
7		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
8		RETURN			
9		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
10		RETURN			
11		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
12		RETURN			
13		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
14		RETURN			
15		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
16	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
17		RETURN			
18		[NOT tcv_CellIndInfo.integrityStarted]			
19		RETURN			
20		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
21		RETURN			
22		?TIMEOUT t_Guard			
23		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
24		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
25		[tcv_TestBody = FALSE]			
26	DF11	CANCEL		(I)	
27		[tcv_TestBody = TRUE]			

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28	DFF1	CANCEL		(F)	
29		?TIMEOUT t_TimeoutInDefault			
30		(tcv_TimeoutInDefault := TRUE)			
31		RETURN			
32		?TIMEOUT			
33		[tcv_TestBody = FALSE]			
34	DFI8	CANCEL		(I)	
35		[tcv_TestBody = TRUE]			
36	DFF8	CANCEL		(F)	
37		AM?OTHERWISE [tcv_TestBody = FALSE]			
38	DFI2	CANCEL		(I)	
39		UM?OTHERWISE [tcv_TestBody = FALSE]			
40	DFI3	CANCEL		(I)	
41		TM?OTHERWISE [tcv_TestBody = FALSE]			
42	DFI4	CANCEL		(I)	
43		AM?OTHERWISE [tcv_TestBody = TRUE]			
44	DFF2	CANCEL		(F)	
45		UM?OTHERWISE [tcv_TestBody = TRUE]			
46	DFF3	CANCEL		(F)	
47		TM?OTHERWISE [tcv_TestBody = TRUE]			
48	DFF4	CANCEL		(F)	
49		CRLC?OTHERWISE			
50	DFI5	CANCEL		(I)	
51		CMAC?OTHERWISE			
52	DFI6	CANCEL		(I)	
53		CPHY?OTHERWISE			
54	DFI7	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : UT_OtherwiseFail
Group : UT_Defaults/
Objective : To match unexpected events and fail the test case at the UtT PCO.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut?OTHERWISE			1.
2	DF11	CANCEL		I	2.
3		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
4	DFF2	[tcv_CellIndInfo.integrityStarted]		(F)	
5		RETURN			
6		[NOT tcv_CellIndInfo.integrityStarted]			
7		RETURN			
8		?TIMEOUT			
9		[tcv_TestBody = FALSE]			
10	DF18	CANCEL		(I)	
11		[tcv_TestBody = TRUE]			
12	DFF8	CANCEL		(F)	

Detailed Comments : 1. Unexpected UT MMI events, fail.
 2. Cancel of all running timers.

Default Dynamic Behaviour

Default Name : SS_Def_Special
Group : SS_Defaults/
Objective : To match unexpected events during SS configuration/reconfiguration steps.
This default does not send any message.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI5	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF7	CANCEL		(F)	
8		?TIMEOUT t_TimeoutInDefault			
9		(tcv_TimeoutInDefault := TRUE)			
10		RETURN			
11		?TIMEOUT			
12		[tcv_TestBody = FALSE]			
13	DFI8	CANCEL		(I)	
14		[tcv_TestBody = TRUE]			
15	DFF8	CANCEL		(F)	
16		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
17		RETURN			
18		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
19		RETURN			
20		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
21		RETURN			
22		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST - Extract Attach type requested
23		RETURN			
24		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
25	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)	
26		RETURN			
27		[NOT tcv_CellIndInfo.integrityStarted]			
28		RETURN			
29		CPHY?OTHERWISE			

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
30	DFI2	CANCEL		(I)	
31		CMAC?OTHERWISE			
32	DFI3	CANCEL		(I)	
33		CRLC?OTHERWISE			
34	DFI4	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : SS_Def
Group : SS_Defaults/
Objective : To match unexpected events during SS configuration/reconfiguration steps.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI5	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF7	CANCEL		(F)	
8		?TIMEOUT t_TimeoutInDefault			
9		(tcv_TimeoutInDefault := TRUE)			
10		RETURN			
11		?TIMEOUT			
12		[tcv_TestBody = FALSE]			
13	DFI8	CANCEL		(I)	
14		[tcv_TestBody = TRUE]			
15	DFF8	CANCEL		(F)	
16		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
17		RETURN			
18		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
19		RETURN			
20		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		
21		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		
22		RETURN			
23		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
24		RETURN			

