



Standard ECMA-285

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**Protocol for Computer
Supported
Telecommunications
Applications (CSTA)
Phase III**

Standard



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Introduction

This Standard defines the ASN.1 protocol for Phase III of Services for Computer Supported Telecommunications Applications (CSTA), ECMA-269 8th edition. This Standard is part of a Suite of Standards and Technical Reports for Phase III of CSTA. All of the Standards and Technical Reports in the Suite are based on practical experience of Ecma member companies and each one represents a pragmatic and widely-based consensus.

Phase III of CSTA extends the previous Phase I and Phase II Standards in major theme directions as well as numerous details. This incorporates technology based upon the versit CTI Encyclopedia (Version 1.0), which was contributed to Ecma by versit.

Major areas of advancement include (all advancements are coloured blue):

- enhance the ability to support non-voice media interactions such as Email, Instant Messaging and Chat
- enhance the ability for CSTA applications to utilize SIP based features supported by underlying protocol layers
- enhance the ability to leverage CSTA Standards for Voice Browser applications by the addition of three new profiles
- adds interactive voice features to support speech/DTMF input and speech output processing
- adds features to support interactive voice resources such as: listener, DTMF, prompt, prompt queue
- facilitates obtaining a list of CSTA services and events that are supported via the new Get CSTA Features service
- provides a set of profiles that are especially tailored for CSTA applications that control and monitor an endpoint device (a SIP device, for example)
- adds new options for establishing an application association. One of these options can be used with the Ecma Session Control Services Standard (ECMA-354).
- adds a new device identifier format specifically for URLs
- enhances the existing device identifier format to allow special characters used in international (canonical) number representations
- enhances the encodings for several existing parameters that allow them to be used in more environments: callIDs, messageIDs, etc.
- adds media class types that define additional granularity for the existing Message type: IM, SMS, MMS
- adds a category of error codes that can be used to provide vendor specific errors
- adds a capability to omit very large message attachments in a CSTA event
- adds an explicit user attribute to a CSTA group device for modeling a user
- new features that enable the establishment and control of advanced types of conferences

- new set of location-based features that enable location-aware applications
- call control enhancements that include the ability to deflect a call to multiple destinations
- enhanced deviceID formats to indicate when a number and/or name associated with a deviceID is private
- new features that enhance the ability of applications to synchronize with a CSTA implementation.

This Ecma Standard has been adopted by the General Assembly of December 2010.

ASN.1 Tools Acknowledgement

The ASN.1 specified in this Standard has been checked for conformance with the ASN.1 Standard by the OSS Nokalva, Inc. ASN.1 Tools.

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Protocol for Computer Supported Telecommunications Applications (CSTA) Phase III

1 Scope

This Standard specifies application protocol data units (APDUs) for the services described in ECMA-269, Services, for Computer Supported Telecommunications Applications (CSTA) Phase III.

Clause 5 to clause 7 inclusive describes the concepts underlying the Remote Operations model, notation and service.

Clause 8 to clause 27 inclusive contains CSTA-specific protocol details and forms the main part of this Standard.

The protocol in this Standard operates in the context of an application association.

2 Conformance

A manufacturer may select any part of the CSTA protocol, as specified in this Standard, for implementation on a system as long as it satisfies the minimum conformance requirements as specified in clause 2 of ECMA-269.

A Protocol Implementation Conformance Statement (PICS) shall be used to specify the operations which are provided by a particular implementation. A PICS shall also specify the parameter options which are used.

2.1 Static Requirements

To conform to this Standard, a system shall support the transfer syntax (derived from the encoding rules specified in ITU-T X.690) named {joint-iso-ccitt asn1(1) basic-encoding(1)}; for the purpose of generating and interpreting CSTA protocol information as defined by the abstract syntax "CSTA-ASN.1-Object-Descriptor" for the operations supported.

2.2 Dynamic Requirements

To conform to this Standard, a system shall:

- a. follow the procedures as specified in this Standard, and ECMA-269, relevant to each CSTA operation that the system claims to implement; and
- b. satisfy the definitions, as specified in ECMA-269, relevant to each CSTA service that the system claims to implement.

2.3 PICS Requirement

To conform to this Standard, the following shall be stated by the implementer when defining a PICS corresponding to an application or implementation:

- a. which CSTA operations, as defined in ECMA-269, are supported by the system for the particular implementation; and
- b. which optional parameters are supported by the PDUs belonging to the supported operations.

A PICS proforma is given in Annex A of this Standard.

3 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ECMA-269, *Services for Computer Supported Telecommunications Applications (CSTA), Phase III, 8th Edition* (June 2009)

ECMA-323, *XML Protocol for Computer Supported Telecommunications Applications (CSTA) Phase III, 5th Edition* (June 2009)

ECMA TR/72, *Glossary of Definitions and Terminology for Computer Supported Telecommunications Applications (CSTA) Phase III, 3rd Edition* (June 2000)

ISO/IEC 8649:1996, *Information technology - Open Systems Interconnection – Service definition for the Association Control Service Element (this corresponds to ITU-T Rec. X.217 1995)*

ISO/IEC 8650-1:1996, *Information technology - Open Systems Interconnection - Connection-oriented protocol for the Association Control Service Element: Protocol specification (this corresponds to ITU-T Rec. X.227 4/95)*

ISO/IEC 9545:1994, *Information technology - Open Systems Interconnection Application Layer structure*

ISO/IEC 13712-1:1995, *Information technology - Remote Operations: Concepts, model, and notation (this corresponds to ITU-T Rec. X.880, 1994)*

ISO/IEC 13712-2:1994, *Information technology - Remote Operations: OSI realisations - Remote Operations Service Element (ROSE) service definition (this corresponds to ITU-T Rec. X.881, 1994)*

ISO/IEC 13712-3:1994, *Information technology - Remote Operations: OSI realisations - Remote Operations Service Element (ROSE) protocol specification (this corresponds to ITU-T Rec.X.882, 1994)*

ITU-T X.680, *Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation*

ITU-T X.690, *Information technology - ASN.1 encoding rules - Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)*

ITU-T X.694, *ASN.1 encoding rules: Mapping W3C XML schema definitions into ASN.1*

RFC 4119, *A Presence-based GEOPRIV Location Object Format*

RFC 3966, *The tel URI for Telephone Numbers*

ISO 3166-1, *Country Codes*

4 Definitions and Abbreviations

CSTA-specific terminology is defined in ECMA TR/72. For the purposes of this Standard, the following additional definitions, defined in other standards, shall apply:

- Remote Operations (as per ISO/IEC 13712-1)
- Application Association (as per ISO/IEC 8649)
- Application Context (as per ISO/IEC 8649)

5 CSTA Service Definition Model

5.1 CSTA Application Layer Structure

The CSTA Application Layer structure conforms to the model described in ISO/IEC 9545.

5.2 Remote Operations

The services of CSTA are modeled as Remote Operations as described in ISO/IEC 13712-1. Typically, one entity requests that a particular operation be performed; the other entity attempts to perform the operation and responds to the requestor.

Consequently the operation of the protocol is an elementary request/reply interaction, supported within the OSI Application Layer, and carried out within the context of an application association.

For some of the CSTA services, the entity to which the request is sent generates a reply which can indicate success or failure.

For these services, CSTA shall adopt the operations Class 2, defined in ISO/IEC 13712-2 as:

- Asynchronous, reporting success or failure (result or error).

For some of the CSTA services, the entity to which the request is sent generates a reply which can only indicate failure.

For these services, CSTA shall adopt the operations Class 3, defined in ISO/IEC 13712-2 as:

- Asynchronous, reporting failure (error) only, if any.

For some of the CSTA services, particularly the ongoing reporting of events, no reply is generated.

For these services, CSTA shall adopt the operations Class 5, defined in ISO/IEC 13712-2 as:

- Asynchronous, outcome not reported.

The protocol description for the particular service defines the relevant class of the operation used for that service.

CSTA shall correlate the single response, denoting success or failure, with the originating request by using the mechanisms within the ROSE protocol.

5.3 The CSTA Service Response

CSTA employs a generic response mechanism which is, in principle, decoupled from the specifics of the switching activity.

The following points describe the operation of the CSTA service response:

- a. Specific services may have an unconfirmed mode where responses to correct requests are not returned.
- b. The server shall check the correctness of the request (e.g. syntactical checks) before issuing the response.
Incorrect requests shall result in an error response, even in the unconfirmed mode.

5.4 Cross Referencing of Event Reports

A computer application process may need to cross reference a CSTAEVENTREPORT to one of the following:

- a. a CSTA Object ID (Call ID or Device ID),
- b. an earlier Monitor request; or
- c. one of many Monitor requests (pertaining to the same CSTA Object).

For the above scenarios the necessary cross referencing function may be fulfilled by use of the parameter "MonitorCrossRefID". The content of MonitorCrossRefID depends upon the context and it may be one of the following: Call ID, Device ID or another independently switch managed static identifier.

The independent identifier may have a unique correlation to either: one device, one call, or one monitor request.

The switching system limit on the number of monitor requests on one CSTA Object (Call or Device) is an implementation option. This Standard does not stipulate how many monitor requests on one object are to be supported by the switch. If using Static Device or Call identifiers the limit can only be one.

5.5 Handling of Private Data

If an entity receives the parameter CSTAPrivateData, and it can not recognize the information contained, the parameter shall be discarded, and the rest of the message shall be processed.

6 Interconnection service boundary

The protocol in this Standard is an OSI Application Layer protocol and uses the Remote Operations protocol defined in ISO/IEC 13712-3. The Remote Operations protocol assumes certain services are provided by the underlying layers, and these services are also assumed by the protocol for CSTA.

7 Security

This protocol also provides a mechanism for secure transmission of CSTA PDUs as defined in this Standard.

8 Association Management

The protocol in this Standard operates in the context of an application association. This application association can be either:

- an implicit association achieved via off-line agreement; or
- a dynamically negotiated association realized through the use of ACSE.

8.1 Implicit association

An a-priori agreement exists between switching and computing functions: the application context is implicit, dynamic negotiation is not possible.

8.2 Dynamic association management using ACSE

ACSE requires the use of an application context Name (as defined by ISO 8649). This is an object id that uniquely identifies CSTA independently of the different versions of the protocol.

The CSTA protocol version information is carried within the User Information field of the A-ASSOCIATE request and response PDUs.

An application context is established (using ACSE) as follows:

- the system generating the A-ASSOCIATE request includes the CSTA application context name and a list of all protocol versions that it is prepared to offer in the User Information field;
- on receipt of the A-ASSOCIATE request, the receiving system selects the protocol version to be used by identifying the highest version that is common to both systems;

- the protocol version selected is conveyed to the requestor in the User Information field of the A-ASSOCIATE response.

In addition to negotiating the protocol version, it is necessary for the requesting and responding systems to specify the CSTA services that they support. As with the protocol version information, this is also achieved by carrying additional information in the User Information field of the A-ASSOCIATE request and response PDUs.

The application association requestor shall:

- list the services required from the serving application;
- list the services it can supply.

The responder shall include similar information for the responding application. At this point the association requestor will either accept or reject the association.

8.2.1 Encoding of application context name

```
CSTA-application-context-name
  { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
    standard( 0 ) csta( 218 ) }
-- Common to all CSTA protocol versions
```

8.2.2 Encoding of application context information

```
CSTA-application-context-information-csta3
  { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
    standard( 0 ) csta3( 285 ) application-context-information( 200 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
CSTAFunctionality FROM CSTA-application-context-information
  { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
    standard( 0 ) csta2( 218 ) application-context-information( 200 ) };

ACSEUserInformationForCSTA ::= CHOICE
{   oldDefinition                               OldACSEUserInformationForCSTA,
    newDefinition      [0] IMPLICIT           NewACSEUserInformationForCSTA }

OldACSEUserInformationForCSTA ::= SEQUENCE
{   cSTAVersion                                CSTAVersion,
    cSTAFuctionsRequiredByApplication          CSTAFunctionality,
    cSTAFuctionsThatCanBeSupplied             CSTAFunctionality }

NewACSEUserInformationForCSTA ::= SEQUENCE
{   cSTAVersion                                CSTAVersion,
  --
  -- Note that the following two parameters are defined in ECMA-218 (CSTA Phase II).
  -- They are defined in the context of CSTA Phase II Services and Events for
  -- backward compatibility considerations.
  -- For CSTA Phase III (and later), implementations should use CSTA Capability Exchange
  -- Services to determine the Services and Events supported by a switching function.
  --
  cSTAFuctionsRequiredByApplication [0] IMPLICIT CSTAFunctionality      OPTIONAL,
  cSTAFuctionsThatCanBeSupplied     [1] IMPLICIT CSTAFunctionality      OPTIONAL,
  cSTAPrivateDataVersionList       [2] IMPLICIT CSTAPrivateDataVersionList OPTIONAL }
```

```
CSTAPrivateDataVersionList ::= SEQUENCE OF INTEGER

CSTAVersion ::= BIT STRING
{
    versionOne      ( 0), -- CSTA protocol version defined in ECMA-180
    versionTwo      ( 1), -- CSTA protocol version defined in ECMA-218
    versionThree     ( 2), -- CSTA protocol version defined in ECMA-285, 1st Edition
    versionFour      ( 3), -- CSTA protocol version defined in ISO/IEC 18052
    versionFive      ( 4), -- CSTA protocol version defined in ECMA-285, 2nd Edition
    versionSix       ( 5), -- CSTA protocol version defined in ECMA-323
    versionSeven     ( 6), -- CSTA protocol version defined in ECMA-323, 2nd Edition
    versionEight     ( 7), -- CSTA protocol version defined in ECMA-323, 3rd Edition
    versionNine      ( 8), -- CSTA protocol version defined in ECMA-323, 4th Edition
    -- Tag option
    versionTen       ( 9), -- CSTA protocol version defined in ECMA-323, 4th Edition
    -- short Tag option
    versionEleven    (10), -- CSTA protocol version defined in ECMA-323, 4th Edition
    -- dynamic transformation option
    versionTwelve    (11), -- CSTA protocol version defined in ECMA-323, 5th Edition
    -- Tag option
    versionThirteen   (12), -- CSTA protocol version defined in ECMA-323, 5th Edition
    -- short Tag option
    versionFourteen   (13), -- CSTA protocol version defined in ECMA-323, 5th Edition
    -- dynamic transformation option
    versionFifteen    (14), -- CSTA protocol version defined in ECMA-285, 3rd Edition
    versionSixteen    (15), -- Reserved for future use
    versionSeventeen   (16), -- Reserved for future use
    versionEighteen    (17), -- Reserved for future use
    versionNineteen    (18), -- Reserved for future use
    versionTwenty      (19), -- Reserved for future use
    versionTwentyone   (20), -- Reserved for future use
    versionTwentytwo   (21), -- Reserved for future use
    versionTwentythree (22), -- Reserved for future use
    versionTwentyfour  (23) } -- Reserved for future use

CallControlServices ::= BIT STRING
{
    acceptCall           ( 0),
    alternateCall         ( 1),
    answerCall            ( 2),
    callBack              ( 3),
    callBackMessage        ( 4),
    campOnCall            ( 5),
    clearCall              ( 6),
    clearConnection         ( 7),
    conferenceCall          ( 8),
    consultationCall        ( 9),
    deflectCall             (10),
    dialDigits              (11),
    directedPickupCall       (12),
    groupPickupCall          (13),
    holdCall                (14),
    intrudeCall              (15),
    joinCall                  (16),
    makeCall                  (17),
    makeConnection            (25),
    makePredictiveCall        (18),
    parkCall                  (19),
    reconnectCall              (20),
    retrieveCall                (21),
    sendMessage                (26),
    singleStepConference       (22),
```

```

singleStepTransfer          (23),
transferCall               (24) }

CallAssociatedServices ::= BIT STRING
{
    associateData          ( 0),
    cancelTelephonyTones   ( 1),
    changeConnectionInformation ( 5),
    generateDigits          ( 2),
    generateTelephonyTones  ( 3),
    sendUserInformation     ( 4) }

MediaAttachmentServices ::= BIT STRING
{
    attachMediaService      ( 0),
    detachMediaService      ( 1) }

RouteingServices ::= BIT STRING
{
    routeRegister           ( 0),
    routeRegisterCancel     ( 1),
    routeRegisterAbort      ( 2),
    reroute                 ( 3),
    routeEnd                ( 4),
    routeReject              ( 5),
    routeRequest             ( 6),
    routeSelect              ( 7),
    routeUsed                ( 8) }

VoiceUnitServices ::= BIT STRING
{
    activate                (12),
    clear                   (13),
    concatenateMessage       ( 0),
    deactivate              (14),
    deleteMessage            ( 1),
    playMessage              ( 2),
    queryVoiceAttribute      ( 3),
    recordMessage            ( 4),
    reposition                ( 5),
    resume                  ( 6),
    review                  ( 7),
    setVoiceAttribute         ( 8),
    stop                     ( 9),
    suspend                  (10),
    synthesizeMessage        (11) }

LocationServices ::= BIT STRING
{
    getLocationInformation   ( 0),
    setLocationInformation   ( 1),
    locationTrackkingSessionResumed ( 2),
    locationTrackkingSessionSuspended ( 3),
    resumeLocationTrackingSession ( 4),
    locationInformationReport ( 5),
    startLocationTrackingSession ( 6),
    stopLocationTrackingSession ( 7),
    suspendLocationTrackingCapabilities ( 8),
    locationSessionInfo       ( 9) }

CallControlEvents ::= BIT STRING
{
    bridged                 (15),
    callCleared              ( 0),
    conferenced              ( 1),
    connectionCleared         ( 2),
}

```

```
delivered          ( 3),
digitsDialed      (14),
diverted          ( 4),
established       ( 5),
failed            ( 6),
held               ( 7),
networkCapabilitiesChanged (16),
networkReached    ( 8),
offered           (17),
originated        ( 9),
queued             (10),
retrieved          (11),
serviceInitiated   (12),
transferred        (13) }

CallAssociatedEvents ::= BIT STRING
{
    callInformation          ( 0),
    charging                 ( 1),
    dTMFDigitsDetected      ( 2),
    telephonyTonesDetected   ( 3),
    serviceCompletionFailure ( 4) }

MediaAttachmentEvents ::= BIT STRING
{
    mediaAttached            ( 0),
    mediaDetached            ( 1) }

PhysicalDeviceFeatureEvents ::= BIT STRING
{
    buttonInformation         ( 0),
    buttonPress                ( 1),
    displayUpdated              ( 2),
    hookswitch                  ( 3),
    lampMode                     ( 4),
    messageWaiting              ( 5),
    microphoneGain              ( 6),
    microphoneMute              ( 7),
    ringerStatus                  ( 8),
    speakerMute                  ( 9),
    speakerVolume                  (10) }

LogicalDeviceFeatureEvents ::= BIT STRING
{
    agentBusy                  ( 0),
    agentLoggedOn                ( 1),
    agentLoggedOff                ( 2),
    agentNotReady                  ( 3),
    agentReady                     ( 4),
    agentWorkingAfterCall        ( 5),
    autoAnswer                      ( 6),
    autoWorkMode                    ( 7),
    callBack                      ( 8),
    callBackMessage                ( 9),
    callerIDStatus                  (10),
    doNotDisturb                    (11),
    forwarding                      (12),
    routeingMode                    (13) }

DeviceMaintenanceEvents ::= BIT STRING
{
    backInService                ( 0),
    deviceCapabilityChanged      ( 2),
    outOfService                  ( 1),
    partiallyInService            ( 3) }
```

```
VoiceUnitEvents ::= BIT STRING
{
    bookmarkReached          ( 7),
    completed                ( 8),
    dtmfDetected             ( 9),
    emptied                  (10),
    interruptionDetected    (11),
    notRecognized            (12),
    play                      ( 1),
    recognized                (13),
    record                   ( 3),
    review                   ( 5),
    started                  (14),
    silenceTimeoutExpired    (15),
    speechDetected           (16),
    stop                     ( 0),
    suspendPlay               ( 2),
    suspendRecord              ( 4),
    voiceAttributesChange     ( 6),
    voiceErrorOccured         (17) }
```

```
VendorSpecEvents ::= BIT STRING
{
    privateEvent              ( 0) }
```

```
END -- of CSTA-application-context-information-csta3
```

9 CSTA parameter types

The major parameters have been assigned distinct application tags to facilitate parsing. The data is defined in logical groups in ascending order of application tag. Application tags used are:

- APPLICATION 1 - 8: Device identifiers
- APPLICATION 11 - 14: Connection identifiers and local connection states
- APPLICATION 21 - 24 : Status reporting
- APPLICATION 29 - 30 : CSTACCommonArguments

9.1 Switching function objects

```
CSTA-switching-function-objects
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) switching-function-objects( 122) }

DEFINITIONS ::=

BEGIN

EXPORTS
CSTAObject;

IMPORTS
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-connection-identifiers( 124) };

CSTAObject ::= CHOICE
{   deviceObject DeviceID,
    callObject   ConnectionID }

END -- of CSTA-switching-function-objects
```

9.2 Device Identifiers

```

CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }

DEFINITIONS ::=

BEGIN

EXPORTS
DeviceID, NumberDigits, CallingDeviceID, CalledDeviceID,
SubjectDeviceID, RedirectionDeviceID, AssociatedCallingDeviceID,
AssociatedCalledDeviceID, NetworkCallingDeviceID, NetworkCalledDeviceID;

IMPORTS
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ExtendedDeviceID ::= [APPLICATION 9] CHOICE
{ deviceIdentifier          DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  restricted                [ 8] IMPLICIT    NULL  }

CallingDeviceID ::= [APPLICATION 1] CHOICE
{ deviceIdentifier          DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  restricted                [ 8] IMPLICIT    NULL  }

CallingDevice ::= CallingDeviceID

CalledDeviceID ::= [APPLICATION 2] CHOICE
{ deviceIdentifier          DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  restricted                [ 8] IMPLICIT    NULL  }

CalledDevice ::= CalledDeviceID

SubjectDeviceID ::= [APPLICATION 3] CHOICE
{ deviceIdentifier          DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  restricted                [ 8] IMPLICIT    NULL  }

RedirectionDeviceID ::= [APPLICATION 4] CHOICE
{ numberdialed              DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  notRequired               [ 8] IMPLICIT    NULL,
  notSpecified              [ 9] IMPLICIT    NULL,
  restricted                [10] IMPLICIT    NULL  }

LastRedirectionDevice ::= RedirectionDeviceID

AssociatedCallingDeviceID ::= [APPLICATION 5] CHOICE
{ deviceIdentifier          DeviceID,
  notKnown                  [ 7] IMPLICIT    NULL,
  restricted                [ 8] IMPLICIT    NULL  }

AssociatedCallingDevice ::= AssociatedCallingDeviceID

```

```

AssociatedCalledDeviceID ::= [APPLICATION 6] CHOICE
{   deviceIdentifier           DeviceID,
    notKnown                  [ 7] IMPLICIT  NULL,
    restricted                [ 8] IMPLICIT  NULL }

AssociatedCalledDevice ::= AssociatedCalledDeviceID

NetworkCallingDeviceID ::= [APPLICATION 7] CHOICE
{   deviceIdentifier           DeviceID,
    notKnown                  [ 7] IMPLICIT  NULL,
    restricted                [ 8] IMPLICIT  NULL }

NetworkCallingDevice ::= NetworkCallingDeviceID

NetworkCalledDeviceID ::= [APPLICATION 8] CHOICE
{   deviceIdentifier           DeviceID,
    notKnown                  [ 7] IMPLICIT  NULL,
    restricted                [ 8] IMPLICIT  NULL }

NetworkCalledDevice ::= NetworkCalledDeviceID

DeviceID ::= SEQUENCE
{   deviceIdentifier CHOICE
    {   dialingNumber          [ 0] IMPLICIT  NumberDigits,
        deviceNumber           [ 1] IMPLICIT  DeviceNumber,
        implicitPublic         [ 2] IMPLICIT  NumberDigits,
        explicitPublic          [ 3] PublicTON,
        implicitPrivate         [ 4] IMPLICIT  NumberDigits,
        explicitPrivate          [ 5] PrivateTON,
        other                   [ 6] IMPLICIT  OtherPlan },
    privateNumber             [ 0] NumberDigits      OPTIONAL,
    privateName               [ 1] IA5String        OPTIONAL,
    mediaCallCharacteristics MediaCallCharacteristics OPTIONAL }

PublicTON ::= CHOICE
{   unknown                 [ 0] IMPLICIT  IA5String,
    international            [ 1] IMPLICIT  IA5String,
    national                 [ 2] IMPLICIT  IA5String,
    networkspecific          [ 3] IMPLICIT  IA5String,
    subscriber               [ 4] IMPLICIT  IA5String,
    abbreviated              [ 5] IMPLICIT  IA5String }

PrivateTON ::= CHOICE
{   unknown                 [ 0] IMPLICIT  IA5String,
    level3RegionalNumber    [ 1] IMPLICIT  IA5String,
    level2RegionalNumber    [ 2] IMPLICIT  IA5String,
    level1RegionalNumber    [ 3] IMPLICIT  IA5String,
    pTNSpecificNumber       [ 4] IMPLICIT  IA5String,
    localNumber              [ 5] IMPLICIT  IA5String,
    abbreviated              [ 6] IMPLICIT  IA5String }

OtherPlan ::= OCTET STRING -- Allows future expansion to cover other numbering
                           -- plans

NumberDigits ::= IA5String

DeviceNumber ::= INTEGER

END -- of CSTA-device-identifier

```

9.3 Call and connection identifiers

```

CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

DEFINITIONS ::=

BEGIN

EXPORTS
CallID, ConnectionID;

IMPORTS
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) };

ConnectionID ::= [APPLICATION 11] CHOICE
{   callID          [0] IMPLICIT      CallID,
    deviceID        [1]             LocalDeviceID,
    both SEQUENCE
    {       callID      [0] IMPLICIT      CallID,
      deviceID      [1]             LocalDeviceID } }

CallID ::= OCTET STRING

LocalDeviceID ::= CHOICE
{   staticID        DeviceID,
  dynamicID        [3] IMPLICIT      OCTET STRING }

END -- of CSTA-call-connection-identifiers

```

9.4 Connection states

```

CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }

DEFINITIONS ::=

BEGIN

EXPORTS
ConnectionList, LocalConnectionState;

IMPORTS
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ConnectionList ::= SEQUENCE OF SEQUENCE
{ newConnection      [0] ConnectionID           OPTIONAL,
  oldConnection       [1] ConnectionID           OPTIONAL,
  endpoint           [2] CHOICE
    { deviceID        DeviceID,
      notKnown         NULL,
      restricted       [1] NULL }                 OPTIONAL,
  associatedNID       [3] CHOICE
    { deviceID        DeviceID,
      notKnown         NULL }                 OPTIONAL,
  resultingConnectionInfo ConnectionInformation OPTIONAL }

LocalConnectionState ::= [APPLICATION 14] IMPLICIT ENUMERATED
{ null      (0),
  initiated (1),
  alerting   (2),
  connected  (3),
  hold      (4),
  queued     (5),
  fail      (6) }

END -- CSTA-connection-states

```

9.5 Status reporting

```

CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }

DEFINITIONS ::=

BEGIN

EXPORTS
MonitorObject, MonitorCrossRefID, MonitorFilter, MonitorType,
MonitorMediaClass, SnapshotCallData, SnapshotDeviceData, RegistrationTypeList, RegistrationList,
MonitorList, LocationSessionInfoList;

IMPORTS
CallControlEvents, CallAssociatedEvents, MediaAttachmentEvents,
PhysicalDeviceFeatureEvents, LogicalDeviceFeatureEvents,
DeviceMaintenanceEvents, VoiceUnitEvents, VendorSpecEvents
FROM CSTA-application-context-information-csta3
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) application-context-information( 200) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control(130) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
ConnectionInformation, MediaCallCharacteristics, MediaServiceType,
MediaServiceInstanceID, MediaStreamID FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

MonitorObject ::= CSTAObject

MonitorCrossRefID ::= [APPLICATION 21] IMPLICIT OCTET STRING

MonitorFilter ::= SEQUENCE-- default is no filter (i.e. all events)
{ callControl          [0] IMPLICIT CallControlEvents      DEFAULT { },
  callAssociated       [6] IMPLICIT CallAssociatedEvents  DEFAULT { },
  mediaAttachment      [7] IMPLICIT MediaAttachmentEvents DEFAULT { },
  physicalDeviceFeature [8] IMPLICIT PhysicalDeviceFeatureEvents DEFAULT { },
  logicalDeviceFeature [9] IMPLICIT LogicalDeviceFeatureEvents DEFAULT { },
  maintenance          [3] IMPLICIT DeviceMaintenanceEvents DEFAULT { },
  voiceUnit            [5] IMPLICIT VoiceUnitEvents      DEFAULT { },

```

```

private [ 4 ] IMPLICIT VendorSpecEvents DEFAULT { } }

-- setting the relevant bit requests the filter for the appropriate events

MonitorType ::= ENUMERATED
{
    call (0),
    device (1) }

MonitorList ::= SEQUENCE OF MonitorListEntry

MonitorListEntry ::= SEQUENCE
{
    monitorCrossRefID MonitorCrossRefID,
    monitorObject DeviceID }

RegistrationTypeList ::= SEQUENCE OF RegistrationType

RegistrationType ::= ENUMERATED
{
    escapeRegister (1),
    ioRegister (2),
    routeRegister (3),
    sysStatRegister (4) }

RegistrationList ::= SEQUENCE OF RegistrationListEntry

RegistrationListEntry ::= SEQUENCE
{
    registrationType RegistrationType,
    registrationID IA5String,
    registrationObject DeviceID OPTIONAL }

LocationSessionInfoList ::= SEQUENCE OF LocationSessionListEntry

LocationSessionListEntry ::= SEQUENCE
{
    locCrossRefID LocCrossRefID,
    locDevice DeviceID }

MonitorMediaClass ::= BIT STRING
{
    voice ( 0 ),
    data ( 1 ),
    image ( 2 ),
    audio ( 4 ),
    other ( 3 ),
    notKnown ( 5 ),
    chat ( 6 ),
    email ( 7 ),
    message ( 8 ),
    im ( 9 ),
    sms ( 10 ),
    mms ( 11 ) }

SnapshotDeviceData ::= [APPLICATION 22] IMPLICIT SEQUENCE OF SnapshotDeviceResponseInfo

SnapshotDeviceResponseInfo ::= SEQUENCE
{
    connectionIdentifier ConnectionID,
    endpointDevice [ 3 ] IMPLICIT SubjectDeviceID OPTIONAL,
    localCallState CallState,
    servicesPermitted [ 0 ] IMPLICIT ServicesPermitted OPTIONAL,
    mediaServiceInfoList [ 1 ] IMPLICIT DeviceMediaInfoList OPTIONAL,
    mediaCallCharacteristics [ 2 ] IMPLICIT MediaCallCharacteristics OPTIONAL }

DeviceMediaInfoList ::= SEQUENCE OF SEQUENCE

```

```

{   mediaStreamID           MediaStreamID           OPTIONAL,
    connectionInformation     ConnectionInformation   OPTIONAL }

SnapshotCallData ::= [APPLICATION 23] IMPLICIT SEQUENCE OF SnapshotCallResponseInfo

SnapshotCallResponseInfo ::= SEQUENCE
{   deviceOnCall             SubjectDeviceID,
    callIdentifier            ConnectionID          OPTIONAL,
    localConnectionState      LocalConnectionState   OPTIONAL,
    servicesPermitted         [0] IMPLICIT ServicesPermitted   OPTIONAL,
    mediaServiceInfoList       [1] IMPLICIT CallMediaInfoList  OPTIONAL,
    locationInfo              [2] IMPLICIT LocationInfoList  OPTIONAL }

CallMediaInfoList ::= SEQUENCE OF SEQUENCE
{   mediaServiceType          [0] IMPLICIT MediaServiceType,
    mediaServiceVersion        [1] IMPLICIT INTEGER        OPTIONAL,
    mediaServiceInstance        [2] IMPLICIT MediaServiceInstanceId OPTIONAL,
    mediaStreamID              [3] IMPLICIT MediaStreamID   OPTIONAL,
    connectionInformation       [4] IMPLICIT ConnectionInformation OPTIONAL }

CallState ::= CHOICE
{   compoundCallState         [0] IMPLICIT CompoundCallState,
    simpleCallState            [1] IMPLICIT SimpleCallState,
    unknown                    [2] IMPLICIT NULL }

CompoundCallState ::= SEQUENCE OF LocalConnectionState

SimpleCallState ::= ENUMERATED
{   callNull                  ( 0),   -- '00'H      - null-null
    callPending                ( 1),   -- '01'H      - null-initiate
    callOriginated              ( 3),   -- '03'H      - null-connect
    callDelivered                ( 35),  -- '23'H     - alerting-connect
    callDeliveredHeld            ( 36),  -- '24'H     - alerting-held
    callReceived                ( 50),  -- '32'H     - connect-alerting
    callEstablished              ( 51),  -- '33'H     - connect-connect
    callEstablishedHeld          ( 52),  -- '34'H     - connected-held
    callReceivedOnHold           ( 66),  -- '42'H     - held-alerting
    callEstablishedOnHold        ( 67),  -- '43'H     - held-connect
    callQueued                  ( 83),  -- '53'H     - queued-connect
    callQueuedHeld               ( 84),  -- '54'H     - queued-held
    callFailed                  ( 99),  -- '63'H     - failed-connect
    callFailedHeld                (100),  -- '64'H     - failed-held
    callBlocked                 ( 96) } -- '60'H     - failed-null }

-- This represents the main call states in a simplified encoding. The semantics
-- are identical to the sequence of connection states but they are represented by
-- an item from an enumerated list.

END -- of CSTA-status-reporting

```

9.6 Device and feature types and other parameters

```

CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }

DEFINITIONS ::=

BEGIN

EXPORTS
AccountInfo, AgentID, AgentPassword, AgentState, AuthCode, CallOrigination, CorrelatorData,
DataPathType, DisplayAttributeList, ForwardList, IOCrossRefID, IOResisterReqID,
MessageID, ParticipationType, PendingAgentState, RetryValue, RouteRegisterReqID,
RouteingCrossRefID, SelectValue, SysStatRegisterID, SystemStatus, TerminatingConditions,
ForwardingType, ForwardDefault, AttributeInfo,
EncodingAlgorithm, ControlData, UserData, TelephonyTone,
DeviceHistory, SubjectOfCall, LanguagePreferences, MessageInfo, LocReason, LocCrossRefID, ResourceID;

IMPORTS
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) event-causes( 121) };

AccountInfo ::= OCTET STRING

AgentID ::= OCTET STRING

AgentPassword ::= OCTET STRING

AgentState ::= ENUMERATED
{
  agentNotReady      (0),
  agentNull          (1),
  agentReady         (2),
  agentBusy          (3),
  agentWorkingAfterCall (4) }

AuthCode ::= OCTET STRING

CorrelatorData ::= OCTET STRING

IOCrossRefID ::= CHOICE
{
  switchProvided     [0] OCTET STRING ,
  computerProvided   [1] OCTET STRING }

IOResisterReqID ::= OCTET STRING

MessageID ::= OCTET STRING

ParticipationType ::= ENUMERATED
{
  silent              (0),
  active              (1),
  none                (2) }

```

```

RouteRegisterReqID ::= OCTET STRING

RouteingCrossRefID ::= [APPLICATION 24] IMPLICIT OCTET STRING

SelectValue ::= ENUMERATED
{
    normal          (0),
    leastCost       (1),
    emergency      (2),
    aCD             (3),
    userDefined     (4) }

RetryValue ::= CHOICE -- used in RouteSelect Request service
{
    noListAvailable [0] IMPLICIT BOOLEAN,
    noCountAvailable [1] IMPLICIT BOOLEAN,
    retryCount      [2] IMPLICIT INTEGER }

SysStatRegisterID ::= OCTET STRING

SystemStatus ::= ENUMERATED
{
    disabled        (4),
    partiallyDisabled (8),
    enabled         (1),
    initializing    (0),
    messagesLost    (3),
    normal          (2),
    overloadImminent (5),
    overloadReached (6),
    overloadRelieved (7) }

CallOrigination ::= BIT STRING
{
    internal        (0),
    external         (1) }

ForwardList ::= SEQUENCE OF SEQUENCE
{
    forwardingType   ForwardingType           OPTIONAL,
    forwardStatus    BOOLEAN,
    forwardDN        DeviceID                OPTIONAL,
    forwardDefault   ForwardDefault          OPTIONAL,
    ringDuration     [0] IMPLICIT INTEGER    OPTIONAL,
    ringCount        INTEGER (1..100)          OPTIONAL }

ForwardingType ::= ENUMERATED
{
    forwardImmediate ( 0),
    forwardBusy      ( 1),
    forwardNoAns    ( 2),
    forwardDND      ( 9),
    forwardBusyInt  ( 3),
    forwardBusyExt  ( 4),
    forwardNoAnsInt ( 5),
    forwardNoAnsExt ( 6),
    forwardImmInt   ( 7),
    forwardImmExt   ( 8),
    forwardDNDInt   (10),
    forwardDNDExt  (11) }

ForwardDefault ::= ENUMERATED
{
    forwardingTypeAndForwardDN ( 0),
    forwardingType      ( 1),
    forwardDN           ( 2) }

```

```

PendingAgentState ::= ENUMERATED
{   agentNotReady          ( 0),
    agentNull              ( 1),
    agentReady              ( 2),
    agentWorkingAfterCall  ( 3) }

DataPathType ::= ENUMERATED
{   text                  ( 0),
    voice                 ( 1) }

DisplayAttributeList ::= SEQUENCE
{   physicalBaseRowNumber [0] IMPLICIT INTEGER OPTIONAL,
    physicalBaseColumnNumber [1] IMPLICIT INTEGER OPTIONAL,
    offset                 [2] IMPLICIT INTEGER OPTIONAL }

TerminatingConditions ::= BIT STRING
{   durationExceeded      ( 0),
    dTMFDigitDetected     ( 1),
    endOfMessageDetected   ( 2),
    speechDetected         ( 3) }

AttributeInfo ::= CHOICE
{   encodingAlgorithm      [0] IMPLICIT EncodingAlgorithm,
    samplingRate            [1] IMPLICIT INTEGER,
    duration                [2] IMPLICIT INTEGER,
    filename                [3] IMPLICIT IA5String,
    currentPosition          [4] IMPLICIT INTEGER,
    currentSpeed             [5] IMPLICIT INTEGER,
    currentVolume            [6] IMPLICIT INTEGER (0 .. 100),
    currentGain              [7] IMPLICIT INTEGER (0 .. 100),
    currentState             [8] IMPLICIT CurrentState }

EncodingAlgorithm ::= ENUMERATED
{   aDPCM6K                ( 0),
    aDPCM8K                ( 1),
    muLawPCM6K              ( 2),
    aLawPCM6K               ( 3) }

LocReason ::= ENUMERATED
{   connectionToDeviceOrNetworkRestored ( 0),
    performanceConditionRelieved       ( 1) }

LocCrossRefID ::= IA5String

CurrentState ::= ENUMERATED
{   dtmfDetected           ( 6),
    formed                  ( 7),
    play                    ( 1),
    playing                 ( 8),
    ready                   ( 9),
    record                  ( 2),
    review                  ( 5),
    speechDetected          (10),
    started                 (11),
    stop                    ( 0),
    suspendPlay             ( 3),
    suspendRecord            ( 4) }

ResourceID ::= IA5String

```

```

MessageInfo ::= SEQUENCE
{   contents                  IA5String,
    contentTypeAndSubtype     IA5String
    contentsLength            INTEGER
                                OPTIONAL,
                                OPTIONAL }

DeviceHistory ::= SEQUENCE
{   oldDeviceID               DeviceID,
    eventCause                [1] IMPLICIT EventCause
    oldConnectionID           [2] IMPLICIT ConnectionID
                                OPTIONAL,
                                OPTIONAL }

SubjectOfCall ::= IA5String

LanguagePreferences ::= IA5String

ControlData ::= SEQUENCE
{   gender        ENUMERATED
    {   male          (0),
        female        (1) },
    language       OCTET STRING }

UserData ::= [APPLICATION 29] OCTET STRING

TelephonyTone ::= ENUMERATED
{   beep          ( 0),
    billing        ( 1),
    busy           ( 2),
    carrier         ( 3),
    confirmation    ( 4),
    dial             ( 5),
    faxCNG          ( 6),
    hold             ( 7),
    howler           ( 8),
    intrusion         ( 9),
    modemCNG         (10),
    park              (11),
    recordWarning    (12),
    reorder           (13),
    ringback          (14),
    silence            (15),
    sitVC              (16),
    sitIC              (17),
    sitRO              (18),
    sitNC              (19),
    switchSpec0        (20),
    switchSpec1        (21),
    switchSpec2        (22),
    switchSpec3        (23),
    switchSpec4        (24),
    switchSpec5        (25),
    switchSpec6        (26),
    switchSpec7        (27),
    switchSpec8        (28),
    switchSpec9        (29),
    switchSpec10       (30),
    switchSpec11       (31),
    switchSpec12       (32),
    switchSpec13       (33),
    switchSpec14       (34),
    switchSpec15       (35),
    switchSpec16       (36),
}

```

```
switchSpec17      ( 37),
switchSpec18      ( 38),
switchSpec19      ( 39),
switchSpec20      ( 40),
switchSpec21      ( 41),
switchSpec22      ( 42),
switchSpec23      ( 43),
switchSpec24      ( 44),
switchSpec25      ( 45),
switchSpec26      ( 46),
switchSpec27      ( 47),
switchSpec28      ( 48),
switchSpec29      ( 49),
switchSpec30      ( 50),
switchSpec31      ( 51),
switchSpec32      ( 52),
switchSpec33      ( 53),
switchSpec34      ( 54),
switchSpec35      ( 55),
switchSpec36      ( 56),
switchSpec37      ( 57),
switchSpec38      ( 58),
switchSpec39      ( 59),
switchSpec40      ( 60),
switchSpec41      ( 61),
switchSpec42      ( 62),
switchSpec43      ( 63),
switchSpec44      ( 64),
switchSpec45      ( 65),
switchSpec46      ( 66),
switchSpec47      ( 67),
switchSpec48      ( 68),
switchSpec49      ( 69),
switchSpec50      ( 70),
switchSpec51      ( 71),
switchSpec52      ( 72),
switchSpec53      ( 73),
switchSpec54      ( 74),
switchSpec55      ( 75),
switchSpec56      ( 76),
switchSpec57      ( 77),
switchSpec58      ( 78),
switchSpec59      ( 79),
switchSpec60      ( 80),
switchSpec61      ( 81),
switchSpec62      ( 82),
switchSpec63      ( 83),
switchSpec64      ( 84),
switchSpec65      ( 85),
switchSpec66      ( 86),
switchSpec67      ( 87),
switchSpec68      ( 88),
switchSpec69      ( 89),
switchSpec70      ( 90),
switchSpec71      ( 91),
switchSpec72      ( 92),
switchSpec73      ( 93),
switchSpec74      ( 94),
switchSpec75      ( 95),
switchSpec76      ( 96),
```

```
switchSpec77      ( 97),
switchSpec78      ( 98),
switchSpec79      ( 99),
switchSpec80      (100),
switchSpec81      (101),
switchSpec82      (102),
switchSpec83      (103),
switchSpec84      (104),
switchSpec85      (105),
switchSpec86      (106),
switchSpec87      (107),
switchSpec88      (108),
switchSpec89      (109),
switchSpec90      (110),
switchSpec91      (111),
switchSpec92      (112),
switchSpec93      (113),
switchSpec94      (114),
switchSpec95      (115),
switchSpec96      (116),
switchSpec97      (117),
switchSpec98      (118),
switchSpec99      (119),
switchSpec100     (120) }
```

```
END -- of CSTA-device-feature-types
```

9.7 Security

```
CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }

DEFINITIONS ::=

BEGIN

EXPORTS
CSTASecurityData,TimeInfo;

CSTASecurityData ::= SEQUENCE
{
  messageSequenceNumber      [ 0] IMPLICIT INTEGER      OPTIONAL,
  timestamp                  TimeInfo                 OPTIONAL,
  securityInfo               SecurityInfo          OPTIONAL }

SecurityInfo ::= CHOICE
{
  string                     OCTET STRING,
  private                    NULL } -- The actual encoding is added here,
                                     -- replacing NULL with another valid ASN.1 type.

TimeInfo ::= GeneralizedTime

END -- of CSTA-security
```

9.8 Common extensions

```
CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

DEFINITIONS ::=

BEGIN

EXPORTS
CSTACommonArguments, CSTAPrivateData;

IMPORTS
CSTASecurityData FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) };

CSTACommonArguments ::= [APPLICATION 30] IMPLICIT SEQUENCE
{
    security      [0] IMPLICIT      CSTASecurityData          OPTIONAL,
    privateData   [1] IMPLICIT      SEQUENCE OF CSTAPrivateData OPTIONAL
}

CSTAPrivateData ::= CHOICE
{
    string        OCTET STRING,
    private       NULL } -- The actual encoding is added here,
                         -- replacing NULL with another valid ASN.1 type.

END -- of CSTA-extension-types
```

9.9 Call control

```

CSTA-call-control
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-control( 130) }

DEFINITIONS ::=

BEGIN

EXPORTS
AutoOriginate, CallCharacteristics, CallLinkageData, CallLinkageDataList, CallQualifyingData,
ConsultOptions, NetworkCapability, LocationInfo, LocationInfoList,
ProgressIndicator, ServicesPermitted;

IMPORTS
TimeInfo FROM CSTA-security
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) security( 128) }
CallControlServices, CallAssociatedServices, MediaAttachmentServices, RouteingServices,
VoiceUnitServices FROM CSTA-application-context-information-csta3
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) application-context-information( 200) };

AutoOriginate ::= ENUMERATED
{   prompt                      ( 0),
    doNotPrompt                  ( 1) }

CallCharacteristics ::= BIT STRING
{   acdCall                     ( 0),
    lowPriorityCall             (11),
    priorityCall                ( 1),
    highPriorityCall            (12),
    maintainanceCall            ( 2),
    directAgent                 ( 3),
    assistCall                  ( 4),
    voiceUnitCall               ( 5),
    privateCall                 ( 6),
    personalCall                ( 7),
    sensitiveCall               ( 8),
    confidentialCall            ( 9),
    encryptedCall               (10) }

CallQualifyingData ::= OCTET STRING

ConsultOptions ::= ENUMERATED
{   unrestricted                ( 0),
    consultOnly                 ( 1),
    transferOnly                ( 2),
    conferenceOnly              ( 3) }

NetworkCapability ::= SEQUENCE
{   networkType ENUMERATED
    {   iSDNPublic                ( 0),
        nonISDNPublic             ( 1),
        iSDNPrivate                ( 2),
        nonISDNPrivate             ( 3),
        other                      ( 4) },
    eventsProvided BIT STRING
    {   bridged                   ( 0),
        ...
    }
}

```

```

allCleared          ( 1),
conferenced        ( 2),
connectionCleared ( 3),
delivered          ( 4),
digitsDialed      ( 5),
diverted          ( 6),
established       ( 7),
failed            ( 8),
held              ( 9),
networkCapabilitiesChange (10),
networkReached     (11),
offered           (12),
originated        (13),
queued            (14),
retrieved         (15),
serviceInitiated  (16),
transferred       (17) } OPTIONAL }

ProgressIndicator ::= SEQUENCE
{
    progressLocation ENUMERATED
    {
        user          ( 0),
        privateNetServingLocal ( 1),
        publicNetServingLocal ( 2),
        transitNetwork   ( 3),
        publicNetServingRemote ( 4),
        privateNetServingRemote ( 5),
        localInterface   ( 6),
        internationalNetwork ( 7),
        networkBeyondInterwk ( 8),
        other           ( 9) },
    progressDescription ENUMERATED
    {
        iSDNProgressDesc ( 0),
        qSIGProgressDesc ( 1),
        other            ( 2) } }

ServicesPermitted ::= SEQUENCE
{
    callControlServices          CallControlServices,
    callAssociatedServices       CallAssociatedServices,
    mediaAttachmentServices     MediaAttachmentServices,
    routeingServices            RouteingServices,
    voiceUnitServices           VoiceUnitServices }

CallLinkageDataList ::= SEQUENCE
{
    newCallLinkageData          CallLinkageData,
    oldCallLinkageData          CallLinkageData }

CallLinkageData ::= SEQUENCE
{
    globalCallData               GlobalCallData,
    threadData                   ThreadData
                                OPTIONAL }

GlobalCallData ::= SEQUENCE
{
    globalCallSwitchingSubDomainName IA5String (SIZE(1..64))   OPTIONAL,
    globalCallLinkageID           GlobalCallLinkageID,
    callLinkageIDTimestamp       TimeInfo
                                OPTIONAL }

GlobalCallLinkageID ::= CHOICE
{
    subDomainCallLinkageID      [0] IMPLICIT OCTET STRING (SIZE(1..8)),
    globallyUniqueCallLinkageID [1] IMPLICIT OCTET STRING (SIZE(1..16)) }

ThreadData ::= SEQUENCE

```

```

{
    threadSwitchingSubDomainName      IA5String (SIZE(1..64)) OPTIONAL,
    threadLinkageID                  ThreadLinkageID,
    threadIDTimeStamp                TimeInfo           OPTIONAL }

ThreadLinkageID ::= CHOICE
{
    subDomainThreadID              [0] IMPLICIT OCTET STRING (SIZE(1..8)),
    globallyUniqueThreadID         [1] IMPLICIT OCTET STRING (SIZE(1..16)) }

Method ::= ENUMERATED -- http://www.iana.org/assignments/method-tokens/method-tokens.xhtml
{
    a-GPS                         ( 0 ),   -- "Method" defines, what location tracking system has been used
    aOA                           ( 1 ),   -- to allocate the presented Location Data
    cell                          ( 2 ),
    derived                        ( 3 ),
    deviceAssistedAGps            ( 4 ),
    deviceBasedAGps               ( 5 ),
    dHCP                          ( 6 ),
    gPS                           ( 7 ),
    handsetAfolt                 ( 8 ),
    handsetEfolt                 ( 9 ),
    hybridAGps                    (10),
    ipdl                          (11),
    lldpMed                       (12),
    manual                        (13),
    mpls                          (14),
    nmr                           (15),
    otdoa                         (16),
    rfid                           (17),
    rssI                          (18),
    rssIrtt                       (19),
    rtt                           (20),
    ta                            (21),
    taNmr                         (22),
    triangulation                 (23),
    utdoa                         (24),
    wiremap                       (25),
    locMet80211                   (26) }

NenaCompanyIDType ::= IA5String          -- NenaCompanyIDs at http://www.nena.org/nena-company-id

TelUri247Type ::= IA5String           -- must be a RFC-3966 conform Tel URI

ProvidedBy ::= SEQUENCE             -- This DataType contains information about the organization
{                                 -- which provided the allocated location data
    dataproviderID   NenaCompanyIDType,
    telUri          TelUri247Type,        -- Standard Telephone URI,
    uRL             IA5String }          -- must be a emergency number, availaible 24/7

UsageRules ::= SEQUENCE
{
    retransmissionAllowed   BOOLEAN,
    retentionExpires        TimeInfo,       -- TimeInfo Already defined in CSTA-security
    rulesetReference        IA5String,     -- rulesetReference must be a URI
    noteWell                IA5String     OPTIONAL }

GpLocationInfo ::= SEQUENCE
{
    civicLocGml   SEQUENCE
    {
        gmlFormat OCTET STRING, -- must conform xsd schemas of GML 3.0
                                -- http://www.opengeospatial.org/standards/gml#downloads
        civicLoc SEQUENCE
        {
            country IA5String (SIZE(0..2)), -- must conform the ISO 3166 country code

```

```

a1      [ 0] IMPLICIT IA5String  OPTIONAL,
a2      [ 1] IMPLICIT IA5String  OPTIONAL,
a3      [ 2] IMPLICIT IA5String  OPTIONAL,
a4      [ 3] IMPLICIT IA5String  OPTIONAL,
a5      [ 4] IMPLICIT IA5String  OPTIONAL,
a6      [ 5] IMPLICIT IA5String  OPTIONAL,
prd     [ 6] IMPLICIT IA5String  OPTIONAL,
pod     [ 7] IMPLICIT IA5String  OPTIONAL,
sts     [ 8] IMPLICIT IA5String  OPTIONAL,
hno     [ 9] IMPLICIT IA5String  OPTIONAL,
hns     [10] IMPLICIT IA5String  OPTIONAL,
lmk     [11] IMPLICIT IA5String  OPTIONAL,
loc     [12] IMPLICIT IA5String  OPTIONAL,
flr     [13] IMPLICIT IA5String  OPTIONAL,
nam     [14] IMPLICIT IA5String  OPTIONAL,
pc      [15] IMPLICIT IA5String  OPTIONAL } OPTIONAL
}
}

GpLocationInfoList ::= SEQUENCE OF GpLocationInfo

--GeoPriv has been defined, regarding the ECMA-269 respective Definition of LocationInfo
GeoPriv ::= SEQUENCE
{
    gpLocationInfo      GpLocationInfoList,
    usageRules          [0] IMPLICIT UsageRules
                        OPTIONAL,
    method              [1] IMPLICIT Method
                        OPTIONAL,
    providedBy         [2] IMPLICIT ProvidedBy
                        OPTIONAL }

LocationInfo ::= SEQUENCE OF GeoPriv

LocationInfoList ::= SEQUENCE OF LocationInfo

END -- of CSTA-call-control