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
25		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST - Extract Attach type requested
26		RETURN			
27		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
28	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)	
29		RETURN			
30		[NOT tcv_CellIndInfo.integrityStarted]			
31		RETURN			
32		CPHY?OTHERWISE			
33	DFI2	CANCEL		(I)	
34		CMAC?OTHERWISE			
35	DFI3	CANCEL		(I)	
36		CRLC?OTHERWISE			
37	DFI4	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : IntersystemDef
Group : InterSystem/
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1	DFF1	CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail	(F)		
2		RETURN				
3		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)			
4		RETURN				
5		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)			
6		RETURN				
7		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)			
8		RETURN				
9		G_L2 ? G_L2_ACCESS_IND[tcv_TestBody = TRUE]	cabr_G_L2_ACCESS_IND (?, ?, ?, ?, ?, ?)			
10		RETURN				
11		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)			
12		RETURN				
13		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?, tsc_RB0, cr_RRC_RrcConnReqAny)			
14	DFF2	[tcv_TestBody = TRUE]		(F)		
15		RETURN				
16		[tcv_TestBody = FALSE]				
17		RETURN				
18		CPHY?CPHY_Sync_IND CANCEL t_T312				ca_SyncInd (tsc_UL_DPCH1)
19		RETURN				
20	CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)				
21	RETURN					
22	G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_Unitdata_Ind_Ch annelReq(?,?, 1 , ?, c_G_ChannelReq_Any)	(P)	Physical channel ID, RFN to be filled		
23	RETURN					
24	G_L2 ?G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_Mea sReport(?,?,?, ?, ?, c_G_MeasReport_Any)			3.	
25	RETURN					
26	G_L2 ? G_L2_Release_IND	cr_G_L2_Release_IND (?)				
27	RETURN					

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChangeAny)		
29		RETURN			
30		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, ?, tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChan ge)		
31		RETURN			
32		G_L2 ?OTHERWISE			4.
33	L_103 2	CANCEL		F	5.
34		?TIMEOUT t_Guard			
35	DFI1	CANCEL		(I)	
36		AM?OTHERWISE			
37	DFI2	CANCEL		(I)	
38		UM?OTHERWISE			
39	DFI3	CANCEL		(I)	
40		TM?OTHERWISE			
41	DFI4	CANCEL		(I)	
42		CRLC?OTHERWISE			
43	DFI5	CANCEL		(I)	
44		CMAC?OTHERWISE			
45	DFI6	CANCEL		(I)	
46		CPHY?OTHERWISE			
47	DFI7	CANCEL		(I)	
<p>Detailed Comments : 2. To throw away any irrelevant channel request. 3. To throw away any measurement report. 4. Other unexpected events, fail. 5. Cancel of all running timers.</p>					

Default Dynamic Behaviour

Default Name : IntersystemGPRS
Group : InterSystem/
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_I ND(?, ?, cr_PacketSIStatusAny)		accept any PSI status message
2		RETURN			
3	DFF1	CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail	(F)	
4		RETURN			
5		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
6		RETURN			
7		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
8		RETURN			
9		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
10		RETURN			
11		G_L2 ? G_L2_ACCESS_IND	cabr_G_L2_ACCESS_IND (?, ?, ?, ?, ?)		
12		RETURN			
13		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_I ND(?, ?, cr_PacketControlAcknowl gement)		All PCAs will be forward ed up to the TTCN. Ignore those not handled within test steps
14		RETURN			

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(? , ?, cr_PacketEnhancedMeasRpt(? , ?))		PEMRs will be sent whenever they're turned on. Ignore those not handled in the test case
16		RETURN			
17		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(? , tsc_RB2)		
18		RETURN			
19		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(? , tsc_RB0, cr_RRC_RrcConnReqAny)		
20	DFF2	[tcv_TestBody = TRUE]		(F)	
21		RETURN			
22		[tcv_TestBody = FALSE]			
23		RETURN			
24		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
25		RETURN			
26		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
27		RETURN			
28		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_Unitdata_Ind_ChannelReq(? , ? , 1 , ? , c_G_ChannelReq_Any)	(P)	Physical channel ID, RFN to be filled
29		RETURN			
30		G_L2 ?G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(? , ? , ? , ? , c_G_MeasReport_Any)		3.
31		RETURN			
32		G_L2 ? G_L2_Release_IND	cr_G_L2_Release_IND (?)		
33		RETURN			
34		G_L2 ? G_L2_DATA_IND [(tcv_SetupExpected = TRUE)] (tcv_SetupExpected := FALSE)	c_G_L2_DATA_IND (tsc_GSM_CellA , cr_G_SetupUL_MO)	(P)	SETUP expected if in 8.3.7.13 , operation mode A
35		RETURN			
36		G_L2 ?OTHERWISE			4.

Continued on next page

Continued from previous page

Default Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
37	L_103 2	CANCEL		F	5.
38		?TIMEOUT t_Guard			
39	DF11	CANCEL		(I)	
40		AM?OTHERWISE			
41	DF12	CANCEL		(I)	
42		UM?OTHERWISE			
43	DF13	CANCEL		(I)	
44		TM?OTHERWISE			
45	DF14	CANCEL		(I)	
46		CRLC?OTHERWISE			
47	DF15	CANCEL		(I)	
48		CMAC?OTHERWISE			
49	DF16	CANCEL		(I)	
50		CPHY?OTHERWISE			
51	DF17	CANCEL		(I)	
52		G_RLC?OTHERWISE			
53	DF18	CANCEL		(I)	
54		G_LLC?OTHERWISE			
55	DF19	CANCEL		(I)	
<p>Detailed Comments : 2. To throw away any irrelevant channel request. 3. To throw away any measurement report. 4. Other unexpected events, fail. 5. Cancel of all running timers.</p>					