```

9.10 Capability Exchange

```

CSTA-capability-exchange
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) capability-exchange( 131 ) }

DEFINITIONS ::=

BEGIN

EXPORTS
CapExchangeServList, SystemStatusServList, MonitoringServList, SnapshotServList,
CallControlServList, CallControlEvtsList, CallAssociatedServList,
CallAssociatedEvtsList, MediaServList, MediaEvtsList, RouteingServList, PhysDevEvtsList,
PhysDevServList, LogicalEvtsList, LogicalServList, DeviceMaintEvtsList, IOServicesServList,
DataCollectionServList, VoiceUnitServList, VoiceUnitEvtsList, CDRServList,
VendorSpecificServList, VendorSpecificEvtsList, DeviceIDFormat, SwDomainFeatures,
SwAppearanceAddressability, SwAppearanceTypes, IgnoreUnsupportedParameters, PauseTime,
TimeStampMode, MiscMonitorCaps, MaxLengthParameters, MaxLengthParametersContinued,
FilterThreshold, ServiceCrossRefID, DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes,
ACDModels, AgentLogOnModels, AppearanceType, TransAndConfSetup, MediaServiceCapsList, LogDevServList,
LogDevEvtsList, BookmarkReached, GetLocationTrackingSessions, GetLocationTrackingCapabilities,
LocationSessionInfo, LocationServicesServList;

IMPORTS
MediaServiceType, MediaServiceInstanceID, ConnectionMode, ConnectionModeBMap
FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) };

ServiceCrossRefID ::= OCTET STRING

-- Capability Bitmaps

LogDevServList ::= SEQUENCE
{ callControlServList [0] IMPLICIT CallControlServList OPTIONAL,
  callAssociatedServList [1] IMPLICIT CallAssociatedServList OPTIONAL,
  logicalServList [2] IMPLICIT LogicalServList OPTIONAL,
  mediaServList [3] IMPLICIT MediaServList OPTIONAL,
  iOSServicesServList [4] IMPLICIT IOSServicesServList OPTIONAL,
  dataCollectionServList [5] IMPLICIT DataCollectionServList OPTIONAL,
  voiceUnitServList [6] IMPLICIT VoiceUnitServList OPTIONAL,
  locationServicesServList [7] IMPLICIT LocationServicesServList OPTIONAL }

LogDevEvtsList ::= SEQUENCE
{ callControlEvtsList [0] IMPLICIT CallControlEvtsList OPTIONAL,
  callAssociatedEvtsList [1] IMPLICIT CallAssociatedEvtsList OPTIONAL,
  logicalEvtsList [2] IMPLICIT LogicalEvtsList OPTIONAL,
  mediaEvtsList [3] IMPLICIT MediaEvtsList OPTIONAL,
  voiceUnitEvtsList [4] IMPLICIT VoiceUnitEvtsList OPTIONAL }

CapExchangeServList ::= SEQUENCE
{ getCSTAFeatures [5] IMPLICIT GetCSTAFeatures OPTIONAL,
  getLogicalDeviceInformation [0] IMPLICIT GetLogicalDeviceInformation OPTIONAL,
  getPhysicalDeviceInformation [1] IMPLICIT GetPhysicalDeviceInformation OPTIONAL,
  getSwitchingFunctionCaps [4] IMPLICIT GetSwitchingFunctionCapabilities OPTIONAL,
  getSwitchingFunctionDevices [2] IMPLICIT GetSwitchingFunctionDevices OPTIONAL,
  switchingFunctionDevices [3] IMPLICIT SwitchingFunctionDevices OPTIONAL }

```

```

GetCSTAFeatures ::= BIT STRING
{
    privateDataInReq                      ( 0),
    privateDataInAck                      ( 1) }

GetLogicalDeviceInformation ::= BIT STRING
{
    privateDataInReq                      ( 0),
    namedDeviceTypeInAck                  ( 1),
    shortFormDeviceIDInAck                ( 2),
    miscMonitorCapsInAck                 ( 3),
    maxCallBacksInAck                   ( 4),
    maxAutoAnswerRingsInAck              ( 5),
    maxActiveCallsInAck                  ( 6),
    maxHeldCallsInAck                   ( 7),
    maxFwdSettingsInAck                 ( 8),
    maxDevicesInConfInAck                ( 9),
    transAndConfSetupParameter           (10),
    transAndConfSetupConsultationInAck   (11),
    transAndConfSetupHoldMakeInAck       (12),
    transAndConfSetupAlternateInAck      (13),
    transAndConfSetupTwoCallsHoldInAck   (14),
    transAndConfSetupTwoCallsConnectedInAck (15),
    mediaClassSupportInAck               (16),
    connectionRateListInAck              (17),
    delayToleranceListInAck              (18),
    numberOfWorkingChannelsInAck        (19),
    maxChannelBindInAck                 (20),
    privateDataInAck                     (21) }

GetPhysicalDeviceInformation ::= BIT STRING
{
    privateDataInReq                      ( 0),
    namedDeviceTypesInAck                 ( 1),
    otherLogicalDeviceListInAck           ( 2),
    deviceModelNameInAck                 ( 3),
    maxDisplaysInAck                     ( 4),
    maxButtonsInAck                      ( 5),
    maxLampsInAck                       ( 6),
    maxRingPatternsInAck                 ( 7),
    privateDataInAck                     ( 8) }

GetSwitchingFunctionDevices ::= BIT STRING
{
    requestedDeviceID                    ( 0),
    requestedDeviceCategoryACD           ( 1),
    requestedDeviceCategoryACDGroup      ( 2),
    requestedDeviceCategoryHuntGroup     ( 3),
    requestedDeviceCategoryPickGroup     ( 4),
    requestedDeviceCategoryUserGroup     (14),
    requestedDeviceCategoryOtherGroup    ( 5),
    requestedDeviceCategoryNetwInterface ( 6),
    requestedDeviceCategoryPark          ( 7),
    requestedDeviceCategoryRouteingDevice ( 8),
    requestedDeviceCategoryStation       ( 9),
    requestedDeviceCategoryVoiceUnit     (10),
    requestedDeviceCategoryGenericIV     (15),
    requestedDeviceCategoryListenerIV    (16),
    requestedDeviceCategoryVDTMFIV       (17),
    requestedDeviceCategoryPromptIV      (18),
    requestedDeviceCategoryPromptQueueIV (19),
    requestedDeviceCategoryMessageIV     (20),
    requestedDeviceCategoryConference    (21),
    requestedDeviceCategoryOther          (11),
}

```

```

privateData (12),
privateDataInAck (13) }

GetSwitchingFunctionCapabilities ::= BIT STRING
{
    privateData ( 0),
    mediaClassSupport ( 1),
    numberOfChannels ( 2),
    maxChannelBind ( 3),
    miscMediaCallCharacteristics ( 4),
    connectionRateList ( 5),
    delayToleranceRateList ( 6),
    pauseTime ( 7),
    currentTime ( 8),
    transAndConfSetupParameter ( 9),
    transAndConfSetupConsultation (10),
    transAndConfSetupHoldMake (11),
    transAndConfSetupAlternate (12),
    transAndConfSetupTwoCalls (13),
    transAndConfSetupTwoCallsConnected (14),
    miscMonitor (15),
    correlatorDataSupported (16),
    dynamicFeatureSupported (17),
    callLinkageOptions (18),
    acdModels (19),
    agentLogOnModels (20),
    agentStateModels (21),
    privateDataVersionList (22),
    simpleThreshold (23),
    filterThreshold (24),
    maxDeviceHistoryEntries (25) }

SwitchingFunctionDevices ::= BIT STRING
{
    segmentID ( 0),
    deviceListDeviceCategory ( 1),
    deviceListNamedDeviceTypes ( 2),
    deviceListDeviceAttributes ( 3),
    deviceListDeviceModelName ( 4),
    deviceListNidGroup ( 6),
    privateData ( 5) }

SystemStatusServList ::= SEQUENCE
{
    changeSystemStatusFilter [ 0] IMPLICIT ChangeSystemStatusFilter OPTIONAL,
    systemRegister [ 1] IMPLICIT SystemRegister OPTIONAL,
    systemStatusRegisterAbort [ 2] IMPLICIT SystemStatusRegisterAbort OPTIONAL,
    systemStatusRegisterCancel [ 3] IMPLICIT SystemStatusRegisterCancel OPTIONAL,
    requestSystemStatus [ 4] IMPLICIT RequestSystemStatus OPTIONAL,
    systemStatus [ 5] IMPLICIT SystemStatus OPTIONAL,
    swFunctionCapsChanged [ 6] IMPLICIT SwFunctionCapsChanged OPTIONAL,
    swFunctionDevicesChanged [ 7] IMPLICIT SwFunctionDevicesChanged OPTIONAL,
    getRegistrations [ 8] IMPLICIT GetRegistrations OPTIONAL,
    registrationInfo [ 9] IMPLICIT RegistrationInfo OPTIONAL }

ChangeSystemStatusFilter ::= BIT STRING
{
    requestedStatusFilterInitializing ( 0), -- optional parameters
    requestedStatusFilterEnabled ( 1), -- optional parameters
    requestedStatusFilterNormal ( 2), -- optional parameters
    requestedStatusFilterMessageLost ( 3), -- optional parameters
    requestedStatusFilterDisabled ( 4), -- optional parameters
    requestedStatusFilterPartiallyDisabled ( 5), -- optional parameters
    requestedStatusFilterOverloadImminent ( 6), -- optional parameters
}

```

```

requestedStatusFilterOverloadReached          ( 7),    -- optional parameters
requestedStatusFilterOverloadRelieved         ( 8),    -- optional parameters
privateData                                ( 9),    -- optional parameters
privateDataInAck                            (10) } -- optional parameters

SystemRegister ::= BIT STRING
{
    requestTypesSystemStatus          ( 0),    -- optional parameters
    requestTypesRequestSystemStatus   ( 1),    -- optional parameters
    requestTypesSwitchingFunctionCapsChanged ( 2),    -- optional parameters
    requestTypesSwitchingFuncionDevicesChanged ( 3),    -- optional parameters
    statusFilterInitializing          ( 4),    -- optional parameters
    statusFilterEnabled              ( 5),    -- optional parameters
    statusFilterNormal               ( 6),    -- optional parameters
    statusFilterMessageLost          ( 7),    -- optional parameters
    statusFilterDisabled             ( 8),    -- optional parameters
    statusFilterPartiallyDisabled    ( 9),    -- optional parameters
    statusFilterOverloadImminent     (10),    -- optional parameters
    statusFilterOverloadReached      (11),    -- optional parameters
    statusFilterOverloadRelieved     (12),    -- optional parameters
    privateDataOctetString          (13),    -- optional parameters
    privateData                      (14),    -- optional parameters
    privateDataOctetStringInAck     (15),    -- optional parameters
    privateDataInAck                (16) } -- optional parameters

SystemStatusRegisterCancel ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) } -- optional parameters

SystemStatusRegisterAbort ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) } -- optional parameters

RequestSystemStatus ::= BIT STRING
{
    privateDataInReq          ( 0),    -- optional parameters
    systemStatusInitializing   ( 1),    -- optional parameters
    systemStatusEnabled        ( 2),    -- optional parameters
    systemStatusNormal         ( 3),    -- optional parameters
    systemStatusMessageLost    ( 4),    -- optional parameters
    systemStatusDisabled       ( 5),    -- optional parameters
    systemStatusPartiallyDisabled ( 6),    -- optional parameters
    systemStatusOverloadImminent ( 7),    -- optional parameters
    systemStatusOverloadReached ( 8),    -- optional parameters
    systemStatusOverloadRelieved ( 9),    -- optional parameters
    privateDataInAck          (10),    -- optional parameters
    switchingFunctionSupportsSending (11),    -- misc characteristics
    switchingFunctionSupportsReceiving (12) } -- misc characteristics

SystemStatus ::= BIT STRING
{
    systemStatusInitializing   ( 0),    -- optional parameters
    systemStatusEnabled        ( 1),    -- optional parameters
    systemStatusNormal         ( 2),    -- optional parameters
    systemStatusMessageLost    ( 3),    -- optional parameters
    systemStatusDisabled       ( 4),    -- optional parameters
    systemStatusPartiallyDisabled ( 5),    -- optional parameters
    systemStatusOverloadImminent ( 6),    -- optional parameters
    systemStatusOverloadReached ( 7),    -- optional parameters
    systemStatusOverloadRelieved ( 8),    -- optional parameters
    privateData                ( 9),    -- optional parameters
    privateDataInAck           (10),    -- optional parameters
    switchingFunctionSupportsSending (11),    -- misc characteristics

```

```

switchingFunctionSupportsReceiving          (12) } -- misc characteristics

SwFunctionCapsChanged ::= BIT STRING
{
    privateData                         ( 0), -- optional parameters
    privateDataInAck                     ( 1) } -- optional parameters

SwFunctionDevicesChanged ::= BIT STRING
{
    privateData                         ( 0), -- optional parameters
    privateDataInAck                   ( 1) } -- optional parameters

GetRegistrations ::= BIT STRING
{
    requestedReqTypes                  ( 0),
    privateData                        ( 1),
    privateDataInAck                  ( 2),
    segmentedResponseProvided        ( 3) }

RegistrationInfo ::= BIT STRING
{
    segmentID                          ( 0),
    privateData                        ( 1) }

MonitoringServList ::= SEQUENCE
{
    changeMonitorFilter      [ 0] IMPLICIT ChangeMonitorFilter   OPTIONAL,
    monitorStart              [ 1] IMPLICIT MonitorStart       OPTIONAL,
    monitorStop               [ 2] IMPLICIT MonitorStop       OPTIONAL,
    getMonitors               [ 3] IMPLICIT GetMonitors      OPTIONAL,
    monitorInfo                [ 4] IMPLICIT MonitorInfo      OPTIONAL }

ChangeMonitorFilter ::= BIT STRING
{
    privateData                         ( 0), -- optional parameters
    privateDataInAck                   ( 1) } -- optional parameters

MonitorStart ::= BIT STRING
{
    monitorObjectDevice                ( 0), -- optional parameters
    monitorObjectCall                 ( 1), -- optional parameters
    requestedMonitorFilter             ( 2), -- optional parameters
    monitorTypeCall                   ( 3), -- optional parameters
    monitorTypeDevice                 ( 4), -- optional parameters
    monitorMediaClassParameter        ( 5), -- optional parameters
    monitorMediaClassAudio            ( 6), -- optional parameters
    monitorMediaClassData             ( 7), -- optional parameters
    monitorMediaClassImage            ( 8), -- optional parameters
    monitorMediaClassVoice            ( 9), -- optional parameters
    monitorMediaClassChat             (15), -- optional parameters
    monitorMediaClassEmail            (16), -- optional parameters
    monitorMediaClassMessage          (17), -- optional parameters
    monitorMediaClassIM               (18), -- optional parameters
    monitorMediaClassSMS              (19), -- optional parameters
    monitorMediaClassMMS              (20), -- optional parameters
    monitorExistingCallsInAck         (10), -- optional parameters
    privateDataInAck                  (11), -- optional parameters
    callIDOnly                         (12), -- miscellaneous characteristics
    swDomainDefaultForMonitorTypeIsDevice (13), -- miscellaneous characteristics
    acceptsMonitorStartWhileOOS       (14) } -- miscellaneous characteristics

MonitorStop ::= BIT STRING
{
    privateData                         ( 0), -- optional parameters
    privateDataInAck                   ( 1), -- optional parameters
    switchingFunctionSupportsSending  ( 2), -- misc characteristics
    switchingFunctionSupportsReceiving ( 3) } -- misc characteristics

```

```

GetMonitors ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    privateDataInAck                          ( 1), -- optional parameters
    segmentedResponseProvided                ( 2) } -- optional parameters

MonitorInfo ::= BIT STRING
{
    segmentID                                ( 0), -- optional parameters
    privateData                               ( 1) } -- optional parameters

SnapshotServList ::= SEQUENCE
{
    snapshotCall                            [0] IMPLICIT SnapshotCall,
    snapshotDevice                           [1] IMPLICIT SnapshotDevice,
    snapshotCallData                         [2] IMPLICIT SnapshotCallData,
    snapshotDeviceData                      [3] IMPLICIT SnapshotDeviceData }

SnapshotCall ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    localConnectionStateInAck               ( 1), -- optional parameters
    mediaServiceInfoListInAck              ( 2), -- optional parameters
    mediaServiceVersionInAck               ( 3), -- optional parameters
    mediaServiceInstanceInAck              ( 4), -- optional parameters
    mediaStreamID                            ( 5), -- optional parameters
    connectionInformation                  ( 6), -- optional parameters
    mediaCallCharacteristicsInAck          ( 7), -- optional parameters
    callCharacteristicsInAck              ( 8), -- optional parameters
    callingDeviceInAck                     ( 9), -- optional parameters
    calledDeviceInAck                      (10), -- optional parameters
    subjectOfCallInAck                    (14), -- optional parameters
    messageInfoInAck                      (15), -- optional parameters
    languagePreferencesInAck              (16), -- optional parameters
    deviceHistoryInAck                   (17), -- optional parameters
    privateDataInAck                       (11), -- optional parameters
    callIDOnly                             (12), -- miscellaneous characteristics
    reportsWithSampsCallData             (13), -- optional parameters
    locationInfoList                      (18) } -- miscellaneous characteristics

SnapshotDevice ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    localCallStateCompoundCallState          ( 1), -- optional parameters
    localCallStateSimpleCallState            ( 2), -- optional parameters
    localCallStateUnknown                   ( 3), -- optional parameters
    mediaServiceInfoListInAck              ( 4), -- optional parameters
    mediaServiceVersionInAck               ( 5), -- optional parameters
    mediaServiceInstanceInAck              ( 6), -- optional parameters
    mediaStreamID                            ( 7), -- optional parameters
    connectionInformation                  ( 8), -- optional parameters
    mediaCallCharacteristicsInAck          ( 9), -- optional parameters
    privateDataInAck                       (10), -- optional parameters
    reportsWithSampsDeviceData            (11) } -- miscellaneous characteristics

SnapshotCallData ::= BIT STRING
{
    segmentID                                ( 0), -- optional parameters
    localConnectionState                    ( 1), -- optional parameters
    mediaServiceInformationList            ( 2), -- optional parameters
    mediaServiceVersion                   ( 3), -- optional parameters
    mediaServiceInstance                  ( 4), -- optional parameters
    mediaStreamID                            ( 5), -- optional parameters
    connectionInformation                  ( 6), -- optional parameters
    privateData                             ( 7), -- optional parameters
    locationInfoList                      ( 8) } -- optional parameters

```

```

SnapshotDeviceData ::= BIT STRING
{
    segmentID                               ( 0), -- optional parameters
    localCallStateCompoundCallState          ( 1), -- optional parameters
    localCallStateSimpleCallState            ( 2), -- optional parameters
    localCallStateUnknown                   ( 3), -- optional parameters
    mediaServiceInformationList             ( 4), -- optional parameters
    mediaServiceVersion                    ( 5), -- optional parameters
    mediaServiceInstance                  ( 6), -- optional parameters
    mediaStreamID                         ( 7), -- optional parameters
    connectionInformation                 ( 8), -- optional parameters
    mediaCallCharacteristics              ( 9), -- optional parameters
    endpointDeviceID                     (11), -- optional parameters
    privateData                           (10) } -- optional parameters
  
```

```

CallControlServList ::= SEQUENCE
{
    acceptCall           [ 0] IMPLICIT AcceptCall      OPTIONAL,
    alternateCall        [ 1] IMPLICIT AlternateCall   OPTIONAL,
    answerCall           [ 2] IMPLICIT AnswerCall     OPTIONAL,
    callBack             [ 3] IMPLICIT CallBack       OPTIONAL,
    callBackMessage      [ 4] IMPLICIT CallBackMessage OPTIONAL,
    campOnCall           [ 5] IMPLICIT CampOnCall    OPTIONAL,
    clearCall            [ 6] IMPLICIT ClearCall     OPTIONAL,
    clearConnection      [ 7] IMPLICIT ClearConnection OPTIONAL,
    conferenceCall       [ 8] IMPLICIT ConferenceCall OPTIONAL,
    consultationCall     [ 9] IMPLICIT ConsultationCall OPTIONAL,
    deflectCall          [10] IMPLICIT DeflectCall    OPTIONAL,
    dialDigits           [11] IMPLICIT DialDigits    OPTIONAL,
    directedPickupCall   [12] IMPLICIT DirectedPickupCall OPTIONAL,
    groupPickupCall      [13] IMPLICIT GroupPickupCall OPTIONAL,
    holdCall             [14] IMPLICIT HoldCall      OPTIONAL,
    intrudeCall          [15] IMPLICIT IntrudeCall    OPTIONAL,
    joinCall              [16] IMPLICIT JoinCall      OPTIONAL,
    makeCall              [17] IMPLICIT MakeCall     OPTIONAL,
    makeConnection        [25] IMPLICIT MakeConnection OPTIONAL,
    makePredictiveCall   [18] IMPLICIT MakePredictiveCall OPTIONAL,
    parkCall              [19] IMPLICIT ParkCall      OPTIONAL,
    reconnectCall         [20] IMPLICIT ReconnectCall  OPTIONAL,
    retrieveCall          [21] IMPLICIT RetrieveCall  OPTIONAL,
    sendMessage           [26] IMPLICIT SendMessage    OPTIONAL,
    singleStepConference  [22] IMPLICIT SingleStepConference OPTIONAL,
    singleStepTransfer    [23] IMPLICIT SingleStepTransfer OPTIONAL,
    transferCall          [24] IMPLICIT TransferCall   OPTIONAL }
  
```

```

AcceptCall ::= BIT STRING
{
    correlatorData                ( 0), -- optional parameters
    userData                      ( 1), -- optional parameters
    privateData                   ( 2), -- optional parameters
    privateDataInAck              ( 3), -- optional parameters
    deviceIDOnly                 ( 4), -- misc characteristics
    ackModelMultiStep             ( 5) } -- misc characteristics
  
```

```

AlternateCall ::= BIT STRING
{
    alerting                     ( 0), -- initial states heldCall
    hold                         ( 1), -- initial states heldCall
    queued                        ( 2), -- initial states heldCall
    connectionReservation        ( 3), -- optional parameters
    consultOptionConsultOnly     ( 4), -- optional parameters
    consultOptionTransferOnly    ( 5), -- optional parameters
    consultOptionConferenceOnly ( 6), -- optional parameters
  
```

```

consultOptionUnrestricted          ( 7),    -- optional parameters
privateData                      ( 8),    -- optional parameters
privateDataInAck                 ( 9),    -- optional parameters
deviceIDOnly                     (10),    -- misc characteristics
ackModelMultiStep                (11),    -- misc characteristics
supportsOfferedModeOfAlerting   (12) } -- misc characteristics

AnswerCall ::= BIT STRING
{
    alerting                      ( 0),    -- initial states
    initiated                     ( 1),    -- initial states
    queued                        ( 2),    -- initial states
    correlatorData                ( 3),    -- optional parameters
    userData                      ( 4),    -- optional parameters
    privateData                   ( 5),    -- optional parameters
    privateDataInAck              ( 6),    -- optional parameters
    deviceIDOnly                  ( 7),    -- misc characteristics
    supportsOfferedModeOfAlerting ( 8),    -- misc characteristics
    ackModelMultiStep              ( 9) } -- misc characteristics

CallBack ::= BIT STRING
{
    alerting                      ( 0),    -- initial states
    null                          ( 1),    -- initial states
    failed                        ( 2),    -- initial states
    queued                        ( 3),    -- initial states
    callCharacteristics           ( 4),    -- optional parameters
    subjectOfCall                 (11),    -- optional parameters
    languagePreferences            (12),    -- optional parameters
    privateData                   ( 5),    -- optional parameters
    targetDeviceInAck             ( 6),    -- optional parameters
    privateDataInAck              ( 7),    -- optional parameters
    deviceIDOnly                  ( 8),    -- misc characteristics
    moreCallBacksNegAck           ( 9),    -- misc characteristics
    ackModelMultiStep              (10) } -- misc characteristics

CallBackMessage ::= BIT STRING
{
    alerting                      ( 0),    -- initial states
    null                          ( 1),    -- initial states
    failed                        ( 2),    -- initial states
    queued                        ( 3),    -- initial states
    privateData                   ( 4),    -- optional parameters
    targetDeviceInAck             ( 5),    -- optional parameters
    privateDataInAck              ( 6),    -- optional parameters
    deviceIDOnly                  ( 7),    -- misc characteristics
    moreCallBacksNegAck           ( 8),    -- misc characteristics
    ackModelMultiStep              ( 9) } -- misc characteristics

CampOnCall ::= BIT STRING
{
    privateData                   ( 0),    -- optional parameters
    privateDataInAck              ( 1),    -- optional parameters
    deviceIDOnly                  ( 2),    -- misc characteristics
    ackModelMultiStep              ( 3) } -- misc characteristics

ClearCall ::= BIT STRING
{
    alerting                      ( 0),    -- initial states
    connected                     ( 1),    -- initial states
    failed                        ( 2),    -- initial states
    queued                        ( 3),    -- initial states
    initiated                     ( 4),    -- initial states
    hold                          ( 5),    -- initial states
    userData                      ( 6),    -- optional parameters

```

```

privateData ( 7), -- optional parameters
privateDataInAck ( 8), -- optional parameters
deviceIDOnly ( 9), -- misc characteristics
callIDOnly (10), -- misc characteristics
ackModelMultiStep (11), -- misc characteristics
reason (12) } -- optional parameters

ClearConnection ::= BIT STRING
{
    alerting ( 0), -- initial states
    connected ( 1), -- initial states
    fail ( 2), -- initial states
    queued ( 3), -- initial states
    initiated ( 4), -- initial states
    hold ( 5), -- initial states
    correlatorData ( 6), -- optional parameters
    userData ( 7), -- optional parameters
    reason (12), -- optional parameters
    privateData ( 8), -- optional parameters
    privateDataInAck ( 9), -- optional parameters
    deviceIDOnly (10), -- misc characteristics
    ackModelMultiStep (11) } -- misc characteristics

ConferenceCall ::= BIT STRING
{
    activeCallConnected ( 0), -- initial states
    activeCallHold ( 1), -- initial states
    heldCallConnected ( 2), -- initial states
    heldCallHold ( 3), -- initial states
    privateData ( 4), -- optional parameters
    connectionParameterInAck ( 5), -- optional parameters
    endpointDeviceID ( 6), -- optional parameters
    resultingConnectionInfo ( 7), -- optional parameters
    conferenceCallOnfoInAck ( 8), -- optional parameters
    privateDataInAck ( 9), -- optional parameters
    protectedAgainstClearing (10), -- misc characteristics
    deviceIDOnly (11), -- misc characteristics
    ackModelMultiStep (12) } -- misc characteristics

ConsultationCall ::= BIT STRING
{
    connectionReservation ( 0), -- optional parameters
    accountCode ( 1), -- optional parameters
    authCode ( 2), -- optional parameters
    correlatorData ( 3), -- optional parameters
    userData ( 4), -- optional parameters
    callCharacteristics ( 5), -- optional parameters
    callCharacteristicsACDCALL ( 6), -- optional parameters
    callCharacteristicsLowPriorityCall (29), -- optional parameters
    callCharacteristicsPriorityCall ( 7), -- optional parameters
    callCharacteristicsHighPriorityCall (30), -- optional parameters
    callCharacteristicsMaintenanceCall ( 8), -- optional parameters
    callCharacteristicsDirectAgent ( 9), -- optional parameters
    callCharacteristicsAssistCall (10), -- optional parameters
    callCharacteristicsVoiceUnitCall (11), -- optional parameters
    callCharacteristicsPrivateCall (31), -- optional parameters
    callCharacteristicsPersonalCall (32), -- optional parameters
    callCharacteristicsSensitiveCall (33), -- optional parameters
    callCharacteristicsConfidentialCall (34), -- optional parameters
    callCharacteristicsEncryptedCall (35), -- optional parameters
    mediaCallCharacteristics (12), -- optional parameters
    callingConnectionInfo (13), -- optional parameters
    flowDirectionTransmit (14), -- optional parameters

```

```

flowDirectionReceive          (15),    -- optional parameters
flowDirectionTransmitAndReceive (16),    -- optional parameters
flowDirectionNone           (36),    -- optional parameters
numberOfChannels              (17),    -- optional parameters
mediaSessionInfo            (37),    -- optional parameters
consultOptionConsultOnly      (18),    -- optional parameters
consultOptionTransferOnly     (19),    -- optional parameters
consultOptionConferenceOnly   (20),    -- optional parameters
consultOptionUnrestricted     (21),    -- optional parameters
subjectOfCall               (38),    -- optional parameters
languagePreferences         (39),    -- optional parameters
privateData                   (22),    -- optional parameters
initiatedCallInfoInAck        (23),    -- optional parameters
privateDataInAck               (24),    -- optional parameters
deviceIDOnly                  (25),    -- misc characteristics
multiStage                     (26),    -- misc characteristics
supportsAdjustmentOfMediaCharacteristics (27),    -- misc characteristics
ackModelMultiStep              (28) } -- misc characteristics

DeflectCall ::= BIT STRING
{
    alerting                  ( 0),    -- initial states
    connected                  ( 1),    -- initial states
    failed                     ( 2),    -- initial states
    hold                       ( 3),    -- initial states
    queued                     ( 4),    -- initial states
    correlatorData             ( 5),    -- optional parameters
    userData                   ( 6),    -- optional parameters
    subjectOfCall             (11),    -- optional parameters
    languagePreferences       (12),    -- optional parameters
    reason                     (13),    -- optional parameters
    privateData                ( 7),    -- optional parameters
    privateDataInAck            ( 8),    -- optional parameters
    deviceIDOnly                ( 9),    -- misc characteristics
    ackModelMultiStep            (10),    -- misc characteristics
    callCharacteristicsinRequest (14),    -- misc characteristics
    multipleDeviceIDsInNewDestination (15) } -- misc characteristics

DialDigits ::= BIT STRING
{
    correlatorData             ( 0),    -- optional parameters
    privateData                 ( 1),    -- optional parameters
    privateDataInAck             ( 2),    -- optional parameters
    deviceIDOnly                 ( 3),    -- misc characteristics
    ackModelMultiStep             ( 4) } -- misc characteristics

DirectedPickupCall ::= BIT STRING
{
    alerting                  ( 0),    -- initial states
    hold                      ( 1),    -- initial states
    queued                     ( 2),    -- initial states
    connected                  ( 3),    -- initial states
    correlatorData             ( 4),    -- optional parameters
    userData                   ( 5),    -- optional parameters
    privateData                ( 6),    -- optional parameters
    pickedCallInAck             ( 7),    -- optional parameters
    pickedCallInfoInAck         ( 8),    -- optional parameters
    privateDataInAck             ( 9),    -- optional parameters
    deviceIDOnly                 (10),    -- misc characteristics
    supportsOfferedModeOfAlerting (11),    -- misc characteristics
    supportsPrompting             (12),    -- misc characteristics
    promptingMode                (13),    -- misc characteristics
    ackModelMultiStep             (14) } -- misc characteristics

```

```

GroupPickupCall ::= BIT STRING
{
    alerting                                ( 0), -- initial states
    connected                               ( 1), -- initial states
    hold                                    ( 2), -- initial states
    queued                                   ( 3), -- initial states
    pickGroup                                ( 4), -- optional parameters
    correlatorData                           ( 5), -- optional parameters
    userData                                 ( 6), -- optional parameters
    privateData                              ( 7), -- optional parameters
    pickedCallInAck                          ( 8), -- optional parameters
    pickedCallInfoInAck                     ( 9), -- optional parameters
    privateDataInAck                         (10), -- optional parameters
    supportsPrompting                        (11), -- misc characteristics
    promptingMode                            (12), -- misc characteristics
    supportsOfferedModeOfAlerting          (13), -- misc characteristics
    ackModelMultiStep                         (14) } -- misc characteristics

HoldCall ::= BIT STRING
{
    connectionReservation                   ( 0), -- optional parameters
    privateData                            ( 1), -- optional parameters
    privateDataInAck                       ( 2), -- optional parameters
    deviceIDOnly                           ( 3), -- misc characteristics
    ackModelMultiStep                      ( 4) } -- misc characteristics

IntrudeCall ::= BIT STRING
{
    participationTypeSilent              ( 0), -- optional parameters
    participationTypeActive               ( 1), -- optional parameters
    userData                                ( 2), -- optional parameters
    privateData                             ( 3), -- optional parameters
    conferencedCallInfoInAck             ( 4), -- optional parameters
    privateDataInAck                       ( 5), -- optional parameters
    deviceIDOnly                           ( 6), -- misc characteristics
    supportsConference                     ( 7), -- misc characteristics
    supportsAlternate                      ( 8), -- misc characteristics
    ackModelMultiStep                      ( 9) } -- misc characteristics

JoinCall ::= BIT STRING
{
    autoOriginatePrompt                  ( 0), -- optional parameters
    autoOriginateDoNotPrompt             ( 1), -- optional parameters
    participationTypeSilent              ( 2), -- optional parameters
    participationTypeActive               ( 3), -- optional parameters
    accountCode                            ( 4), -- optional parameters
    authCode                               ( 5), -- optional parameters
    correlatorData                         ( 6), -- optional parameters
    userData                                ( 7), -- optional parameters
    conferencedCallInAck                 ( 8), -- optional parameters
    conferencedCallInfoInAck              ( 9), -- optional parameters
    privateDataInAck                       (10), -- optional parameters
    deviceIDOnly                           (11), -- misc characteristics
    supportsPrompting                      (12), -- misc characteristics
    promptingMode                           (13), -- misc characteristics
    ackModelMultiStep                      (14) } -- misc characteristics

MakeCall ::= BIT STRING
{
    initiated                             ( 0), -- initials states
    null                                  ( 1), -- initials states
    accountCode                            ( 2), -- optional parameters
    authCode                               ( 3), -- optional parameters
    autoOriginatePrompt                   ( 4), -- optional parameters

```

```

autoOriginateDoNotPrompt          ( 5),    -- optional parameters
correlatorData                   ( 6),    -- optional parameters
userData                         ( 7),    -- optional parameters
callCharacteristics              ( 8),    -- optional parameters
callCharacteristicsACDCALL       ( 9),    -- optional parameters
callCharacteristicsLowPriorityCall (26),    -- optional parameters
callCharacteristicsPriorityCall  (10),   -- optional parameters
callCharacteristicsHighPriorityCall (27),   -- optional parameters
callCharacteristicsMaintenanceCall (11),   -- optional parameters
callCharacteristicsDirectAgent   (12),   -- optional parameters
callCharacteristicsAssistCall    (13),   -- optional parameters
callCharacteristicsVoiceUnitCall (14),   -- optional parameters
callCharacteristicsPrivateCall   (28),   -- optional parameters
callCharacteristicsPersonalCall  (29),   -- optional parameters
callCharacteristicsSensitiveCall (30),   -- optional parameters
callCharacteristicsConfidentialCall (31),   -- optional parameters
callCharacteristicsEncryptedCall (32),   -- optional parameters
mediaCallCharacteristics         (15),   -- optional parameters
callingConnectionInfo            (16),   -- optional parameters
subjectOfCall                    (33),   -- optional parameters
languagePreferences              (34),   -- optional parameters
privateData                      (17),   -- optional parameters
initiatedCallInfoInAck          (18),   -- optional parameters
privateDataInAck                 (19),   -- optional parameters
multiStage                       (20),   -- misc characteristics
supportsPrompting               (21),   -- misc characteristics
promptingMode                   (22),   -- misc characteristics
offHook                          (23),   -- misc characteristics
mediaCharacteristicsAdjustable  (24),   -- misc characteristics
ackModelMultiStep                (25),   -- misc characteristics
reason                           (35) } -- optional parameters

```

```

MakeConnection ::= BIT STRING
{
    null                      ( 0),    -- initials states
    accountCode                ( 1),    -- optional parameters
    authCode                   ( 2),    -- optional parameters
    autoOriginatePrompt        ( 3),    -- optional parameters
    autoOriginateDoNotPrompt   ( 4),    -- optional parameters
    correlatorData             ( 5),    -- optional parameters
    callCharacteristics        ( 6),    -- optional parameters
    callCharacteristicsACDCALL ( 7),    -- optional parameters
    callCharacteristicsLowPriorityCall ( 8),   -- optional parameters
    callCharacteristicsPriorityCall ( 9),   -- optional parameters
    callCharacteristicsHighPriorityCall (10),   -- optional parameters
    callCharacteristicsMaintenanceCall (11),   -- optional parameters
    callCharacteristicsDirectAgent (12),   -- optional parameters
    callCharacteristicsAssistCall (13),   -- optional parameters
    callCharacteristicsVoiceUnitCall (14),   -- optional parameters
    callCharacteristicsPrivateCall (15),   -- optional parameters
    callCharacteristicsPersonalCall (16),   -- optional parameters
    callCharacteristicsSensitiveCall (17),   -- optional parameters
    callCharacteristicsConfidentialCall (18),   -- optional parameters
    callCharacteristicsEncryptedCall (19),   -- optional parameters
    mediaCallCharacteristics   (20),   -- optional parameters
    connectionInfo             (21),   -- optional parameters
    subjectOfCall              (22),   -- optional parameters
    languagePreferences        (23),   -- optional parameters
    reason                     (24),   -- optional parameters
    maxDevices                 (25),   -- optional parameters
    startTime                  (26),   -- optional parameters
}

```

```

duration                                (27), -- optional parameters
privateData                               (28), -- optional parameters
mediaCharacteristicsInAck                (29), -- optional parameters
initiatedCallInfoInAck                  (30), -- optional parameters
privateDataInAck                         (31), -- optional parameters
supportsPrompting                        (32), -- optional parameters
promptingMode                            (33), -- optional parameters
mediaCharacteristicsAdjusted             (34), -- optional parameters
ackModelMultistep                         (35) } -- optional parameters

MakePredictiveCall ::= BIT STRING
{
    signallingDetection                   ( 0), -- optional parameters
    signallingConditionCallDelivered     ( 1), -- optional parameters
    signallingConditionCallEstablished   ( 2), -- optional parameters
    signallingConditionActionDestinationDetection ( 3), -- optional parameters
    signallingConditionActionRemainConnected ( 4), -- optional parameters
    destinationDetection                 ( 5), -- optional parameters
    destinationConditionHumanVoice       ( 6), -- optional parameters
    destinationConditionAnsweringMachine ( 7), -- optional parameters
    destinationConditionFax              ( 8), -- optional parameters
    destinationActionClearConnection    ( 9), -- optional parameters
    destinationActionRemainConnected    (10), -- optional parameters
    defaultActionClearConnection        (11), -- optional parameters
    defaultActionRemainConnected        (12), -- optional parameters
    accountCode                           (13), -- optional parameters
    authCode                             (14), -- optional parameters
    autoOriginatePrompt                  (15), -- optional parameters
    autoOriginateDoNotPrompt            (16), -- optional parameters
    alertTime                            (17), -- optional parameters
    correlatorData                      (18), -- optional parameters
    callCharacteristics                 (19), -- optional parameters
    callCharacteristicsACDCALL          (20), -- optional parameters
    callCharacteristicsLowPriorityCall  (35), -- optional parameters
    callCharacteristicsPriorityCall     (21), -- optional parameters
    callCharacteristicsHighPriorityCall (36), -- optional parameters
    callCharacteristicsMaintenanceCall (22), -- optional parameters
    callCharacteristicsDirectAgent      (23), -- optional parameters
    callCharacteristicsAssistCall       (24), -- optional parameters
    callCharacteristicsVoiceUnitCall    (25), -- optional parameters
    callCharacteristicsPrivateCall      (37), -- optional parameters
    callCharacteristicsPersonalCall     (38), -- optional parameters
    callCharacteristicsSensitiveCall    (39), -- optional parameters
    callCharacteristicsConfidentialCall (40), -- optional parameters
    callCharacteristicsEncryptedCall    (41), -- optional parameters
    subjectOfCall                        (42), -- optional parameters
    languagePreferences                  (43), -- optional parameters
    userData                            (26), -- optional parameters
    privateData                          (27), -- optional parameters
    initiatedCallInfoInAck              (28), -- optional parameters
    privateDataInAck                    (29), -- optional parameters
    deviceIDOnly                        (30), -- misc characteristics
    supportsPrompting                  (31), -- misc characteristics
    promptingMode                       (32), -- misc characteristics
    reservesCallingDevice               (33), -- misc characteristics
    ackModelMultiStep                   (34) } -- misc characteristics

ParkCall ::= BIT STRING
{
    hold                                ( 0), -- initial states
    connected                           ( 1), -- initial states
    correlatorData                      ( 2), -- optional parameters

```

```

subjectOfCall                                ( 8),    -- optional parameters
languagePreferences                           ( 9),    -- optional parameters
privateData                                    ( 3),    -- optional parameters
parkedToInAck                                 ( 4),    -- optional parameters
privateDataInAck                              ( 5),    -- optional parameters
deviceIDOnly                                  ( 6),    -- misc characteristics
ackModelMultiStep                            ( 7) } -- misc characteristics

ReconnectCall ::= BIT STRING
{
    alerting                               ( 0),    -- initial states
    connected                             ( 1),    -- initial states
    fail                                  ( 2),    -- initial states
    initiated                             ( 3),    -- initial states
    queued                                ( 4),    -- initial states
    privateData                            ( 5),    -- optional parameters
    privateDataInAck                      ( 6),    -- optional parameters
    deviceIDOnly                          ( 7),    -- misc characteristics
    ackModelMultiStep                     ( 8) } -- misc characteristics

RetrieveCall ::= BIT STRING
{
    privateData                            ( 0),    -- optional parameters
    privateDataInAck                      ( 1),    -- optional parameters
    deviceIDOnly                          ( 2),    -- misc characteristics
    ackModelMultiStep                     ( 3) } -- misc characteristics

SendMessage ::= BIT STRING
{
    accountCode                           ( 0),    -- optional parameters
    authCode                             ( 1),    -- optional parameters
    correlatorData                       ( 2),    -- optional parameters
    userData                             ( 3),    -- optional parameters
    callCharacteristics                  ( 4),    -- optional parameters
    callCharacteristicsACDCall          ( 5),    -- optional parameters
    callCharacteristicsLowPriorityCall   ( 6),    -- optional parameters
    callCharacteristicsPriorityCall     ( 7),    -- optional parameters
    callCharacteristicsHighPriorityCall ( 8),    -- optional parameters
    callCharacteristicsMaintenanceCall ( 9),    -- optional parameters
    callCharacteristicsDirectAgent      (10),   -- optional parameters
    callCharacteristicsAssistCall       (11),   -- optional parameters
    callCharacteristicsVoiceUnitCall   (12),   -- optional parameters
    callCharacteristicsPrivateCall     (13),   -- optional parameters
    callCharacteristicsPersonalCall    (14),   -- optional parameters
    callCharacteristicsSensitiveCall   (15),   -- optional parameters
    callCharacteristicsConfidentialCall(16),   -- optional parameters
    callCharacteristicsEncryptedCall  (17),   -- optional parameters
    mediaCallCharacteristics           (18),   -- optional parameters
    subjectOfCall                        (19),   -- optional parameters
    languagePreferences                 (20),   -- optional parameters
    privateData                          (21),   -- optional parameters
    privateDataInAck                   (22) } -- optional parameters

SingleStepConference ::= BIT STRING
{
    participationTypeActive             ( 0),    -- optional parameters
    participationTypeSilent            ( 1),    -- optional parameters
    accountCode                         ( 2),    -- optional parameters
    authCode                            ( 3),    -- optional parameters
    correlatorData                     ( 4),    -- optional parameters
    userData                            ( 5),    -- optional parameters
    privateData                         ( 6),    -- optional parameters
    conferencedCallInfoInAck          ( 7),    -- optional parameters
    privateDataInAck                  ( 8),    -- optional parameters

```

```

deviceIDOnly          ( 9),    -- misc characteristics
ackModelMultiStep     (10) }    -- misc characteristics

SingleStepTransfer ::= BIT STRING
{
  accountCode          ( 0),    -- optional parameters
  authCode              ( 1),    -- optional parameters
  correlatorData        ( 2),    -- optional parameters
  userData              ( 3),    -- optional parameters
  subjectOfCall         (13),   -- optional parameters
  languagePreferences   (14),   -- optional parameters
  reason                (15),   -- optional parameters
  privateData           ( 4),    -- optional parameters
  connectionParameterInAck ( 5),   -- optional parameters
  endpointDeviceID      ( 6),    -- optional parameters
  resultConnectionInformation ( 7),   -- optional parameters
  transferredCollInfoInAck ( 8),   -- optional parameters
  privateDataInAck       ( 9),    -- optional parameters
  deviceIDOnly           (10),   -- misc characteristics
  multipleDevices         (11),   -- misc characteristics
  ackModelMultiStep       (12),   -- misc characteristics
  callCharacteristicsinRequest (16) } -- misc characteristics

TransferCall ::= BIT STRING
{
  activeCallConnected   ( 0),    -- initial states
  activeCallHold          ( 1),    -- initial states
  heldCallConnected        ( 2),    -- initial states
  heldCallHold             ( 3),    -- initial states
  privateData              ( 4),    -- optional parameters
  connectionsParameterInAck ( 5),   -- optional parameters
  endpointDeviceID         ( 6),    -- optional parameters
  resultingConnectionInformation ( 7),   -- optional parameters
  transferredCallInfoInAck ( 8),   -- optional parameters
  privateDataInAck          ( 9),    -- optional parameters
  deviceIDOnly              (10),   -- misc characteristics
  multipleDevices            (11),   -- misc characteristics
  ackModelMultiStep          (12) } -- misc characteristics

CallControlEvtsList ::= SEQUENCE
{
  bridged                 [ 0] IMPLICIT  Bridged           OPTIONAL,
  callCleared               [ 1] IMPLICIT  CallCleared        OPTIONAL,
  conferenced                [ 2] IMPLICIT  Conferenced        OPTIONAL,
  connectionCleared          [ 3] IMPLICIT  ConnectionCleared  OPTIONAL,
  delivered                  [ 4] IMPLICIT  Delivered         OPTIONAL,
  digitsDialed                [ 5] IMPLICIT  DigitsDialed      OPTIONAL,
  diverted                   [ 6] IMPLICIT  Diverted          OPTIONAL,
  established                 [ 7] IMPLICIT  Established        OPTIONAL,
  failed                      [ 8] IMPLICIT  Failed            OPTIONAL,
  held                        [ 9] IMPLICIT  Held              OPTIONAL,
  netwCapsChanged             [10] IMPLICIT  NetwCapsChanged    OPTIONAL,
  netwReached                  [11] IMPLICIT  NetwReached        OPTIONAL,
  offered                      [12] IMPLICIT  Offered           OPTIONAL,
  originated                  [13] IMPLICIT  Originated         OPTIONAL,
  queued                        [14] IMPLICIT  Queued            OPTIONAL,
  retrieved                    [15] IMPLICIT  Retrieved          OPTIONAL,
  serviceInitiated             [16] IMPLICIT  ServiceInitiated   OPTIONAL,
  transferred                  [17] IMPLICIT  Transferred        OPTIONAL }

Bridged ::= BIT STRING
{
  correlatorData             ( 0),    -- optional parameters
  userData                     ( 1),    -- optional parameters

```

```

servicesPermitted                                ( 2),    -- optional parameters
mediaCallCharacteristics                         ( 3),    -- optional parameters
callCharacteristics                            ( 4),    -- optional parameters
bridgedConnectionInfo                         ( 5),    -- optional parameters
languagePreferences                           ( 8),    -- optional parameters
callLinkageData                                 ( 7),    -- optional parameters
privateData                                     ( 6),    -- optional parameters
locationInfoList                               ( 9) } -- optional parameters

CallCleared ::= BIT STRING
{
    correlatorData                                ( 0),    -- optional parameters
    userData                                      ( 1),    -- optional parameters
    mediaCallCharacteristics                         ( 2),    -- optional parameters
    callCharacteristics                            ( 3),    -- optional parameters
    callLinkageData                                ( 6),    -- optional parameters
    privateData                                     ( 4),    -- optional parameters
    callIDOnly                                     ( 5) } -- miscellaneous characteristics

Conferenced ::= BIT STRING
{
    conferenceConnectionsEndpointDeviceID        ( 0),    -- optional parameters
    conferenceConnectionsresultingConnectionInfo ( 1),    -- optional parameters
    userData                                       ( 2),    -- optional parameters
    servicesPermitted                            ( 3),    -- optional parameters
    mediaCallCharacteristics                      ( 4),    -- optional parameters
    callCharacteristics                           ( 5),    -- optional parameters
    bridgedConnectionInfo                        ( 6),    -- optional parameters
    languagePreferences                          ( 8),    -- optional parameters
    deviceHistory                                ( 9),    -- optional parameters
    privateData                                    ( 7),    -- optional parameters
    locationInfoList                             (10) } -- optional parameters

ConnectionCleared ::= BIT STRING
{
    correlatorData                                ( 0),    -- optional parameters
    userData                                      ( 1),    -- optional parameters
    chargingInfo                                   ( 2),    -- optional parameters
    numberUnitsNumberOfChargingUnits             ( 3),    -- optional parameters
    numberUnitsTypeOfUnits                        ( 4),    -- optional parameters
    numberUnitsNumberOfCurrencyUnits            ( 5),    -- optional parameters
    typeOfChargingInfoSubTotal                  ( 6),    -- optional parameters
    typeOfChargingInfoTotal                     ( 7),    -- optional parameters
    chargingMultiplierAThousandth               ( 8),    -- optional parameters
    chargingMultiplierAHundredth                ( 9),    -- optional parameters
    chargingMultiplierATenth                     (10),    -- optional parameters
    chargingMultiplierOne                       (11),    -- optional parameters
    chargingMultiplierTen                      (12),    -- optional parameters
    chargingMultiplierHundred                 (13),    -- optional parameters
    chargingMultiplierThousand                (14),    -- optional parameters
    servicesPermitted                            (15),    -- optional parameters
    mediaCallCharacteristics                    (16),    -- optional parameters
    callCharacteristics                           (17),    -- optional parameters
    droppedConnectionInfo                      (18),    -- optional parameters
    callLinkageData                             (20),    -- optional parameters
    languagePreferences                          (21),    -- optional parameters
    deviceHistory                                (22),    -- optional parameters
    privateData                                    (19),    -- optional parameters
    locationInfoList                            (23) } -- optional parameters

Delivered ::= BIT STRING
{
    originatingNIDConnection                   ( 0),    -- optional parameters
    userData                                     ( 1),    -- optional parameters

```

```

servicesPermitted          ( 2),    -- optional parameters
netwCallingDevice          ( 3),    -- optional parameters
netwCalledDevice           ( 4),    -- optional parameters
mediaCallCharacteristics   ( 5),    -- optional parameters
callCharacteristics        ( 6),    -- optional parameters
connectionInfo             ( 7),    -- optional parameters
subjectOfCall              ( 9),    -- optional parameters
messageInfo                (10),    -- optional parameters
languagePreferences         (11),    -- optional parameters
deviceHistory              (12),    -- optional parameters
privateData                ( 8),    -- optional parameters
locationInfoList           (13) }  -- optional parameters

DigitsDialed ::= BIT STRING
{
    servicesPermitted          ( 0),    -- optional parameters
    netwCallingDevice          ( 1),    -- optional parameters
    netwCalledDevice           ( 2),    -- optional parameters
    diallingConnectionInfo    ( 3),    -- optional parameters
    callCharacteristics        ( 4),    -- optional parameters
    languagePreferences         ( 6),    -- optional parameters
    privateData                ( 5),    -- optional parameters
    locationInfoList           ( 7) }  -- optional parameters

Diverted ::= BIT STRING
{
    callingDevice              ( 0),    -- optional parameters
    calledDevice               ( 1),    -- optional parameters
    userData                  ( 2),    -- optional parameters
    servicesPermitted          ( 3),    -- optional parameters
    mediaCallCharacteristics   ( 4),    -- optional parameters
    callCharacteristics        ( 5),    -- optional parameters
    connectionInfo             ( 6),    -- optional parameters
    netwCallingDevice          ( 7),    -- optional parameters
    netwCalledDevice           ( 8),    -- optional parameters
    subjectOfCall              (11),    -- optional parameters
    messageInfo                (12),    -- optional parameters
    languagePreferences         (13),    -- optional parameters
    deviceHistory              (14),    -- optional parameters
    privateData                ( 9),    -- optional parameters
    sendsDivertedToAll         (10),    -- optional parameters
    locationInfoList           (15) }  -- optional parameters

Established ::= BIT STRING
{
    originatingNIDConnection  ( 0),    -- optional parameters
    userData                  ( 1),    -- optional parameters
    servicesPermitted          ( 2),    -- optional parameters
    netwCallingDevice          ( 3),    -- optional parameters
    netwCalledDevice           ( 4),    -- optional parameters
    mediaCallCharacteristics   ( 5),    -- optional parameters
    callCharacteristics        ( 6),    -- optional parameters
    establishedConnectionInfo  ( 7),    -- optional parameters
    subjectOfCall              ( 9),    -- optional parameters
    messageInfo                (10),    -- optional parameters
    languagePreferences         (11),    -- optional parameters
    deviceHistory              (12),    -- optional parameters
    privateData                ( 8),    -- optional parameters
    locationInfoList           (13) }  -- optional parameters

Failed ::= BIT STRING
{
    originatingNIDConnection  ( 0),    -- optional parameters
    userData                  ( 1),    -- optional parameters

```

```

servicesPermitted                                ( 2),    -- optional parameters
netwCallingDevice                               ( 3),    -- optional parameters
netwCalledDevice                               ( 4),    -- optional parameters
mediaCallCharacteristics                      ( 5),    -- optional parameters
callCharacteristics                            ( 6),    -- optional parameters
failedConnectionInfo                         ( 7),    -- optional parameters
subjectOfCall                                  (10),    -- optional parameters
messageInfo                                    (11),    -- optional parameters
languagePreferences                          (12),    -- optional parameters
deviceHistory                                   (13),    -- optional parameters
privateData                                     ( 8),    -- optional parameters
callIDOnly                                     ( 9),    -- miscellaneous characteristics
locationInfoList                             (14) } -- optional parameters

Held ::= BIT STRING
{
    correlatorData                                ( 0),    -- optional parameters
    servicesPermitted                            ( 1),    -- optional parameters
    mediaCallCharacteristics                    ( 2),    -- optional parameters
    callCharacteristics                           ( 3),    -- optional parameters
    heldConnectionInfo                         ( 4),    -- optional parameters
    callLinkageData                             ( 6),    -- optional parameters
    languagePreferences                        ( 7),    -- optional parameters
    privateData                                 ( 5),    -- optional parameters
    locationInfoList                           ( 8) } -- optional parameters

NetwCapsChanged ::= BIT STRING
{
    progressLocationUser                         ( 0),    -- optional parameters
    progressLocationPrivateServLocal           ( 1),    -- optional parameters
    progressLocationPublicServLocal            ( 2),    -- optional parameters
    progressLocationTransit                     ( 3),    -- optional parameters
    progressLocationPublicServRemote          ( 4),    -- optional parameters
    progressLocationPrivateServRemote        ( 5),    -- optional parameters
    progressLocationLocal                       ( 6),    -- optional parameters
    progressLocationInternational              ( 7),    -- optional parameters
    progressLocationNetwBeyondInterworking    ( 8),    -- optional parameters
    progressLocationOther                      ( 9),    -- optional parameters
    progressDescriptionISDN                  (10),    -- optional parameters
    progressDescriptionQSIG                   (11),    -- optional parameters
    progressDescriptionOther                 (12),    -- optional parameters
    userData                                    (13),    -- optional parameters
    typeOfNetworkISDNPublic                (14),    -- optional parameters
    typeOfNetworkNonISDNPublic              (15),    -- optional parameters
    typeOfNetworkISDNPrivate                (16),    -- optional parameters
    typeOfNetworkNonISDNPrivate             (17),    -- optional parameters
    typeOfNetworkOther                      (18),    -- optional parameters
    eventsProvidedParameter                (19),    -- optional parameters
    eventsProvidedBridged                  (20),    -- optional parameters
    eventsProvidedCallCleared              (21),    -- optional parameters
    eventsProvidedConferenced              (22),    -- optional parameters
    eventsProvidedConnectionCleared        (23),    -- optional parameters
    eventsProvidedDelivered                (24),    -- optional parameters
    eventsProvidedDigitsDialed             (25),    -- optional parameters
    eventsProvidedDiverted                (26),    -- optional parameters
    eventsProvidedEstablished              (27),    -- optional parameters
    eventsProvidedFailed                  (28),    -- optional parameters
    eventsProvidedHeld                   (29),    -- optional parameters
    eventsProvidedNetwCapsChanged         (30),    -- optional parameters
    eventsProvidedNetwReached              (31),    -- optional parameters
    eventsProvidedOffered                 (32),    -- optional parameters
    eventsProvidedOriginated             (33),    -- optional parameters

```

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eventsProvidedQueued          (34), -- optional parameters
eventsProvidedRetrieved       (35), -- optional parameters
eventsProvidedServiceInitiated (36), -- optional parameters
eventsProvidedTransferred     (37), -- optional parameters
servicesPermitted              (38), -- optional parameters
mediaCallCharacteristics      (39), -- optional parameters
callCharacteristics            (40), -- optional parameters
outboundConnectionInfo         (41), -- optional parameters
languagePreferences             (43), -- optional parameters
privateData                     (42), -- optional parameters
locationInfoList                (44) } -- optional parameters

NetwReached ::= BIT STRING
{
    originatingNIDConnection   ( 0), -- optional parameters
    userData                     ( 1), -- optional parameters
    typeOfNetworkISDNPublic     ( 2), -- optional parameters
    typeOfNetworkNonISDNPublic  ( 3), -- optional parameters
    typeOfNetworkISDNPrivate    ( 4), -- optional parameters
    typeOfNetworkNonISDNPrivate ( 5), -- optional parameters
    typeOfNetworkOther           ( 6), -- optional parameters
    eventsProvidedParameter      ( 7), -- optional parameters
    eventsProvidedBridged        ( 8), -- optional parameters
    eventsProvidedCallCleared    ( 9), -- optional parameters
    eventsProvidedConferenced    (10), -- optional parameters
    eventsProvidedConnectionCleared (11), -- optional parameters
    eventsProvidedDelivered      (12), -- optional parameters
    eventsProvidedDigitsDialed   (13), -- optional parameters
    eventsProvidedDiverted       (14), -- optional parameters
    eventsProvidedEstablished    (15), -- optional parameters
    eventsProvidedFailed          (16), -- optional parameters
    eventsProvidedHeld            (17), -- optional parameters
    eventsProvidedNetwCapsChanged (18), -- optional parameters
    eventsProvidedNetwReached    (19), -- optional parameters
    eventsProvidedOffered         (20), -- optional parameters
    eventsProvidedOriginated     (21), -- optional parameters
    eventsProvidedQueued          (22), -- optional parameters
    eventsProvidedRetrieved       (23), -- optional parameters
    eventsProvidedServiceInitiated (24), -- optional parameters
    eventsProvidedTransferred     (25), -- optional parameters
    servicesPermitted              (26), -- optional parameters
    mediaCallCharacteristics      (27), -- optional parameters
    callCharacteristics            (28), -- optional parameters
    outboundConnectionInfo         (29), -- optional parameters
    netwCallingDevice              (30), -- optional parameters
    netwCalledDevice               (31), -- optional parameters
    languagePreferences             (33), -- optional parameters
    deviceHistory                  (34), -- optional parameters
    privateData                     (32), -- optional parameters
    locationInfoList                (35) } -- optional parameters

Offered ::= BIT STRING
{
    originatingNIDConnection   ( 0), -- optional parameters
    userData                     ( 1), -- optional parameters
    servicesPermitted              ( 2), -- optional parameters
    netwCallingDevice              ( 3), -- optional parameters
    netwCalledDevice               ( 4), -- optional parameters
    mediaCallCharacteristics      ( 5), -- optional parameters
    callCharacteristics            ( 6), -- optional parameters
    offeredConnectionInfo         ( 7), -- optional parameters
    subjectOfCall                  ( 9), -- optional parameters

```

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messageInfo                                (10), -- optional parameters
languagePreferences                         (11), -- optional parameters
deviceHistory                               (12), -- optional parameters
privateData                                  ( 8), -- optional parameters
locationInfoList                           (13) } -- optional parameters

Originated ::= BIT STRING
{
    originatingDevice                      ( 0), -- optional parameters
    servicesPermitted                      ( 1), -- optional parameters
    netwCallingDevice                      ( 2), -- optional parameters
    netwCalledDevice                       ( 3), -- optional parameters
    mediaCallCharacteristics               ( 4), -- optional parameters
    callCharacteristics                    ( 5), -- optional parameters
    originatedConnectionInfo              ( 6), -- optional parameters
    subjectOfCall                          ( 8), -- optional parameters
    messageInfo                            ( 9), -- optional parameters
    languagePreferences                   (10), -- optional parameters
    privateData                            ( 7), -- optional parameters
    locationInfoList                      (11) } -- optional parameters

Queued ::= BIT STRING
{
    numberQueued                           ( 0), -- optional parameters
    callsInFront                           ( 1), -- optional parameters
    userData                                ( 2), -- optional parameters
    servicesPermitted                      ( 3), -- optional parameters
    netwCallingDevice                      ( 4), -- optional parameters
    netwCalledDevice                       ( 5), -- optional parameters
    mediaCallCharacteristics               ( 6), -- optional parameters
    callCharacteristics                    ( 7), -- optional parameters
    queuedConnectionInfo                  ( 8), -- optional parameters
    subjectOfCall                          (10), -- optional parameters
    messageInfo                            (11), -- optional parameters
    languagePreferences                   (12), -- optional parameters
    deviceHistory                          (13), -- optional parameters
    privateData                            ( 9), -- optional parameters
    locationInfoList                      (14) } -- optional parameters

Retrieved ::= BIT STRING
{
    correlatorData                         ( 0), -- optional parameters
    servicesPermitted                      ( 1), -- optional parameters
    mediaCallCharacteristics               ( 2), -- optional parameters
    callCharacteristics                    ( 3), -- optional parameters
    retrievedConnectionInfo              ( 4), -- optional parameters
    callLinkageData                        ( 6), -- optional parameters
    languagePreferences                   ( 7), -- optional parameters
    deviceHistory                          ( 8), -- optional parameters
    privateData                            ( 5), -- optional parameters
    locationInfoList                      ( 9) } -- optional parameters

ServiceInitiated ::= BIT STRING
{
    servicesPermitted                      ( 0), -- optional parameters
    mediaCallCharacteristics               ( 1), -- optional parameters
    callCharacteristics                    ( 2), -- optional parameters
    initiatedConnectionInfo              ( 3), -- optional parameters
    netwCallingDevice                      ( 4), -- optional parameters
    netwCalledDevice                       ( 5), -- optional parameters
    subjectOfCall                          ( 7), -- optional parameters
    messageInfo                            ( 8), -- optional parameters
    languagePreferences                   ( 9), -- optional parameters
    privateData                            ( 6), -- optional parameters

```

```

calledDevice (10), -- optional parameters
locationInfoList (11) } -- optional parameters

Transferred ::= BIT STRING
{
    transferredConnectionsEndpointDeviceID ( 0), -- optional parameters
    transferredConnectionsResultingConnectionInfo ( 1), -- optional parameters
    userData ( 2), -- optional parameters
    chargingInfo ( 3), -- optional parameters
    numberUnitsNumberOfChargingUnits ( 4), -- optional parameters
    numberUnitsTypeOfUnits ( 5), -- optional parameters
    numberUnitsNumberOfCurrencyUnits ( 6), -- optional parameters
    typeOfChargingInfoSubTotal ( 7), -- optional parameters
    typeOfChargingInfoTotal ( 8), -- optional parameters
    chargingMultiplierAThousandth ( 9), -- optional parameters
    chargingMultiplierAHundredth (10), -- optional parameters
    chargingMultiplierATenth (11), -- optional parameters
    chargingMultiplierOne (12), -- optional parameters
    chargingMultiplierTen (13), -- optional parameters
    chargingMultiplierHundred (14), -- optional parameters
    chargingMultiplierThousand (15), -- optional parameters
    servicesPermitted (16), -- optional parameters
    mediaCallCharacteristics (17), -- optional parameters
    callCharacteristics (18), -- optional parameters
    connectionInfo (19), -- optional parameters
    languagePreferences (21), -- optional parameters
    deviceHistory (22), -- optional parameters
    privateData (20) } -- optional parameters

CallAssociatedServList ::= SEQUENCE
{
    associateData [0] IMPLICIT AssociateData OPTIONAL,
    cancelTelephonyTones [1] IMPLICIT CancelTelephonyTones OPTIONAL,
    changeConnectionInformation [5] IMPLICIT ChangeConnectionInformation OPTIONAL,
    generateDigits [2] IMPLICIT GenerateDigits OPTIONAL,
    generateTelephonyTones [3] IMPLICIT GenerateTelephonyTones OPTIONAL,
    sendUserInformation [4] IMPLICIT SendUserInformation OPTIONAL }

AssociateData ::= BIT STRING
{
    accountCode ( 0), -- optional parameters
    authCode ( 1), -- optional parameters
    correlatorData ( 2), -- optional parameters
    callQualifyingData ( 3), -- optional parameters
    callCharacteristics ( 9), -- optional parameters
    subjectOfCall (10), -- optional parameters
    languagePreferences (11), -- optional parameters
    privateData ( 4), -- optional parameters
    privateDataInAck ( 5), -- optional parameters
    deviceIDOnly ( 6), -- misc characteristics
    rejectsRequestsWithOldConnectionID ( 7), -- misc characteristics
    ackModelMultiStep ( 8), -- misc characteristics
    deviceInfo (12) } -- misc characteristics

CancelTelephonyTones ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1), -- optional parameters
    ackModelMultiStep ( 2) } -- misc characteristics

ChangeConnectionInformation ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1) } -- optional parameters

```

```

GenerateDigits ::= BIT STRING
{
    digitModeDTMF          ( 0),      -- optional parameters
    digitModePulse          ( 1),      -- optional parameters
    toneDuration            ( 2),      -- optional parameters
    pulseRate               ( 3),      -- optional parameters
    pauseDuration           ( 4),      -- optional parameters
    privateData              ( 5),      -- optional parameters
    privateDataInAck         ( 6),      -- optional parameters
    deviceIDOnly             ( 7),      -- misc characteristics
    supportsDTMFTonesABCD   ( 8),      -- misc characteristics
    supportsPauseToneChar    ( 9),      -- misc characteristics
    ackModelMultiStep        (10) }     -- misc characteristics

GenerateTelephonyTones ::= BIT STRING
{
    toneToSendBeep          ( 0),      -- optional parameters
    toneToSendBilling         ( 1),      -- optional parameters
    toneToSendBusy            ( 2),      -- optional parameters
    toneToSendCarrier          ( 3),      -- optional parameters
    toneToSendConfirmation    ( 4),      -- optional parameters
    toneToSendDial             ( 5),      -- optional parameters
    toneToSendFaxCNG           ( 6),      -- optional parameters
    toneToSendHold              ( 7),      -- optional parameters
    toneToSendHowler            ( 8),      -- optional parameters
    toneToSendIntrusion          ( 9),      -- optional parameters
    toneToSendModemCNG          (10),      -- optional parameters
    toneToSendPark              (11),      -- optional parameters
    toneToSendRecordWarning     (12),      -- optional parameters
    toneToSendReorder            (13),      -- optional parameters
    toneToSendRingback           (14),      -- optional parameters
    toneToSendSilence             (15),      -- optional parameters
    toneToSendSITVC              (16),      -- optional parameters
    toneToSendSITIC              (17),      -- optional parameters
    toneToSendSITRO              (18),      -- optional parameters
    toneToSendSITNC              (19),      -- optional parameters
    toneToSendSf0                 (20),      -- optional parameters
    toneToSendSf1                 (21),      -- optional parameters
    toneToSendSf2                 (22),      -- optional parameters
    toneToSendSf3                 (23),      -- optional parameters
    toneToSendSf4                 (24),      -- optional parameters
    toneToSendSf5                 (25),      -- optional parameters
    toneToSendSf6                 (26),      -- optional parameters
    toneToSendSf7                 (27),      -- optional parameters
    toneToSendSf8                 (28),      -- optional parameters
    toneToSendSf9                 (29),      -- optional parameters
    toneToSendSf10                (30),      -- optional parameters
    toneToSendSf11                (31),      -- optional parameters
    toneToSendSf12                (32),      -- optional parameters
    toneToSendSf13                (33),      -- optional parameters
    toneToSendSf14                (34),      -- optional parameters
    toneToSendSf15                (35),      -- optional parameters
    toneToSendSf16                (36),      -- optional parameters
    toneToSendSf17                (37),      -- optional parameters
    toneToSendSf18                (38),      -- optional parameters
    toneToSendSf19                (39),      -- optional parameters
    toneToSendSf20                (40),      -- optional parameters
    toneToSendSf21                (41),      -- optional parameters
    toneToSendSf22                (42),      -- optional parameters
    toneToSendSf23                (43),      -- optional parameters
    toneToSendSf24                (44),      -- optional parameters
    toneToSendSf25                (45),      -- optional parameters
}

```

toneToSendSf26	(46),	-- optional parameters
toneToSendSf27	(47),	-- optional parameters
toneToSendSf28	(48),	-- optional parameters
toneToSendSf29	(49),	-- optional parameters
toneToSendSf30	(50),	-- optional parameters
toneToSendSf31	(51),	-- optional parameters
toneToSendSf32	(52),	-- optional parameters
toneToSendSf33	(53),	-- optional parameters
toneToSendSf34	(54),	-- optional parameters
toneToSendSf35	(55),	-- optional parameters
toneToSendSf36	(56),	-- optional parameters
toneToSendSf37	(57),	-- optional parameters
toneToSendSf38	(58),	-- optional parameters
toneToSendSf39	(59),	-- optional parameters
toneToSendSf40	(60),	-- optional parameters
toneToSendSf41	(61),	-- optional parameters
toneToSendSf42	(62),	-- optional parameters
toneToSendSf43	(63),	-- optional parameters
toneToSendSf44	(64),	-- optional parameters
toneToSendSf45	(65),	-- optional parameters
toneToSendSf46	(66),	-- optional parameters
toneToSendSf47	(67),	-- optional parameters
toneToSendSf48	(68),	-- optional parameters
toneToSendSf49	(69),	-- optional parameters
toneToSendSf50	(70),	-- optional parameters
toneToSendSf51	(71),	-- optional parameters
toneToSendSf52	(72),	-- optional parameters
toneToSendSf53	(73),	-- optional parameters
toneToSendSf54	(74),	-- optional parameters
toneToSendSf55	(75),	-- optional parameters
toneToSendSf56	(76),	-- optional parameters
toneToSendSf57	(77),	-- optional parameters
toneToSendSf58	(78),	-- optional parameters
toneToSendSf59	(79),	-- optional parameters
toneToSendSf60	(80),	-- optional parameters
toneToSendSf61	(81),	-- optional parameters
toneToSendSf62	(82),	-- optional parameters
toneToSendSf63	(83),	-- optional parameters
toneToSendSf64	(84),	-- optional parameters
toneToSendSf65	(85),	-- optional parameters
toneToSendSf66	(86),	-- optional parameters
toneToSendSf67	(87),	-- optional parameters
toneToSendSf68	(88),	-- optional parameters
toneToSendSf69	(89),	-- optional parameters
toneToSendSf70	(90),	-- optional parameters
toneToSendSf71	(91),	-- optional parameters
toneToSendSf72	(92),	-- optional parameters
toneToSendSf73	(93),	-- optional parameters
toneToSendSf74	(94),	-- optional parameters
toneToSendSf75	(95),	-- optional parameters
toneToSendSf76	(96),	-- optional parameters
toneToSendSf77	(97),	-- optional parameters
toneToSendSf78	(98),	-- optional parameters
toneToSendSf79	(99),	-- optional parameters
toneToSendSf80	(100),	-- optional parameters
toneToSendSf81	(101),	-- optional parameters
toneToSendSf82	(102),	-- optional parameters
toneToSendSf83	(103),	-- optional parameters
toneToSendSf84	(104),	-- optional parameters
toneToSendSf85	(105),	-- optional parameters

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toneToSendSf86          (106),    -- optional parameters
toneToSendSf87          (107),    -- optional parameters
toneToSendSf88          (108),    -- optional parameters
toneToSendSf89          (109),    -- optional parameters
toneToSendSf90          (110),    -- optional parameters
toneToSendSf91          (111),    -- optional parameters
toneToSendSf92          (112),    -- optional parameters
toneToSendSf93          (113),    -- optional parameters
toneToSendSf94          (114),    -- optional parameters
toneToSendSf95          (115),    -- optional parameters
toneToSendSf96          (116),    -- optional parameters
toneToSendSf97          (117),    -- optional parameters
toneToSendSf98          (118),    -- optional parameters
toneToSendSf99          (119),    -- optional parameters
toneToSendSf100         (120),    -- optional parameters
toneDuration            (121),    -- optional parameters
privateData              (122),    -- optional parameters
privateDataInAck         (123),    -- optional parameters
deviceIDOnly             (124),    -- misc characteristics
ackModelMultiStep        (125) } -- misc characteristics

SendUserInformation ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1),    -- optional parameters
    deviceIDOnly         ( 2),    -- misc characteristics
    ackModelMultiStep    ( 3) } -- misc characteristics

CallAssociatedEvtsList ::= SEQUENCE
{
    callInformation       [0] IMPLICIT CallInformation OPTIONAL,
    charging              [1] IMPLICIT Charging OPTIONAL,
    digitsGenerated       [2] IMPLICIT DigitsGenerated OPTIONAL,
    telephonyTonesGenerated [3] IMPLICIT TelephonyTonesGenerated OPTIONAL,
    serviceCompletionFailure [4] IMPLICIT ServiceCompletionFailure OPTIONAL }

CallInformation ::= BIT STRING
{
    callingDevice          ( 0),    -- optional parameters
    accountInfo            ( 1),    -- optional parameters
    authorisatinonCode     ( 2),    -- optional parameters
    correlatorData          ( 3),    -- optional parameters
    servicesPermitted       ( 4),    -- optional parameters
    userData                ( 5),    -- optional parameters
    callQualifyingData      ( 6),    -- optional parameters
    connectionInfo          ( 7),    -- optional parameters
    callLinkageData          (10),   -- optional parameters
    callCharacteristics     (11),   -- optional parameters
    subjectOfCall           (12),   -- optional parameters
    languagePreferences      (13),   -- optional parameters
    privateData              ( 8),    -- optional parameters
    genCallInfoForOutdatedConnID [9], -- misc characteristics
    deviceInfo               (14) } -- optional parameters

Charging ::= BIT STRING
{
    numberUnitsNumberOfChargingUnits ( 0),    -- optional parameters
    numberUnitsTypeOfUnits        ( 1),    -- optional parameters
    numberUnitsNumberOfCurrencyUnits ( 2),   -- optional parameters
    typeOfChargingInfoSubTotal    ( 3),    -- optional parameters
    typeOfChargingInfoTotal       ( 4),    -- optional parameters
    chargingMultiplierAThousandth ( 5),    -- optional parameters
    chargingMultiplierAHundredth  ( 6),    -- optional parameters
    chargingMultiplierATenth      ( 7),    -- optional parameters

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chargingMultiplierOne          ( 8),    -- optional parameters
chargingMultiplierTen         ( 9),    -- optional parameters
chargingMultiplierHundred     (10),    -- optional parameters
chargingMultiplierThousand    (11),    -- optional parameters
privateData                   (12) } -- optional parameters

DigitsGenerated ::= BIT STRING
{
  digitsDurationList          ( 0),    -- optional parameters
  pauseDurationList           ( 1),    -- optional parameters
  connectionInfo               ( 2),    -- optional parameters
  privateData                  ( 3) } -- optional parameters

TelephonyTonesGenerated ::= BIT STRING
{
  toneToSendBeep               ( 0),    -- optional parameters
  toneToSendBilling             ( 1),    -- optional parameters
  toneToSendBusy                ( 2),    -- optional parameters
  toneToSendCarrier              ( 3),    -- optional parameters
  toneToSendConfirmation        ( 4),    -- optional parameters
  toneToSendDial                 ( 5),    -- optional parameters
  toneToSendFaxCNG              ( 6),    -- optional parameters
  toneToSendHold                 ( 7),    -- optional parameters
  toneToSendHowler               ( 8),    -- optional parameters
  toneToSendIntrusion             ( 9),    -- optional parameters
  toneToSendModemCNG             (10),   -- optional parameters
  toneToSendPark                  (11),   -- optional parameters
  toneToSendRecordWarning        (12),   -- optional parameters
  toneToSendReorder                (13),   -- optional parameters
  toneToSendRingback              (14),   -- optional parameters
  toneToSendSilence                (15),   -- optional parameters
  toneToSendSipVC                  (16),   -- optional parameters
  toneToSendSipIC                  (17),   -- optional parameters
  toneToSendSipRO                  (18),   -- optional parameters
  toneToSendSipNC                  (19),   -- optional parameters
  toneToSendSf0                     (20),   -- optional parameters
  toneToSendSf1                     (21),   -- optional parameters
  toneToSendSf2                     (22),   -- optional parameters
  toneToSendSf3                     (23),   -- optional parameters
  toneToSendSf4                     (24),   -- optional parameters
  toneToSendSf5                     (25),   -- optional parameters
  toneToSendSf6                     (26),   -- optional parameters
  toneToSendSf7                     (27),   -- optional parameters
  toneToSendSf8                     (28),   -- optional parameters
  toneToSendSf9                     (29),   -- optional parameters
  toneToSendSf10                    (30),   -- optional parameters
  toneToSendSf11                    (31),   -- optional parameters
  toneToSendSf12                    (32),   -- optional parameters
  toneToSendSf13                    (33),   -- optional parameters
  toneToSendSf14                    (34),   -- optional parameters
  toneToSendSf15                    (35),   -- optional parameters
  toneToSendSf16                    (36),   -- optional parameters
  toneToSendSf17                    (37),   -- optional parameters
  toneToSendSf18                    (38),   -- optional parameters
  toneToSendSf19                    (39),   -- optional parameters
  toneToSendSf20                    (40),   -- optional parameters
  toneToSendSf21                    (41),   -- optional parameters
  toneToSendSf22                    (42),   -- optional parameters
  toneToSendSf23                    (43),   -- optional parameters
  toneToSendSf24                    (44),   -- optional parameters
  toneToSendSf25                    (45),   -- optional parameters
  toneToSendSf26                    (46),   -- optional parameters

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toneToSendSf27	(47), -- optional parameters
toneToSendSf28	(48), -- optional parameters
toneToSendSf29	(49), -- optional parameters
toneToSendSf30	(50), -- optional parameters
toneToSendSf31	(51), -- optional parameters
toneToSendSf32	(52), -- optional parameters
toneToSendSf33	(53), -- optional parameters
toneToSendSf34	(54), -- optional parameters
toneToSendSf35	(55), -- optional parameters
toneToSendSf36	(56), -- optional parameters
toneToSendSf37	(57), -- optional parameters
toneToSendSf38	(58), -- optional parameters
toneToSendSf39	(59), -- optional parameters
toneToSendSf40	(60), -- optional parameters
toneToSendSf41	(61), -- optional parameters
toneToSendSf42	(62), -- optional parameters
toneToSendSf43	(63), -- optional parameters
toneToSendSf44	(64), -- optional parameters
toneToSendSf45	(65), -- optional parameters
toneToSendSf46	(66), -- optional parameters
toneToSendSf47	(67), -- optional parameters
toneToSendSf48	(68), -- optional parameters
toneToSendSf49	(69), -- optional parameters
toneToSendSf50	(70), -- optional parameters
toneToSendSf51	(71), -- optional parameters
toneToSendSf52	(72), -- optional parameters
toneToSendSf53	(73), -- optional parameters
toneToSendSf54	(74), -- optional parameters
toneToSendSf55	(75), -- optional parameters
toneToSendSf56	(76), -- optional parameters
toneToSendSf57	(77), -- optional parameters
toneToSendSf58	(78), -- optional parameters
toneToSendSf59	(79), -- optional parameters
toneToSendSf60	(80), -- optional parameters
toneToSendSf61	(81), -- optional parameters
toneToSendSf62	(82), -- optional parameters
toneToSendSf63	(83), -- optional parameters
toneToSendSf64	(84), -- optional parameters
toneToSendSf65	(85), -- optional parameters
toneToSendSf66	(86), -- optional parameters
toneToSendSf67	(87), -- optional parameters
toneToSendSf68	(88), -- optional parameters
toneToSendSf69	(89), -- optional parameters
toneToSendSf70	(90), -- optional parameters
toneToSendSf71	(91), -- optional parameters
toneToSendSf72	(92), -- optional parameters
toneToSendSf73	(93), -- optional parameters
toneToSendSf74	(94), -- optional parameters
toneToSendSf75	(95), -- optional parameters
toneToSendSf76	(96), -- optional parameters
toneToSendSf77	(97), -- optional parameters
toneToSendSf78	(98), -- optional parameters
toneToSendSf79	(99), -- optional parameters
toneToSendSf80	(100), -- optional parameters
toneToSendSf81	(101), -- optional parameters
toneToSendSf82	(102), -- optional parameters
toneToSendSf83	(103), -- optional parameters
toneToSendSf84	(104), -- optional parameters
toneToSendSf85	(105), -- optional parameters
toneToSendSf86	(106), -- optional parameters

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toneToSendSf87          (107), -- optional parameters
toneToSendSf88          (108), -- optional parameters
toneToSendSf89          (109), -- optional parameters
toneToSendSf90          (110), -- optional parameters
toneToSendSf91          (111), -- optional parameters
toneToSendSf92          (112), -- optional parameters
toneToSendSf93          (113), -- optional parameters
toneToSendSf94          (114), -- optional parameters
toneToSendSf95          (115), -- optional parameters
toneToSendSf96          (116), -- optional parameters
toneToSendSf97          (117), -- optional parameters
toneToSendSf98          (118), -- optional parameters
toneToSendSf99          (119), -- optional parameters
toneToSendSf100         (120), -- optional parameters
toneFrequency           (121), -- optional parameters
toneDuration            (122), -- optional parameters
pauseDurationList       (123), -- optional parameters
connectionInfo          (124), -- optional parameters
privateData              (125) } -- optional parameters

ServiceCompletionFailure ::= BIT STRING
{
    primaryCallConnectionInfo      ( 0), -- optional parameters
    secondaryCallConnectionInfo   ( 1), -- optional parameters
    otherDevicesPrimaryCallList   ( 2), -- optional parameters
    otherDevicesSecondaryCallList ( 3), -- optional parameters
    mediaCallCharacteristics     ( 4), -- optional parameters
    privateData                   ( 5) } -- optional parameters

MediaServList ::= SEQUENCE
{
    attachMediaService           [0] IMPLICIT     AttachMediaService      OPTIONAL,
    detachMediaService          [1] IMPLICIT     DetachMediaService     OPTIONAL }

AttachMediaService ::= BIT STRING
{
    mediaServiceVersion          ( 0), -- optional parameters
    mediaServiceInstanceId        ( 1), -- optional parameters
    connectionModeConsultConference ( 2), -- optional parameters
    connectionModeConsultConferenceHold ( 3), -- optional parameters
    connectionModeDeflect        ( 4), -- optional parameters
    connectionModeDirectedPickup ( 5), -- optional parameters
    connectionModeJoin           ( 6), -- optional parameters
    connectionModeSingleStepConference ( 7), -- optional parameters
    connectionModeSingleStepConferenceHold ( 8), -- optional parameters
    connectionModeSingleStepTransfer ( 9), -- optional parameters
    connectionModeTransfer       (10), -- optional parameters
    connectionModeDirect         (11), -- optional parameters
    requestedConnectionState    (12), -- optional parameters
    privateData                  (13), -- optional parameters
    mediaServiceInstanceIdInAck (14), -- optional parameters
    mediaConnectionInfoInAck    (15), -- optional parameters
    privateDataInAck             (16), -- optional parameters
    deviceIDOnly                 (17), -- misc characteristics
    ackModelMultiStep            (18) } -- misc characteristics

DetachMediaService ::= BIT STRING
{
    alerting                    ( 0), -- initial states
    connected                   ( 1), -- initial states
    fail                        ( 2), -- initial states
    hold                        ( 3), -- initial states
    queued                      ( 4), -- initial states
    privateData                 ( 5), -- optional parameters

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privateDataInAck          ( 6),    -- optional parameters
deviceIDOnly              ( 7),    -- misc characteristics
ackModelMultiStep         ( 8) }    -- misc characteristics

MediaEvtsList ::= SEQUENCE
{
    mediaAttached           [ 0] IMPLICIT   MediaAttached      OPTIONAL,
    mediaDetached            [ 1] IMPLICIT   MediaDetached     OPTIONAL }

MediaAttached ::= BIT STRING
{
    mediaServiceVersion      ( 0),    -- optional parameters
    mediaServiceInstanceID    ( 1),    -- optional parameters
    mediaStreamID             ( 2),    -- optional parameters
    mediaCallCharacteristics  ( 3),    -- optional parameters
    callCharacteristics       ( 4),    -- optional parameters
    mediaConnectionInfo       ( 5),    -- optional parameters
    privateData                ( 6) }    -- optional parameters

MediaDetached ::= BIT STRING
{
    mediaServiceVersion      ( 0),    -- optional parameters
    mediaServiceInstanceID    ( 1),    -- optional parameters
    mediaStreamID             ( 2),    -- optional parameters
    mediaCallCharacteristics  ( 3),    -- optional parameters
    callCharacteristics       ( 4),    -- optional parameters
    mediaConnectionInfo       ( 5),    -- optional parameters
    privateData                ( 6) }    -- optional parameters

RouteingServList ::= SEQUENCE
{
    routeRegister             [ 0] IMPLICIT   RouteRegister      OPTIONAL,
    routeRegisterCancel        [ 1] IMPLICIT   RouteRegisterCancel OPTIONAL,
    routeRegisterAbort         [ 2] IMPLICIT   RouteRegisterAbort  OPTIONAL,
    reRoute                     [ 3] IMPLICIT   ReRoute          OPTIONAL,
    routeEnd                   [ 4] IMPLICIT   RouteEnd          OPTIONAL,
    routeReject                 [ 5] IMPLICIT   RouteReject       OPTIONAL,
    routeRequest                 [ 6] IMPLICIT   RouteRequest      OPTIONAL,
    routeSelect                  [ 7] IMPLICIT   RouteSelect       OPTIONAL,
    routeUsed                   [ 8] IMPLICIT   RouteUsed        OPTIONAL }

RouteRegister ::= BIT STRING
{
    routeingDevice              ( 0),    -- optional parameters
    requestedMonitorMediaClass    ( 1),    -- optional parameters
    requestedMonitorMediaClassAudio ( 2),    -- optional parameters
    requestedMonitorMediaClassData ( 3),    -- optional parameters
    requestedMonitorMediaClassImage ( 4),    -- optional parameters
    requestedMonitorMediaClassVoice ( 5),    -- optional parameters
    requestedMonitorMediaClassChat (10),    -- optional parameters
    requestedMonitorMediaClassEmail (11),    -- optional parameters
    requestedMonitorMediaClassMessage (12),    -- optional parameters
    requestedMonitorMediaClassIM (13),    -- optional parameters
    requestedMonitorMediaClassSMS (14),    -- optional parameters
    requestedMonitorMediaClassMMS (15),    -- optional parameters
    privateData                  ( 6),    -- optional parameters
    actualRouteingMediaClassInAck ( 7),    -- optional parameters
    privateDataInAck              ( 8),    -- optional parameters
    allRouteingDevices            ( 9) }    -- misc characteristics

RouteRegisterAbort ::= BIT STRING
{
    privateData                  ( 0) }    -- optional parameters

RouteRegisterCancel ::= BIT STRING

```

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{
    privateData                               ( 0), -- optional parameters
    privateDataInAck                         ( 1) } -- optional parameters

ReRoute ::= BIT STRING
{
    replyTimeout                            ( 1), -- optional parameters
    correlatorData                          ( 2), -- optional parameters
    privateData                             ( 3) } -- optional parameters

RouteEnd ::= BIT STRING
{
    errorValue                             ( 1), -- optional parameters
    correlatorData                          ( 2), -- optional parameters
    privateData                            ( 3), -- optional parameters
    supportsSending                        ( 4), -- misc characteristics
    supportsReceiving                      ( 5) } -- misc characteristics

RouteReject ::= BIT STRING
{
    rejectCauseBusyOverflow                ( 0), -- optional parameters
    rejectCauseQueueTimeOverflow          ( 1), -- optional parameters
    rejectCauseCapacityOverflow           ( 2), -- optional parameters
    rejectCauseCalendarOverflow          ( 3), -- optional parameters
    rejectCauseUnknownOverflow           ( 4), -- optional parameters
    correlatorData                         ( 5), -- optional parameters
    privateData                            ( 6) } -- optional parameters

RouteRequest ::= BIT STRING
{
    callingDevice                           ( 0), -- optional parameters
    routeingDevice                          ( 1), -- optional parameters
    routeSelAlgorithmACD                  ( 2), -- optional parameters
    routeSelAlgorithmEmergency            ( 3), -- optional parameters
    routeSelAlgorithmLeastCost            ( 4), -- optional parameters
    routeSelAlgorithmNormal               ( 5), -- optional parameters
    routeSelAlgorithmUserDefined          ( 6), -- optional parameters
    priority                                ( 7), -- optional parameters
    replyTimeout                            ( 8), -- optional parameters
    correlatorData                          ( 9), -- optional parameters
    mediaCallCharacteristics              (10), -- optional parameters
    callCharacteristics                    (11), -- optional parameters
    routedCallInfo                          (12), -- optional parameters
    subjectOfCall                           (15), -- optional parameters
    messageInformation                     (16), -- optional parameters
    languagePreferences                   (17), -- optional parameters
    deviceHistory                           (18), -- optional parameters
    privateData                            (13), -- optional parameters
    nonCallRelatedRouteing                (14) } -- misc characteristics

RouteSelect ::= BIT STRING
{
    alternateRoutes                         ( 0), -- optional parameters
    remainRetriesNoListAvailable          ( 1), -- optional parameters
    remainRetriesNoCountAvailable         ( 2), -- optional parameters
    remainRetriesRetryCount               ( 3), -- optional parameters
    routeUsed                               ( 4), -- optional parameters
    correlatorData                          ( 5), -- optional parameters
    privateData                            ( 6) } -- optional parameters

RouteUsed ::= BIT STRING
{
    callingDevice                           ( 0), -- optional parameters
    domain                                  ( 1), -- optional parameters
    correlatorData                          ( 2), -- optional parameters
    privateData                            ( 3) } -- optional parameters

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PhysDevServList ::= SEQUENCE
{
    buttonPress [ 0] IMPLICIT ButtonPress OPTIONAL,
    getAuditoryApparatusInfo [ 1] IMPLICIT GetAuditoryApparatusInfo OPTIONAL,
    getButtonInformation [ 2] IMPLICIT GetButtonInformation OPTIONAL,
    getDisplay [ 3] IMPLICIT GetDisplay OPTIONAL,
    getHookSwitchStatus [ 4] IMPLICIT GetHookSwitchStatus OPTIONAL,
    getLampInfo [ 5] IMPLICIT GetLampInfo OPTIONAL,
    getLampMode [ 6] IMPLICIT GetLampMode OPTIONAL,
    getMessageWaitingIndicator [ 7] IMPLICIT GetMessageWaitingIndicator OPTIONAL,
    getMicrophoneGain [ 8] IMPLICIT GetMicrophoneGain OPTIONAL,
    getMicrophoneMute [ 9] IMPLICIT GetMicrophoneMute OPTIONAL,
    getRingerStatus [10] IMPLICIT GetRingerStatus OPTIONAL,
    getSpeakerMute [11] IMPLICIT GetSpeakerMute OPTIONAL,
    getSpeakerVolume [12] IMPLICIT GetSpeakerVolume OPTIONAL,
    setButtonInformation [13] IMPLICIT SetButtonInformation OPTIONAL,
    setDisplay [14] IMPLICIT SetDisplay OPTIONAL,
    setHookSwitchStatus [15] IMPLICIT SetHookSwitchStatus OPTIONAL,
    setLampMode [16] IMPLICIT SetLampMode OPTIONAL,
    setMessageWaitingIndicator [17] IMPLICIT SetMessageWaitingIndicator OPTIONAL,
    setMicrophoneGain [18] IMPLICIT SetMicrophoneGain OPTIONAL,
    setMicrophoneMute [19] IMPLICIT SetMicrophoneMute OPTIONAL,
    setRingerStatus [20] IMPLICIT SetRingerStatus OPTIONAL,
    setSpeakerMute [21] IMPLICIT SetSpeakerMute OPTIONAL,
    setSpeakerVolume [22] IMPLICIT SetSpeakerVolume OPTIONAL }

ButtonPress ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1), -- optional parameters
    ackModelMultiStep ( 2) } -- misc characteristics

GetAuditoryApparatusInfo ::= BIT STRING
{
    auditoryApparatus ( 0), -- optional parameters
    privateData ( 1), -- optional parameters
    auditoryApparatusTypeSpeakerphone ( 2), -- optional parameters
    auditoryApparatusTypeHandset ( 3), -- optional parameters
    auditoryApparatusTypeHeadset ( 4), -- optional parameters
    auditoryApparatusTypeSpeakerOnlyPhone ( 5), -- optional parameters
    auditoryApparatusTypeOther ( 6), -- optional parameters
    speakerPresent ( 7), -- optional parameters
    speakerVolumeSettable ( 8), -- optional parameters
    speakerVolumeReadable ( 9), -- optional parameters
    speakerMuteSettable (10), -- optional parameters
    speakerMuteReadable (11), -- optional parameters
    microphonePresent (12), -- optional parameters
    microphoneGainSettable (13), -- optional parameters
    microphoneGainReadable (14), -- optional parameters
    microphoneMuteSettable (15), -- optional parameters
    microphoneMuteReadable (16), -- optional parameters
    hookswitchSettable (17), -- optional parameters
    hookswitchOnHook (18), -- optional parameters
    privateDataInAck (19) } -- optional parameters

GetButtonInformation ::= BIT STRING
{
    button ( 0), -- optional parameters
    privateData ( 1), -- optional parameters
    buttonLabelInAck ( 2), -- optional parameters
    buttonLabelSettableInAck ( 3), -- optional parameters
    buttonFunctionInAck ( 4), -- optional parameters
    buttonAssociatedNumberInAck ( 5), -- optional parameters
    buttonAssociatedNumberSettableInAck ( 6), -- optional parameters
}

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listOfLampsInAck          ( 7), -- optional parameters
privateDataInAck           ( 8) } -- optional parameters

GetDisplay ::= BIT STRING
{
    displayID             ( 0), -- optional parameters
    privateData             ( 1), -- optional parameters
    characterSetASCII        ( 2), -- optional parameters
    characterSetUnicode       ( 3), -- optional parameters
    characterSetProprietary   ( 4), -- optional parameters
    privateDataInAck         ( 5) } -- optional parameters

GetHookSwitchStatus ::= BIT STRING
{
    hookSwitch              ( 0), -- optional parameters
    privateData               ( 1), -- optional parameters
    privateDataInAck           ( 2) } -- optional parameters

GetLampInfo ::= BIT STRING
{
    lamp                     ( 0), -- optional parameters
    privateData               ( 1), -- optional parameters
    lampLabelInAck             ( 2), -- optional parameters
    buttonInAck                 ( 3), -- optional parameters
    lampColorInAck                ( 4), -- optional parameters
    privateDataInAck             ( 5) } -- optional parameters

GetLampMode ::= BIT STRING
{
    lamp                     ( 0), -- optional parameters
    privateData               ( 1), -- optional parameters
    lampModeInAck                ( 2), -- optional parameters
    lampBrightnessNormal      ( 3), -- optional parameters
    lampBrightnessDim          ( 4), -- optional parameters
    lampBrightnessBright        ( 5), -- optional parameters
    lampColorInAck                ( 6), -- optional parameters
    buttonInAck                  ( 7), -- optional parameters
    privateDataInAck             ( 8) } -- optional parameters

GetMessageWaitingIndicator ::= BIT STRING
{
    privateData                ( 0), -- optional parameter
    deviceForMsgInAck          ( 1), -- optional parameter
    lampIsPresentInAck          ( 2), -- optional parameter
    privateDataInAck             ( 3) } -- optional parameters

GetMicrophoneGain ::= BIT STRING
{
    auditoryApparatus          ( 0), -- optional parameters
    privateData                  ( 1), -- optional parameters
    micGainAbsInAck                ( 2), -- optional parameters
    privateDataInAck             ( 3) } -- optional parameters

GetMicrophoneMute ::= BIT STRING
{
    auditoryApparatus          ( 0), -- optional parameters
    privateData                  ( 1), -- optional parameters
    privateDataInAck             ( 2) } -- optional parameters

GetRingerStatus ::= BIT STRING
{
    ringer                     ( 0), -- optional parameters
    privateData                  ( 1), -- optional parameters
    ringCountInAck                ( 2), -- optional parameters
    ringPatternInAck               ( 3), -- optional parameters
    ringVolumeInAck                 ( 4), -- optional parameters
    ringVolumeAbsInAck              ( 5), -- optional parameters
    privateDataInAck             ( 6) } -- optional parameters

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GetSpeakerMute ::= BIT STRING
{
    auditoryApparatus          ( 0), -- optional parameters
    privateDataInAck            ( 1), -- optional parameters
    privateData                 ( 2) } -- optional parameters

GetSpeakerVolume ::= BIT STRING
{
    auditoryApparatus          ( 0), -- optional parameters
    privateData                  ( 1), -- optional parameters
    speakerVolAbsInAck         ( 2), -- optional parameters
    privateDataInAck            ( 3) } -- optional parameters

SetButtonInformation ::= BIT STRING
{
    buttonLabel                 ( 0), -- optional parameters
    buttonAssociatedNumber      ( 1), -- optional parameters
    privateData                  ( 2), -- optional parameters
    privateDataInAck            ( 3), -- optional parameters
    ackModelMultiStep           ( 4) } -- misc characteristics

SetDisplay ::= BIT STRING
{
    physBaseRowNumber           ( 0), -- optional parameters
    physColumnRowNumber         ( 1), -- optional parameters
    offset                      ( 2), -- optional parameters
    privateData                  ( 3), -- optional parameters
    privateDataInAck            ( 4), -- optional parameters
    supportsModifyingPosition   ( 5), -- misc characteristics
    ackModelMultiStep           ( 6) } -- misc characteristics

SetHookSwitchStatus ::= BIT STRING
{
    privateData                  ( 0), -- optional parameters
    ackModelMultiStep           ( 1) } -- misc characteristics

SetLampMode ::= BIT STRING
{
    lampModeBrokenFlutter       ( 0), -- optional parameter
    lampModeFlutter              ( 1), -- optional parameter
    lampModeOff                  ( 2), -- optional parameter
    lampModeSteady               ( 3), -- optional parameter
    lampModeWink                 ( 4), -- optional parameter
    lampModeReserved             ( 5), -- optional parameter
    lampModeSf0                  ( 6), -- optional parameters
    lampModeSf1                  ( 7), -- optional parameters
    lampModeSf2                  ( 8), -- optional parameters
    lampModeSf3                  ( 9), -- optional parameters
    lampModeSf4                  ( 10), -- optional parameters
    lampModeSf5                  ( 11), -- optional parameters
    lampModeSf6                  ( 12), -- optional parameters
    lampModeSf7                  ( 13), -- optional parameters
    lampModeSf8                  ( 14), -- optional parameters
    lampModeSf9                  ( 15), -- optional parameters
    lampModeSf10                 ( 16), -- optional parameters
    lampModeSf11                 ( 17), -- optional parameters
    lampModeSf12                 ( 18), -- optional parameters
    lampModeSf13                 ( 19), -- optional parameters
    lampModeSf14                 ( 20), -- optional parameters
    lampModeSf15                 ( 21), -- optional parameters
    lampModeSf16                 ( 22), -- optional parameters
    lampModeSf17                 ( 23), -- optional parameters
    lampModeSf18                 ( 24), -- optional parameters
    lampModeSf19                 ( 25), -- optional parameters
    lampModeSf20                 ( 26), -- optional parameters

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```
lampModeSf21      ( 27), -- optional parameters
lampModeSf22      ( 28), -- optional parameters
lampModeSf23      ( 29), -- optional parameters
lampModeSf24      ( 30), -- optional parameters
lampModeSf25      ( 31), -- optional parameters
lampModeSf26      ( 32), -- optional parameters
lampModeSf27      ( 33), -- optional parameters
lampModeSf28      ( 34), -- optional parameters
lampModeSf29      ( 35), -- optional parameters
lampModeSf30      ( 36), -- optional parameters
lampModeSf31      ( 37), -- optional parameters
lampModeSf32      ( 38), -- optional parameters
lampModeSf33      ( 39), -- optional parameters
lampModeSf34      ( 40), -- optional parameters
lampModeSf35      ( 41), -- optional parameters
lampModeSf36      ( 42), -- optional parameters
lampModeSf37      ( 43), -- optional parameters
lampModeSf38      ( 44), -- optional parameters
lampModeSf39      ( 45), -- optional parameters
lampModeSf40      ( 46), -- optional parameters
lampModeSf41      ( 47), -- optional parameters
lampModeSf42      ( 48), -- optional parameters
lampModeSf43      ( 49), -- optional parameters
lampModeSf44      ( 50), -- optional parameters
lampModeSf45      ( 51), -- optional parameters
lampModeSf46      ( 52), -- optional parameters
lampModeSf47      ( 53), -- optional parameters
lampModeSf48      ( 54), -- optional parameters
lampModeSf49      ( 55), -- optional parameters
lampModeSf50      ( 56), -- optional parameters
lampModeSf51      ( 57), -- optional parameters
lampModeSf52      ( 58), -- optional parameters
lampModeSf53      ( 59), -- optional parameters
lampModeSf54      ( 60), -- optional parameters
lampModeSf55      ( 61), -- optional parameters
lampModeSf56      ( 62), -- optional parameters
lampModeSf57      ( 63), -- optional parameters
lampModeSf58      ( 64), -- optional parameters
lampModeSf59      ( 65), -- optional parameters
lampModeSf60      ( 66), -- optional parameters
lampModeSf61      ( 67), -- optional parameters
lampModeSf62      ( 68), -- optional parameters
lampModeSf63      ( 69), -- optional parameters
lampModeSf64      ( 70), -- optional parameters
lampModeSf65      ( 71), -- optional parameters
lampModeSf66      ( 72), -- optional parameters
lampModeSf67      ( 73), -- optional parameters
lampModeSf68      ( 74), -- optional parameters
lampModeSf69      ( 75), -- optional parameters
lampModeSf70      ( 76), -- optional parameters
lampModeSf71      ( 77), -- optional parameters
lampModeSf72      ( 78), -- optional parameters
lampModeSf73      ( 79), -- optional parameters
lampModeSf74      ( 80), -- optional parameters
lampModeSf75      ( 81), -- optional parameters
lampModeSf76      ( 82), -- optional parameters
lampModeSf77      ( 83), -- optional parameters
lampModeSf78      ( 84), -- optional parameters
lampModeSf79      ( 85), -- optional parameters
lampModeSf80      ( 86), -- optional parameters
```

lampModeSf81	(87), -- optional parameters
lampModeSf82	(88), -- optional parameters
lampModeSf83	(89), -- optional parameters
lampModeSf84	(90), -- optional parameters
lampModeSf85	(91), -- optional parameters
lampModeSf86	(92), -- optional parameters
lampModeSf87	(93), -- optional parameters
lampModeSf88	(94), -- optional parameters
lampModeSf89	(95), -- optional parameters
lampModeSf90	(96), -- optional parameters
lampModeSf91	(97), -- optional parameters
lampModeSf92	(98), -- optional parameters
lampModeSf93	(99), -- optional parameters
lampModeSf94	(100), -- optional parameters
lampBrightnessNormal	(101), -- optional parameters
lampBrightnessDim	(102), -- optional parameters
lampBrightnessBright	(103), -- optional parameters
lampColorNoColor	(104), -- optional parameters
lampColorRed	(105), -- optional parameters
lampColorYellow	(106), -- optional parameters
lampColorGreen	(107), -- optional parameters
lampColorBlue	(108), -- optional parameters
lampColorReserved	(109), -- optional parameters
lampColorSf0	(110), -- optional parameters
lampColorSf1	(111), -- optional parameters
lampColorSf2	(112), -- optional parameters
lampColorSf3	(113), -- optional parameters
lampColorSf4	(114), -- optional parameters
lampColorSf5	(115), -- optional parameters
lampColorSf6	(116), -- optional parameters
lampColorSf7	(117), -- optional parameters
lampColorSf8	(118), -- optional parameters
lampColorSf9	(119), -- optional parameters
lampColorSf10	(120), -- optional parameters
lampColorSf11	(121), -- optional parameters
lampColorSf12	(122), -- optional parameters
lampColorSf13	(123), -- optional parameters
lampColorSf14	(124), -- optional parameters
lampColorSf15	(125), -- optional parameters
lampColorSf16	(126), -- optional parameters
lampColorSf17	(127), -- optional parameters
lampColorSf18	(128), -- optional parameters
lampColorSf19	(129), -- optional parameters
lampColorSf20	(130), -- optional parameters
lampColorSf21	(131), -- optional parameters
lampColorSf22	(132), -- optional parameters
lampColorSf23	(133), -- optional parameters
lampColorSf24	(134), -- optional parameters
lampColorSf25	(135), -- optional parameters
lampColorSf26	(136), -- optional parameters
lampColorSf27	(137), -- optional parameters
lampColorSf28	(138), -- optional parameters
lampColorSf29	(139), -- optional parameters
lampColorSf30	(140), -- optional parameters
lampColorSf31	(141), -- optional parameters
lampColorSf32	(142), -- optional parameters
lampColorSf33	(143), -- optional parameters
lampColorSf34	(144), -- optional parameters
lampColorSf35	(145), -- optional parameters
lampColorSf36	(146), -- optional parameters

```
lampColorSf37          (147), -- optional parameters
lampColorSf38          (148), -- optional parameters
lampColorSf39          (149), -- optional parameters
lampColorSf40          (150), -- optional parameters
lampColorSf41          (151), -- optional parameters
lampColorSf42          (152), -- optional parameters
lampColorSf43          (153), -- optional parameters
lampColorSf44          (154), -- optional parameters
lampColorSf45          (155), -- optional parameters
lampColorSf46          (156), -- optional parameters
lampColorSf47          (157), -- optional parameters
lampColorSf48          (158), -- optional parameters
lampColorSf49          (159), -- optional parameters
lampColorSf50          (160), -- optional parameters
lampColorSf51          (161), -- optional parameters
lampColorSf52          (162), -- optional parameters
lampColorSf53          (163), -- optional parameters
lampColorSf54          (164), -- optional parameters
lampColorSf55          (165), -- optional parameters
lampColorSf56          (166), -- optional parameters
lampColorSf57          (167), -- optional parameters
lampColorSf58          (168), -- optional parameters
lampColorSf59          (169), -- optional parameters
lampColorSf60          (170), -- optional parameters
lampColorSf61          (171), -- optional parameters
lampColorSf62          (172), -- optional parameters
lampColorSf63          (173), -- optional parameters
lampColorSf64          (174), -- optional parameters
lampColorSf65          (175), -- optional parameters
lampColorSf66          (176), -- optional parameters
lampColorSf67          (177), -- optional parameters
lampColorSf68          (178), -- optional parameters
lampColorSf69          (179), -- optional parameters
lampColorSf70          (180), -- optional parameters
lampColorSf71          (181), -- optional parameters
lampColorSf72          (182), -- optional parameters
lampColorSf73          (183), -- optional parameters
lampColorSf74          (184), -- optional parameters
lampColorSf75          (185), -- optional parameters
lampColorSf76          (186), -- optional parameters
lampColorSf77          (187), -- optional parameters
lampColorSf78          (188), -- optional parameters
lampColorSf79          (189), -- optional parameters
lampColorSf80          (190), -- optional parameters
lampColorSf81          (191), -- optional parameters
lampColorSf82          (192), -- optional parameters
lampColorSf83          (193), -- optional parameters
lampColorSf84          (194), -- optional parameters
lampColorSf85          (195), -- optional parameters
lampColorSf86          (196), -- optional parameters
lampColorSf87          (197), -- optional parameters
lampColorSf88          (198), -- optional parameters
lampColorSf89          (199), -- optional parameters
lampColorSf90          (200), -- optional parameters
lampColorSf91          (201), -- optional parameters
lampColorSf92          (202), -- optional parameters
lampColorSf93          (203), -- optional parameters
lampColorSf94          (204), -- optional parameters
privateData            (205), -- optional parameters
privateDataInAck        (206), -- optional parameters
```

```

ackModelMultiStep          (207) } -- misc characteristics

SetMessageWaitingIndicator ::= BIT STRING
{
    deviceForMsg           ( 0),   -- optional parameters
    privateData             ( 1),   -- optional parameters
    privateDataInAck        ( 2),   -- optional parameters
    ackModelMultiStep       ( 3) } -- misc characteristics

SetMicrophoneGain ::= BIT STRING
{
    microphoneGainAbs      ( 0),   -- optional parameters
    microphoneGainInc       ( 1),   -- optional parameters
    privateData              ( 2),   -- optional parameters
    privateDataInAck         ( 3),   -- optional parameters
    ackModelMultiStep        ( 4) } -- misc characteristics

SetMicrophoneMute ::= BIT STRING
{
    privateData              ( 0),   -- optional parameters
    privateDataInAck         ( 1),   -- optional parameters
    ackModelMultiStep        ( 2) } -- misc characteristics

SetRingerStatus ::= BIT STRING
{
    ringerModeRinging        ( 0),   -- optional parameters
    ringerModeNotRinging     ( 1),   -- optional parameters
    ringVolumeAbs            ( 2),   -- optional parameters
    ringVolumeInc             ( 3),   -- optional parameters
    privateData               ( 4),   -- optional parameters
    privateDataInAck          ( 5),   -- optional parameters
    ackModelMultiStep         ( 6) } -- misc characteristics

SetSpeakerMute ::= BIT STRING
{
    privateData               ( 0),   -- optional parameters
    privateDataInAck          ( 1),   -- optional parameters
    ackModelMultiStep         ( 2) } -- misc characteristics

SetSpeakerVolume ::= BIT STRING
{
    speakerVolumeAbs          ( 0),   -- optional parameters
    speakerVolumeInc           ( 1),   -- optional parameters
    privateData                 ( 2),   -- optional parameters
    privateDataInAck            ( 3),   -- optional parameters
    ackModelMultiStep           ( 4),   -- misc characteristics
    resettedAfterCall          ( 5),   -- misc characteristics
    notSettableWhileActive     ( 6) } -- misc characteristics

PhysDevEvtsList ::= SEQUENCE
{
    buttonInformation          [ 0] IMPLICIT  ButtonInformation      OPTIONAL,
    buttonPress                  [ 1] IMPLICIT  ButtonPressEvent      OPTIONAL,
    displayUpdated                [ 2] IMPLICIT  DisplayUpdated        OPTIONAL,
    hookswitch                   [ 3] IMPLICIT  Hookswitch          OPTIONAL,
    lampMode                     [ 4] IMPLICIT  LampMode            OPTIONAL,
    messageWaiting                 [ 5] IMPLICIT  MessageWaiting      OPTIONAL,
    microphoneGain                 [ 6] IMPLICIT  MicrophoneGain     OPTIONAL,
    microphoneMute                  [ 7] IMPLICIT  MicrophoneMute     OPTIONAL,
    ringerStatus                   [ 8] IMPLICIT  RingerStatus        OPTIONAL,
    speakerMute                     [ 9] IMPLICIT  SpeakerMute        OPTIONAL,
    speakerVolume                   [10] IMPLICIT  SpeakerVolume       OPTIONAL }

ButtonInformation ::= BIT STRING
{
    buttonLabel                  ( 0),   -- optional parameters
    buttonAssociatedNumber        ( 1),   -- optional parameters
    buttonPressIndicator          ( 2),   -- optional parameters

```

```

privateData          ( 3 ) } -- optional parameters

ButtonPressEvent ::= BIT STRING
{
    buttonLabel          ( 0 ),   -- optional parameters
    buttonAssociatedNumber ( 1 ),   -- optional parameters
    privateData          ( 2 ) } -- optional parameters

DisplayUpdated ::= BIT STRING
{
    characterSetASCII     ( 0 ),   -- optional parameters
    characterSetUnicode    ( 1 ),   -- optional parameters
    characterSetProprietary ( 2 ),   -- optional parameters
    privateData          ( 3 ) } -- optional parameters

Hookswitch ::= BIT STRING
{
    privateData          ( 0 ) } -- optional parameters

LampMode ::= BIT STRING
{
    lampModeBrokenFlutter ( 0 ),   -- optional parameters
    lampModeFlutter        ( 1 ),   -- optional parameters
    lampModeOff             ( 2 ),   -- optional parameters
    lampModeSteady          ( 3 ),   -- optional parameters
    lampModeWink             ( 4 ),   -- optional parameters
    lampModeReserved         ( 5 ),   -- optional parameters
    lampModeSf0              ( 6 ),   -- optional parameters
    lampModeSf1              ( 7 ),   -- optional parameters
    lampModeSf2              ( 8 ),   -- optional parameters
    lampModeSf3              ( 9 ),   -- optional parameters
    lampModeSf4              ( 10 ),  -- optional parameters
    lampModeSf5              ( 11 ),  -- optional parameters
    lampModeSf6              ( 12 ),  -- optional parameters
    lampModeSf7              ( 13 ),  -- optional parameters
    lampModeSf8              ( 14 ),  -- optional parameters
    lampModeSf9              ( 15 ),  -- optional parameters
    lampModeSf10             ( 16 ),  -- optional parameters
    lampModeSf11             ( 17 ),  -- optional parameters
    lampModeSf12             ( 18 ),  -- optional parameters
    lampModeSf13             ( 19 ),  -- optional parameters
    lampModeSf14             ( 20 ),  -- optional parameters
    lampModeSf15             ( 21 ),  -- optional parameters
    lampModeSf16             ( 22 ),  -- optional parameters
    lampModeSf17             ( 23 ),  -- optional parameters
    lampModeSf18             ( 24 ),  -- optional parameters
    lampModeSf19             ( 25 ),  -- optional parameters
    lampModeSf20             ( 26 ),  -- optional parameters
    lampModeSf21             ( 27 ),  -- optional parameters
    lampModeSf22             ( 28 ),  -- optional parameters
    lampModeSf23             ( 29 ),  -- optional parameters
    lampModeSf24             ( 30 ),  -- optional parameters
    lampModeSf25             ( 31 ),  -- optional parameters
    lampModeSf26             ( 32 ),  -- optional parameters
    lampModeSf27             ( 33 ),  -- optional parameters
    lampModeSf28             ( 34 ),  -- optional parameters
    lampModeSf29             ( 35 ),  -- optional parameters
    lampModeSf30             ( 36 ),  -- optional parameters
    lampModeSf31             ( 37 ),  -- optional parameters
    lampModeSf32             ( 38 ),  -- optional parameters
    lampModeSf33             ( 39 ),  -- optional parameters
    lampModeSf34             ( 40 ),  -- optional parameters
    lampModeSf35             ( 41 ),  -- optional parameters
    lampModeSf36             ( 42 ),  -- optional parameters
    lampModeSf37             ( 43 ),  -- optional parameters

```

```
lampModeSf38          ( 44), -- optional parameters
lampModeSf39          ( 45), -- optional parameters
lampModeSf40          ( 46), -- optional parameters
lampModeSf41          ( 47), -- optional parameters
lampModeSf42          ( 48), -- optional parameters
lampModeSf43          ( 49), -- optional parameters
lampModeSf44          ( 50), -- optional parameters
lampModeSf45          ( 51), -- optional parameters
lampModeSf46          ( 52), -- optional parameters
lampModeSf47          ( 53), -- optional parameters
lampModeSf48          ( 54), -- optional parameters
lampModeSf49          ( 55), -- optional parameters
lampModeSf50          ( 56), -- optional parameters
lampModeSf51          ( 57), -- optional parameters
lampModeSf52          ( 58), -- optional parameters
lampModeSf53          ( 59), -- optional parameters
lampModeSf54          ( 60), -- optional parameters
lampModeSf55          ( 61), -- optional parameters
lampModeSf56          ( 62), -- optional parameters
lampModeSf57          ( 63), -- optional parameters
lampModeSf58          ( 64), -- optional parameters
lampModeSf59          ( 65), -- optional parameters
lampModeSf60          ( 66), -- optional parameters
lampModeSf61          ( 67), -- optional parameters
lampModeSf62          ( 68), -- optional parameters
lampModeSf63          ( 69), -- optional parameters
lampModeSf64          ( 70), -- optional parameters
lampModeSf65          ( 71), -- optional parameters
lampModeSf66          ( 72), -- optional parameters
lampModeSf67          ( 73), -- optional parameters
lampModeSf68          ( 74), -- optional parameters
lampModeSf69          ( 75), -- optional parameters
lampModeSf70          ( 76), -- optional parameters
lampModeSf71          ( 77), -- optional parameters
lampModeSf72          ( 78), -- optional parameters
lampModeSf73          ( 79), -- optional parameters
lampModeSf74          ( 80), -- optional parameters
lampModeSf75          ( 81), -- optional parameters
lampModeSf76          ( 82), -- optional parameters
lampModeSf77          ( 83), -- optional parameters
lampModeSf78          ( 84), -- optional parameters
lampModeSf79          ( 85), -- optional parameters
lampModeSf80          ( 86), -- optional parameters
lampModeSf81          ( 87), -- optional parameters
lampModeSf82          ( 88), -- optional parameters
lampModeSf83          ( 89), -- optional parameters
lampModeSf84          ( 90), -- optional parameters
lampModeSf85          ( 91), -- optional parameters
lampModeSf86          ( 92), -- optional parameters
lampModeSf87          ( 93), -- optional parameters
lampModeSf88          ( 94), -- optional parameters
lampModeSf89          ( 95), -- optional parameters
lampModeSf90          ( 96), -- optional parameters
lampModeSf91          ( 97), -- optional parameters
lampModeSf92          ( 98), -- optional parameters
lampModeSf93          ( 99), -- optional parameters
lampModeSf94          (100), -- optional parameters
lampBrightnessNormal  (101), -- optional parameters
lampBrightnessDim     (102), -- optional parameters
lampBrightnessBright  (103), -- optional parameters
```

lampColorNoColor	(104), -- optional parameters
lampColorRed	(105), -- optional parameters
lampColorYellow	(106), -- optional parameters
lampColorGreen	(107), -- optional parameters
lampColorBlue	(108), -- optional parameters
lampColorReserved	(109), -- optional parameters
lampColorSf0	(110), -- optional parameters
lampColorSf1	(111), -- optional parameters
lampColorSf2	(112), -- optional parameters
lampColorSf3	(113), -- optional parameters
lampColorSf4	(114), -- optional parameters
lampColorSf5	(115), -- optional parameters
lampColorSf6	(116), -- optional parameters
lampColorSf7	(117), -- optional parameters
lampColorSf8	(118), -- optional parameters
lampColorSf9	(119), -- optional parameters
lampColorSf10	(120), -- optional parameters
lampColorSf11	(121), -- optional parameters
lampColorSf12	(122), -- optional parameters
lampColorSf13	(123), -- optional parameters
lampColorSf14	(124), -- optional parameters
lampColorSf15	(125), -- optional parameters
lampColorSf16	(126), -- optional parameters
lampColorSf17	(127), -- optional parameters
lampColorSf18	(128), -- optional parameters
lampColorSf19	(129), -- optional parameters
lampColorSf20	(130), -- optional parameters
lampColorSf21	(131), -- optional parameters
lampColorSf22	(132), -- optional parameters
lampColorSf23	(133), -- optional parameters
lampColorSf24	(134), -- optional parameters
lampColorSf25	(135), -- optional parameters
lampColorSf26	(136), -- optional parameters
lampColorSf27	(137), -- optional parameters
lampColorSf28	(138), -- optional parameters
lampColorSf29	(139), -- optional parameters
lampColorSf30	(140), -- optional parameters
lampColorSf31	(141), -- optional parameters
lampColorSf32	(142), -- optional parameters
lampColorSf33	(143), -- optional parameters
lampColorSf34	(144), -- optional parameters
lampColorSf35	(145), -- optional parameters
lampColorSf36	(146), -- optional parameters
lampColorSf37	(147), -- optional parameters
lampColorSf38	(148), -- optional parameters
lampColorSf39	(149), -- optional parameters
lampColorSf40	(150), -- optional parameters
lampColorSf41	(151), -- optional parameters
lampColorSf42	(152), -- optional parameters
lampColorSf43	(153), -- optional parameters
lampColorSf44	(154), -- optional parameters
lampColorSf45	(155), -- optional parameters
lampColorSf46	(156), -- optional parameters
lampColorSf47	(157), -- optional parameters
lampColorSf48	(158), -- optional parameters
lampColorSf49	(159), -- optional parameters
lampColorSf50	(160), -- optional parameters
lampColorSf51	(161), -- optional parameters
lampColorSf52	(162), -- optional parameters
lampColorSf53	(163), -- optional parameters

```

lampColorSf54          (164), -- optional parameters
lampColorSf55          (165), -- optional parameters
lampColorSf56          (166), -- optional parameters
lampColorSf57          (167), -- optional parameters
lampColorSf58          (168), -- optional parameters
lampColorSf59          (169), -- optional parameters
lampColorSf60          (170), -- optional parameters
lampColorSf61          (171), -- optional parameters
lampColorSf62          (172), -- optional parameters
lampColorSf63          (173), -- optional parameters
lampColorSf64          (174), -- optional parameters
lampColorSf65          (175), -- optional parameters
lampColorSf66          (176), -- optional parameters
lampColorSf67          (177), -- optional parameters
lampColorSf68          (178), -- optional parameters
lampColorSf69          (179), -- optional parameters
lampColorSf70          (180), -- optional parameters
lampColorSf71          (181), -- optional parameters
lampColorSf72          (182), -- optional parameters
lampColorSf73          (183), -- optional parameters
lampColorSf74          (184), -- optional parameters
lampColorSf75          (185), -- optional parameters
lampColorSf76          (186), -- optional parameters
lampColorSf77          (187), -- optional parameters
lampColorSf78          (188), -- optional parameters
lampColorSf79          (189), -- optional parameters
lampColorSf80          (190), -- optional parameters
lampColorSf81          (191), -- optional parameters
lampColorSf82          (192), -- optional parameters
lampColorSf83          (193), -- optional parameters
lampColorSf84          (194), -- optional parameters
lampColorSf85          (195), -- optional parameters
lampColorSf86          (196), -- optional parameters
lampColorSf87          (197), -- optional parameters
lampColorSf88          (198), -- optional parameters
lampColorSf89          (199), -- optional parameters
lampColorSf90          (200), -- optional parameters
lampColorSf91          (201), -- optional parameters
lampColorSf92          (202), -- optional parameters
lampColorSf93          (203), -- optional parameters
lampColorSf94          (204), -- optional parameters
privateData            (205) } -- optional parameters

```

```

MessageWaiting ::= BIT STRING
{
    deviceForMsg        ( 0), -- optional parameters
    privateData         ( 1) } -- optional parameters

```

```

MicrophoneGain ::= BIT STRING
{
    microphoneGainAbs   ( 0), -- optional parameters
    microphoneGainInc   ( 1), -- optional parameters
    privateData         ( 2) } -- optional parameters

```

```

MicrophoneMute ::= BIT STRING
{
    privateData         ( 0) } -- optional parameters

```

```

RingerStatus ::= BIT STRING
{
    ringerModeRinging   ( 0), -- optional parameters
    ringerModeNotRinging ( 1), -- optional parameters
    ringCount           ( 2), -- optional parameters
    ringPattern         ( 3), -- optional parameters

```

```

ringVolumeAbs          ( 4),    -- optional parameters
ringVolumeInc          ( 5),    -- optional parameters
privateData             ( 6) } -- optional parameters

SpeakerMute ::= BIT STRING
{      privateData           ( 0) } -- optional parameters

SpeakerVolume ::= BIT STRING
{      speakerVolumeAbs      ( 0),    -- optional parameters
      speakerVolumeInc       ( 1),    -- optional parameters
      privateData             ( 2) } -- optional parameters

LogicalServList ::= SEQUENCE
{      callBackNonCallRel     [ 0] IMPLICIT CallBackNonCallRel   OPTIONAL,
      callBackMsgNonCallRel   [ 1] IMPLICIT CallBackMsgNonCallRel OPTIONAL,
      cancelCallBack          [ 2] IMPLICIT CancelCallBack        OPTIONAL,
      cancelCallBackMsg        [ 3] IMPLICIT CancelCallBackMsg   OPTIONAL,
      getAgentState            [ 4] IMPLICIT GetAgentState        OPTIONAL,
      getAutoAnswer             [ 5] IMPLICIT GetAutoAnswer        OPTIONAL,
      getAutoWorkMode          [ 6] IMPLICIT GetAutoWorkMode      OPTIONAL,
      getCallerIDStatus        [ 7] IMPLICIT GetCallerIDStatus    OPTIONAL,
      getCallBack              [19] IMPLICIT GetCallBack        OPTIONAL,
      getDoNotDisturb          [ 8] IMPLICIT GetDoNotDisturb    OPTIONAL,
      getForwarding            [ 9] IMPLICIT GetForwarding      OPTIONAL,
      getLastNumberDialed      [10] IMPLICIT GetLastNumberDialed OPTIONAL,
      getRouteingMode          [11] IMPLICIT GetRouteingMode    OPTIONAL,
      setAgentState             [12] IMPLICIT SetAgentState      OPTIONAL,
      setAutoAnswer              [13] IMPLICIT SetAutoAnswer     OPTIONAL,
      setAutoWorkMode           [14] IMPLICIT SetAutoWorkMode   OPTIONAL,
      setCallerIDStatus         [15] IMPLICIT SetCallerIDStatus  OPTIONAL,
      setDoNotDisturb           [16] IMPLICIT SetDoNotDisturb   OPTIONAL,
      setForwarding             [17] IMPLICIT SetForwarding     OPTIONAL,
      setRouteingMode           [18] IMPLICIT SetRouteingMode   OPTIONAL }

CallBackNonCallRel ::= BIT STRING
{      privateData           ( 0),    -- optional parameters
      privateDataInAck         ( 1),    -- optional parameters
      additionalReqForbidden   ( 2),    -- optional parameters
      ackModelMultiStep        ( 3) } -- misc characteristics

CallBackMsgNonCallRel ::= BIT STRING
{      privateData           ( 0),    -- optional parameters
      privateDataInAck         ( 1),    -- optional parameters
      additionalReqForbidden   ( 2),    -- optional parameters
      ackModelMultiStep        ( 3) } -- misc characteristics

CancelCallBack ::= BIT STRING
{      privateData           ( 0),    -- optional parameters
      privateDataInAck         ( 1),    -- optional parameters
      ackModelMultiStep        ( 2),    -- misc characteristics
      supportsClearing         ( 3) } -- misc characteristics

CancelCallBackMsg ::= BIT STRING
{      privateData           ( 0),    -- optional parameters
      privateDataInAck         ( 1),    -- optional parameters
      ackModelMultiStep        ( 2),    -- misc characteristics
      supportsClearing         ( 3) } -- misc characteristics

GetAgentState ::= BIT STRING
{      acdGroup               ( 0),    -- optional parameters

```

```

privateData ( 1), -- optional parameters
agentStateListAgentIDInAck ( 2), -- optional parameters
agentGroupInAck ( 3), -- optional parameters
pendingAgentStateInAck ( 4), -- optional parameters
agentStateConditionForcedPauseInAck ( 5), -- optional parameters
agentStateConditionPauseInAck ( 6), -- optional parameters
privateDataInAck ( 7) } -- optional parameters

GetAutoAnswer ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    numberRingsInAck ( 1), -- optional parameters
    privateDataInAck ( 2) } -- optional parameters

GetAutoWorkMode ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    autoWorkIntervalInAck ( 1), -- optional parameters
    privateDataInAck ( 2) } -- optional parameters

GetCallerIDStatus ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1) } -- optional parameters

GetCallBack ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1) } -- optional parameters

GetDoNotDisturb ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    callOriginParameterInAck ( 1), -- optional parameters
    callOriginInternInAck ( 2), -- optional parameters
    callOriginExternInAck ( 3), -- optional parameters
    callingDeviceListInAck ( 4), -- optional parameters
    privateDataInAck ( 5) } -- optional parameters

GetForwarding ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    forwardListInAck ( 1), -- optional parameters
    forwardListImmediateInAck ( 2), -- optional parameters
    forwardListBusyInAck ( 3), -- optional parameters
    forwardListDNDInAck ( 4), -- optional parameters
    forwardListNoAnsInAck ( 5), -- optional parameters
    forwardListBusyIntInAck ( 6), -- optional parameters
    forwardListBusyExtInAck ( 7), -- optional parameters
    forwardListDNDIntInAck ( 8), -- optional parameters
    forwardListDNDExtInAck ( 9), -- optional parameters
    forwardListNoAnsIntInAck (10), -- optional parameters
    forwardListNoAnsExtInAck (11), -- optional parameters
    forwardListImmIntInAck (12), -- optional parameters
    forwardListImmExtInAck (13), -- optional parameters
    forwardDNInAck (14), -- optional parameters
    forwardDefaultInAck (15), -- optional parameters
    forwardDefaultTypeAndDNInAck (16), -- optional parameters
    forwardDefaultTypeInAck (17), -- optional parameters
    forwardDefaultDNInAck (18), -- optional parameters
    ringCountInAck (19), -- optional parameters
    privateDataInAck (20) } -- optional parameters

GetLastNumberDialed ::= BIT STRING
{
    privateData ( 0), -- optional parameters
    privateDataInAck ( 1) } -- optional parameters

```

```

GetRouteingMode ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    privateDataInAck                           ( 1) } -- optional parameters

SetAgentState ::= BIT STRING
{
    requestedAgentStateLoggedOn              ( 0), -- optional parameters
    requestedAgentStateLoggedOff             ( 1), -- optional parameters
    requestedAgentStateNotReady             ( 2), -- optional parameters
    requestedAgentStateReady                ( 3), -- optional parameters
    requestedAgentStateWorkingAfterCall     ( 4), -- optional parameters
    agentID                                  ( 5), -- optional parameters
    password                                 ( 6), -- optional parameters
    group                                    ( 7), -- optional parameters
    privateData                             ( 8), -- optional parameters
    pendingAgentStateWorkingAfterCallInAck   ( 9), -- optional parameters
    pendingAgentStateNotReadyInAck          (10), -- optional parameters
    pendingAgentStateNullInAck              (11), -- optional parameters
    privateDataInAck                        (12), -- optional parameters
    ackModelMultiStep                      (13), -- misc characteristics
    groupDeviceAllowedInReq                (14), -- misc characteristics
    aCDDeviceAllowedInReq                  (15), -- misc characteristics
    delayTransitionIfBusy                 (16), -- misc characteristics
    delayTransitionIfWorkingAfterCall      (17) } -- misc characteristics

SetAutoAnswer ::= BIT STRING
{
    numberOfRings                            ( 0), -- optional parameters
    privateData                             ( 1), -- optional parameters
    privateDataInAck                        ( 2), -- optional parameters
    ackModelMultiStep                      ( 3) } -- misc characteristics

SetAutoWorkMode ::= BIT STRING
{
    autoWorkInterval                         ( 0), -- optional parameters
    privateData                            ( 1), -- optional parameters
    privateDataInAck                        ( 2), -- optional parameters
    ackModelMultiStep                      ( 3), -- misc characteristics
    groupDeviceAllowedInReq                ( 4), -- misc characteristics
    aCDDeviceAllowedInReq                  ( 5) } -- misc characteristics

SetCallerIDStatus ::= BIT STRING
{
    privateData                            ( 0), -- optional parameters
    privateDataInAck                       ( 1), -- optional parameters
    ackModelMultiStep                     ( 2) } -- misc characteristics

SetDoNotDisturb ::= BIT STRING
{
    callOriginationInternal               ( 0), -- optional parameters
    callOriginationExternal              ( 1), -- optional parameters
    callingDeviceList                     ( 2), -- optional parameters
    privateData                           ( 3), -- optional parameters
    privateDataInAck                     ( 4), -- optional parameters
    ackModelMultiStep                   ( 5) } -- misc characteristics

SetForwarding ::= BIT STRING
{
    forwardingTypeBusy                  ( 0), -- optional parameters
    forwardingTypeBusyInt                ( 1), -- optional parameters
    forwardingTypeBusyExt                ( 2), -- optional parameters
    forwardingTypeDND                   ( 3), -- optional parameters
    forwardingTypeDNDInt                ( 4), -- optional parameters
    forwardingTypeDNDExt                ( 5), -- optional parameters
    forwardingTypeNoAns                 ( 6), -- optional parameters

```

```

forwardingTypeNoAnsInt          ( 7),    -- optional parameters
forwardingTypeNoAnsExt          ( 8),    -- optional parameters
forwardingTypeImmediate         ( 9),    -- optional parameters
forwardingTypeImmInt           (10),    -- optional parameters
forwardingTypeImmExt           (11),    -- optional parameters
forwardDN                      (12),    -- optional parameters
ringCount                      (13),    -- optional parameters
privateData                     (14),    -- optional parameters
privateDataInAck                (15),    -- optional parameters
ackModelMultiStep               (16),    -- misc characteristics
ringDuration                   (17) } -- optional parameters

SetRouteingMode ::= BIT STRING
{
    privateData                  ( 0),    -- optional parameters
    privateDataInAck              ( 1),    -- optional parameters
    ackModelMultiStep             ( 2) } -- misc characteristics

LogicalEvtsList ::= SEQUENCE
{
    agentBusy                    [ 0] IMPLICIT AgentBusy           OPTIONAL,
    agentLoggedOff                [ 1] IMPLICIT AgentLoggedOff        OPTIONAL,
    agentLoggedOn                 [ 2] IMPLICIT AgentLoggedOn        OPTIONAL,
    agentNotReady                 [ 3] IMPLICIT AgentNotReady       OPTIONAL,
    agentReady                    [ 4] IMPLICIT AgentReady          OPTIONAL,
    agentWorkingAfterCall         [ 5] IMPLICIT AgentWorkingAfterCall OPTIONAL,
    autoAnswer                    [ 6] IMPLICIT AutoAnswer         OPTIONAL,
    autoWorkMode                  [ 7] IMPLICIT AutoWorkMode        OPTIONAL,
    callBack                      [ 8] IMPLICITCallBackEvent      OPTIONAL,
    callBackMessage               [ 9] IMPLICITCallBackMessageEvent OPTIONAL,
    callerIDStatus                [10] IMPLICIT CallerIDStatus      OPTIONAL,
    doNotDisturb                  [11] IMPLICIT DoNotDisturb        OPTIONAL,
    forwarding                    [12] IMPLICIT Forwarding         OPTIONAL,
    routeingMode                  [13] IMPLICIT RouteingMode        OPTIONAL }

AgentBusy ::= BIT STRING
{
    agentID                      ( 0),    -- optional parameters
    acdGroup                      ( 1),    -- optional parameters
    pendingAgentStateWorkingAfterCall ( 2),    -- optional parameters
    pendingAgentStateNotReady      ( 3),    -- optional parameters
    pendingAgentStateReady         ( 4),    -- optional parameters
    pendingAgentStateNull          ( 5),    -- optional parameters
    cause                          ( 6),    -- optional parameters
    privateData                   ( 7) } -- optional parameters

AgentLoggedOff ::= BIT STRING
{
    agentID                      ( 0),    -- optional parameters
    acdGroup                      ( 1),    -- optional parameters
    agentPassword                 ( 2),    -- optional parameters
    cause                          ( 3),    -- optional parameters
    privateData                   ( 4) } -- optional parameters

AgentLoggedOn ::= BIT STRING
{
    agentID                      ( 0),    -- optional parameters
    acdGroup                      ( 1),    -- optional parameters
    agentPassword                 ( 2),    -- optional parameters
    cause                          ( 3),    -- optional parameters
    privateData                   ( 4) } -- optional parameters

AgentNotReady ::= BIT STRING
{
    agentID                      ( 0),    -- optional parameters
}

```

```

acdGroup          ( 1),    -- optional parameters
cause             ( 2),    -- optional parameters
privateData       ( 3) } -- optional parameters

AgentReady ::= BIT STRING
{
    agentID          ( 0),    -- optional parameters
    acdGroup         ( 1),    -- optional parameters
    cause            ( 2),    -- optional parameters
    privateData      ( 3) } -- optional parameters

AgentWorkingAfterCall ::= BIT STRING
{
    agentID          ( 0),    -- optional parameters
    acdGroup         ( 1),    -- optional parameters
    pendingAgentStateNotReady ( 2),    -- optional parameters
    pendingAgentStateReady   ( 3),    -- optional parameters
    pendingAgentStateNull    ( 4),    -- optional parameters
    cause             ( 5),    -- optional parameters
    privateData       ( 6) } -- optional parameters

AutoAnswer ::= BIT STRING
{
    numberOfRings    ( 0),    -- optional parameters
    privateData      ( 1) } -- optional parameters

AutoWorkMode ::= BIT STRING
{
    privateData      ( 0) } -- optional parameters

CallBackEvent ::= BIT STRING
{
    privateData      ( 0) } -- optional parameters

CallBackMessageEvent ::= BIT STRING
{
    privateData      ( 0) } -- optional parameters

CallerIDStatus ::= BIT STRING
{
    privateData      ( 0) } -- optional parameters

DoNotDisturb ::= BIT STRING
{
    callOriginationParameter ( 0),    -- optional parameters
    callOriginationInternal ( 1),    -- optional parameters
    callOriginationExternal  ( 2),    -- optional parameters
    callingDeviceList        ( 3),    -- optional parameters
    privateData              ( 4) } -- optional parameters

Forwarding ::= BIT STRING
{
    forwardingTypeBusy      ( 0),
    forwardingTypeBusyInt   ( 1),
    forwardingTypeBusyExt   ( 2),
    forwardingTypeDND       ( 3),
    forwardingTypeDNDInt    ( 4),
    forwardingTypeDNDExt    ( 5),
    forwardingTypeNoAns     ( 6),
    forwardingTypeNoAnsInt  ( 7),
    forwardingTypeNoAnsExt  ( 8),
    forwardingTypeImmediate ( 9),
    forwardingTypeImmInt    (10),
    forwardingTypeImmExt    (11),
    forwardTo               (12),
    forwardDefaultTypeAndDN (13),
    forwardDefaultType      (14),
    forwardDefaultDN        (15),
    ringCount               (16),
}

```

```

privateData (17),
ringDuration (18) }

RouteingMode ::= BIT STRING
{ privateData ( 0 ) -- optional parameters

DeviceMaintEvtsList ::= SEQUENCE
{ backInService [0] IMPLICIT BackInService OPTIONAL,
  deviceCapsChanged [1] IMPLICIT DeviceCapsChanged OPTIONAL,
  outOfService [2] IMPLICIT OutOfService OPTIONAL,
  partiallyInService [3] IMPLICIT PartiallyInService OPTIONAL }

BackInService ::= BIT STRING
{ cause ( 0 ), -- optional parameters
  privateData ( 1 ) -- optional parameters

DeviceCapsChanged ::= BIT STRING
{ cause ( 0 ), -- optional parameters
  privateData ( 1 ) -- optional parameters

OutOfService ::= BIT STRING
{ cause ( 0 ), -- optional parameters
  privateData ( 1 ) -- optional parameters

PartiallyInService ::= BIT STRING
{ cause ( 0 ), -- optional parameters
  privateData ( 1 ) -- optional parameters

IOServicesServList ::= SEQUENCE
{ ioRegister [ 0 ] IMPLICIT IoRegister OPTIONAL,
  ioRegisterAbort [ 1 ] IMPLICIT IoRegisterAbort OPTIONAL,
  ioRegisterCancel [ 2 ] IMPLICIT IoRegisterCancel OPTIONAL,
  dataPathResumed [ 3 ] IMPLICIT DataPathResumed OPTIONAL,
  dataPathSuspended [ 4 ] IMPLICIT DataPathSuspended OPTIONAL,
  fastData [ 5 ] IMPLICIT FastData OPTIONAL,
  resumeDataPath [ 6 ] IMPLICIT ResumeDataPath OPTIONAL,
  sendBroadcastData [ 7 ] IMPLICIT SendBroadcastData OPTIONAL,
  sendData [ 8 ] IMPLICIT SendData OPTIONAL,
  sendMulticastData [ 9 ] IMPLICIT SendMulticastData OPTIONAL,
  startDataPath [10] IMPLICIT StartDataPath OPTIONAL,
  stopDataPath [11] IMPLICIT StopDataPath OPTIONAL,
  suspendDataPath [12] IMPLICIT SuspendDataPath OPTIONAL }

IoRegister ::= BIT STRING
{ ioDevice ( 0 ), -- optional parameters
  privateData ( 1 ), -- optional parameters
  privateDataInAck ( 2 ), -- optional parameters
  allIODEvices ( 3 ) -- misc characteristics

IoRegisterAbort ::= BIT STRING
{ privateData ( 0 ) -- optional parameters

IoRegisterCancel ::= BIT STRING
{ privateData ( 0 ), -- optional parameters
  privateDataInAck ( 1 ) -- optional parameters

DataPathResumed ::= BIT STRING
{ privateData ( 0 ), -- optional parameters
  privateDataInAck ( 1 ) -- optional parameters

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DataPathSuspended ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    privateDataInAck                           ( 1) } -- optional parameters

FastData ::= BIT STRING
{
    objectDevice                             ( 0), -- optional parameters
    objectCall                                ( 1), -- optional parameters
    dataPathTypeText                         ( 2), -- optional parameters
    dataPathTypeVoice                         ( 3), -- optional parameters
    displayAttribPhyBaseRowNumber           ( 4), -- optional parameters
    displayAttribPhyBaseColumnNumber        ( 5), -- optional parameters
    displayAttribOffset                      ( 6), -- optional parameters
    privateData                               ( 7), -- optional parameters
    privateDataInAck                         ( 8), -- optional parameters
    supportsModifyingPosition                ( 9) } -- misc characteristics

ResumeDataPath ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    privateDataInAck                         ( 1), -- optional parameters
    sendsDataPathResumed                     ( 2) } -- misc characteristics

SendBroadcastData ::= BIT STRING
{
    privateData                               ( 0), -- optional parameters
    dataPathTypeText                         ( 1), -- optional parameters
    dataPathTypeVoice                        ( 2), -- optional parameters
    displayAttribPhyBaseRowNumber           ( 3), -- optional parameters
    displayAttribPhyBaseColumnNumber        ( 4), -- optional parameters
    displayAttribOffset                      ( 5), -- optional parameters
    privateDataInAck                         ( 6), -- optional parameters
    supportsModifyingPosition                ( 7) } -- misc characteristics

SendData ::= BIT STRING
{
    displayAttribPhyBaseRowNumber           ( 0), -- optional parameters
    displayAttribPhyBaseColumnNumber        ( 1), -- optional parameters
    displayAttribOffset                      ( 2), -- optional parameters
    ioCauseTerminationCharReceived        ( 3), -- optional parameters
    ioCauseCharCountReached                ( 4), -- optional parameters
    ioCauseTimeout                          ( 5), -- optional parameters
    ioCauseSfTerminated                   ( 6), -- optional parameters
    privateData                               ( 7), -- optional parameters
    privateDataInAck                        ( 8), -- optional parameters
    supportsModifyingPosition               ( 9) } -- misc characteristics

SendMulticastData ::= BIT STRING
{
    ioData                                    ( 0), -- optional parameters
    displayAttribPhyBaseRowNumber           ( 1), -- optional parameters
    displayAttribPhyBaseColumnNumber        ( 2), -- optional parameters
    displayAttribOffset                      ( 3), -- optional parameters
    privateData                               ( 4), -- optional parameters
    privateDataInAck                         ( 5), -- optional parameters
    supportsModifyingPosition                ( 6) } -- misc characteristics

StartDataPath ::= BIT STRING
{
    objectDevice                             ( 0), -- optional parameters
    objectCall                                ( 1), -- optional parameters
    dataPathDirectionCfToObject             ( 2), -- optional parameters
    dataPathDirectionObjectToCf              ( 3), -- optional parameters
    dataPathDirectionBidirectional          ( 4), -- optional parameters
    dataPathTypeText                         ( 5), -- optional parameters
    dataPathTypeVoice                        ( 6), -- optional parameters

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numberOfCharsToCollect          ( 7),    -- optional parameters
terminationChar                ( 8),    -- optional parameters
timeout                        ( 9),    -- optional parameters
privateData                     (10),    -- optional parameters
numberOfCharsToCollectInAck    (11),    -- optional parameters
terminationCharInAck           (12),    -- optional parameters
timeoutInAck                   (13),    -- optional parameters
privateDataInAck                (14) } -- optional parameters

StopDataPath ::= BIT STRING
{
    privateData                  ( 0),    -- optional parameters
    privateDataInAck              ( 1) } -- optional parameters

SuspendDataPath ::= BIT STRING
{
    privateData                  ( 0),    -- optional parameters
    privateDataInAck              ( 1) } -- optional parameters

DataCollectionServList ::= SEQUENCE
{
    dataCollected                 [ 0] IMPLICIT DataCollected           OPTIONAL,
    dataCollectionResumed          [ 1] IMPLICIT DataCollectionResumed   OPTIONAL,
    dataCollectionSuspended        [ 2] IMPLICIT DataCollectionSuspended  OPTIONAL,
    resumeDataCollection           [ 3] IMPLICIT ResumeDataCollection  OPTIONAL,
    startDataCollection            [ 4] IMPLICIT StartDataCollection  OPTIONAL,
    stopDataCollection             [ 5] IMPLICIT StopDataCollection   OPTIONAL,
    suspendDataCollection          [ 6] IMPLICIT SuspendDataCollection OPTIONAL }

DataCollected ::= BIT STRING
{
    digitsDuration                ( 0),    -- optional parameters
    digitsPauseDuration            ( 1),    -- optional parameters
    toneDetectedBeep               ( 2),    -- optional parameters
    toneDetectedBilling              ( 3),    -- optional parameters
    toneDetectedBusy                ( 4),    -- optional parameters
    toneDetectedCarrier              ( 5),    -- optional parameters
    toneDetectedConfirmation        ( 6),    -- optional parameters
    toneDetectedDial                  ( 7),    -- optional parameters
    toneDetectedFaxCNG                ( 8),    -- optional parameters
    toneDetectedHold                  ( 9),    -- optional parameters
    toneDetectedHowler                (10),    -- optional parameters
    toneDetectedIntrusion              (11),    -- optional parameters
    toneDetectedModemCNG                (12),    -- optional parameters
    toneDetectedPark                  (13),    -- optional parameters
    toneDetectedRecordWarning          (14),    -- optional parameters
    toneDetectedReorder                (15),    -- optional parameters
    toneDetectedRingback                (16),    -- optional parameters
    toneDetectedSilence                  (17),    -- optional parameters
    toneDetectedSitVC                  (18),    -- optional parameters
    toneDetectedSitIC                  (19),    -- optional parameters
    toneDetectedSitRO                  (20),    -- optional parameters
    toneDetectedSitNC                  (21),    -- optional parameters
    toneDetectedSf0                    (22),    -- optional parameters
    toneDetectedSf1                    (23),    -- optional parameters
    toneDetectedSf2                    (24),    -- optional parameters
    toneDetectedSf3                    (25),    -- optional parameters
    toneDetectedSf4                    (26),    -- optional parameters
    toneDetectedSf5                    (27),    -- optional parameters
    toneDetectedSf6                    (28),    -- optional parameters
    toneDetectedSf7                    (29),    -- optional parameters
    toneDetectedSf8                    (30),    -- optional parameters
    toneDetectedSf9                    (31),    -- optional parameters
    toneDetectedSf10                   (32),    -- optional parameters

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toneDetectedOther          (33),    -- optional parameters
toneFrequency              (34),    -- optional parameters
toneDuration               (35),    -- optional parameters
tonePauseDuration          (36),    -- optional parameters
connectionInfo             (37),    -- optional parameters
dcollCauseFushCharReceived (38),    -- optional parameters
dcollCauseCharCountReached (39),    -- optional parameters
dcollCauseTimeout          (40),    -- optional parameters
dcollCauseSFTerminated     (41),    -- optional parameters
privateData                (42),    -- optional parameters
privateDataInAck            (43) } -- optional parameters

DataCollectionResumed ::= BIT STRING
{
  privateData           ( 0),    -- optional parameters
  privateDataInAck       ( 1) } -- optional parameters

DataCollectionSuspended ::= BIT STRING
{
  privateData           ( 0),    -- optional parameters
  privateDataInAck       ( 1) } -- optional parameters

ResumeDataCollection ::= BIT STRING
{
  privateData           ( 0),    -- optional parameters
  privateDataInAck       ( 1) } -- optional parameters

StartDataCollection ::= BIT STRING
{
  objectDevice          ( 0),    -- optional parameters
  objectCall             ( 1),    -- optional parameters
  dataCollectionTypeDigits ( 2),   -- optional parameters
  dataCollectionTypeTones ( 3),   -- optional parameters
  digitsReportingCriteriaNumChars ( 4), -- optional parameters
  digitsReportingCriteriaFlushChar ( 5), -- optional parameters
  digitsReportingCriteriaTimeout ( 6), -- optional parameters
  privateData           ( 7),    -- optional parameters
  privateDataInAck       ( 8) } -- optional parameters

StopDataCollection ::= BIT STRING
{
  privateData           ( 0),    -- optional parameters
  privateDataInAck       ( 1) } -- optional parameters

SuspendDataCollection ::= BIT STRING
{
  privateData           ( 0),    -- optional parameters
  privateDataInAck       ( 1) } -- optional parameters

VoiceUnitServList ::= SEQUENCE
{
  activate               [12] IMPLICIT Activate      OPTIONAL,
  clear                  [13] IMPLICIT Clear        OPTIONAL,
  deactivate              [14] IMPLICIT Deactivate    OPTIONAL,
  concatenateMsg          [ 0] IMPLICIT ConcatenateMsg OPTIONAL,
  deleteMsg               [ 1] IMPLICIT DeleteMsg    OPTIONAL,
  queue                  [15] IMPLICIT Queue        OPTIONAL,
  playMsg                 [ 2] IMPLICIT PlayMsg     OPTIONAL,
  queryVoiceAttrib        [ 3] IMPLICIT QueryVoiceAttrib OPTIONAL,
  recordMsg               [ 4] IMPLICIT RecordMsg    OPTIONAL,
  reposition               [ 5] IMPLICIT Reposition    OPTIONAL,
  resume                  [ 6] IMPLICIT Resume      OPTIONAL,
  review                  [ 7] IMPLICIT Review      OPTIONAL,
  start                   [16] IMPLICIT Start        OPTIONAL,
  setVoiceAttrib          [ 8] IMPLICIT SetVoiceAttrib OPTIONAL,
  stop                    [ 9] IMPLICIT Stop        OPTIONAL,
  suspend                 [10] IMPLICIT Suspend     OPTIONAL,
}

```

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synthesizeMsg           [11] IMPLICIT SynthesizeMsg          OPTIONAL }

Activate ::= BIT STRING
{
    resource                      ( 0), -- optional parameters
    grammarName                   ( 1), -- optional parameters
    privateData                   ( 2), -- optional parameters
    privateDataInAck              ( 3) } -- optional parameters

Clear ::= BIT STRING
{
    resource                      ( 0), -- optional parameters
    privateData                   ( 1), -- optional parameters
    privateDataInAck              ( 2) } -- optional parameters

ConcatenateMsg ::= BIT STRING
{
    privateData                  ( 0), -- optional parameters
    privateDataInAck              ( 1) } -- optional parameters

Deactivate ::= BIT STRING
{
    resource                      ( 0), -- optional parameters
    grammarName                   ( 1), -- optional parameters
    privateData                   ( 2), -- optional parameters
    privateDataInAck              ( 3) } -- optional parameters

DeleteMsg ::= BIT STRING
{
    privateData                  ( 0), -- optional parameters
    privateDataInAck              ( 1) } -- optional parameters

PlayMsg ::= BIT STRING
{
    duration                      ( 0), -- optional parameters
    terminationParameter          ( 1), -- optional parameters
    terminationDurationExceeded   ( 2), -- optional parameters
    terminationDTMFDigitDetected ( 3), -- optional parameters
    terminationEndOfSpeechDetected( 4), -- optional parameters
    terminationSpeech             ( 5), -- optional parameters
    privateData                   ( 6), -- optional parameters
    privateDataInAck              ( 7), -- optional parameters
    multipleMsgsSimultaneously   ( 8) } -- miscellaneous characteristics

QueryVoiceAttrib ::= BIT STRING
{
    messageToQuery                (30), -- optional parameters
    resource                       (31), -- optional parameters
    attribToQueryEncodingAlgorithm( 0), -- optional parameters
    attribToQuerySamplingRate     ( 1), -- optional parameters
    attribToQueryDuration         ( 2), -- optional parameters
    attribToQueryFilename          ( 3), -- optional parameters
    attribToQueryCurrentPosition  ( 4), -- optional parameters
    attribToQueryCurrentSpeed     ( 5), -- optional parameters
    attribToQueryCurrentVolume    ( 6), -- optional parameters
    attribToQueryCurrentLevel     ( 7), -- optional parameters
    attribToQueryCurrentState     ( 8), -- optional parameters
    attribToQueryGrammars          (32), -- optional parameters
    attribToQueryLanguage          (33), -- optional parameters
    attribToQueryMode              (34), -- optional parameters
    attribToQueryRetainAudio       (35), -- optional parameters
    attribToQuerySilenceTimeout   (36), -- optional parameters
    attribToQueryMaxTimeout        (37), -- optional parameters
    attribToQueryBabbleTimeout    (38), -- optional parameters
    attribToQueryEndSilence        (39), -- optional parameters
    attribToQueryRejectionThreshold(40), -- optional parameters
    attribToQueryAutoInterruptable(41), -- optional parameters
}

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attribToQueryInnerXML          (42), -- optional parameters
attribToQueryInterdigitTimeout (43), -- optional parameters
attribToQueryPreflush          (44), -- optional parameters
connection                     ( 9), -- optional parameters
duration                       (10), -- optional parameters
terminationParameter           (11), -- optional parameters
terminationDurationExceeded    (12), -- optional parameters
terminationDTMFDigitDetected   (13), -- optional parameters
terminationEndOfSpeechDetected (14), -- optional parameters
terminationSpeech               (15), -- optional parameters
privateData                     (16), -- optional parameters
attribInAckEncodingAlgorithmADPCM6K (17), -- optional parameters
attribInAckEncodingAlgorithmADPCM8K (18), -- optional parameters
attribInAckEncodingAlgorithmMuLawPCM6K (19), -- optional parameters
attribInAckEncodingAlgorithmALawPCM6K (20), -- optional parameters
attribInAckSamplingRate         (21), -- optional parameters
attribInAckDuration             (22), -- optional parameters
attribInAckFilename              (23), -- optional parameters
attribInAckCurrentPosition      (24), -- optional parameters
attribInAckCurrentSpeed          (25), -- optional parameters
attribInAckCurrentVolumeAbs     (26), -- optional parameters
attribInAckCurrentGain           (27), -- optional parameters
attribInAckCurrentState          (28), -- optional parameters
privateDataInAck                 (29) } -- optional parameters

Queue ::= BIT STRING
{
  message          ( 0), -- optional parameters
  resource          ( 1), -- optional parameters
  text              ( 2), -- optional parameters
  privateData        ( 3), -- optional parameters
  privateDataInAck   ( 4) } -- optional parameters

RecordMsg ::= BIT STRING
{
  resource          (13), -- optional parameters
  samplingRate       ( 0), -- optional parameters
  encodingAlgorithmADPCM6K ( 1), -- optional parameters
  encodingAlgorithmADPCM8K ( 2), -- optional parameters
  encodingAlgorithmMuLawPCM6K ( 3), -- optional parameters
  encodingAlgorithmALawPCM6K ( 4), -- optional parameters
  maxDuration        ( 5), -- optional parameters
  terminationParameter ( 6), -- optional parameters
  terminationDurationExceeded ( 7), -- optional parameters
  terminationDTMFDigitDetected ( 8), -- optional parameters
  terminationEndOfDataDetected ( 9), -- optional parameters
  terminationSpeechDetected (10), -- optional parameters
  privateData         (11), -- optional parameters
  privateDataInAck    (12) } -- optional parameters

Reposition ::= BIT STRING
{
  periodOfRepositionStartOfMsg ( 0), -- optional parameters
  periodOfRepositionEndOfMsg   ( 1), -- optional parameters
  periodOfRepositionRelativePointer ( 2), -- optional parameters
  msgToReposition              ( 3), -- optional parameters
  privateData                   ( 4), -- optional parameters
  privateDataInAck              ( 5) } -- optional parameters

Resume ::= BIT STRING
{
  msgToResume                ( 0), -- optional parameters
  resource                     ( 4), -- optional parameters
  duration                      ( 1), -- optional parameters

```

```

privateData                                ( 2), -- optional parameters
privateDataInAck                            ( 3) } -- optional parameters

Review ::= BIT STRING
{
    msgToReview                           ( 4), -- optional parameters
    resource                               ( 5), -- optional parameters
    periodToResumeStartOfMsg              ( 0), -- optional parameters
    periodToResumeLengthOfReview          ( 1), -- optional parameters
    privateData                            ( 2), -- optional parameters
    privateDataInAck                      ( 3) } -- optional parameters

SetVoiceAttrib ::= BIT STRING
{
    resource                             ( 9), -- optional parameters
    currentSpeed                         ( 0), -- optional parameters
    currentVolumeAbs                     ( 1), -- optional parameters
    currentVolumeInc                     ( 2), -- optional parameters
    grammars                             (10), -- optional parameters
    language                             (11), -- optional parameters
    mode                                 (12), -- optional parameters
    retainAudio                          (13), -- optional parameters
    silenceTimeout                      (14), -- optional parameters
    maxTimeout                           (15), -- optional parameters
    babbleTimeout                        (16), -- optional parameters
    endSilence                           (17), -- optional parameters
    rejectionThreshold                  (18), -- optional parameters
    autoInterruptable                  (19), -- optional parameters
    innerXML                            (20), -- optional parameters
    interdigitTimeout                  (21), -- optional parameters
    preflush                            (22), -- optional parameters
    periodToResumeStartOfMsg            ( 3), -- optional parameters
    periodToResumeLengthOfReview        ( 4), -- optional parameters
    currentGain                           ( 5), -- optional parameters
    message                              ( 6), -- optional parameters
    privateData                          ( 7), -- optional parameters
    privateDataInAck                    ( 8) } -- optional parameters

Start ::= BIT STRING
{
    resource                            ( 0), -- optional parameters
    text                                ( 1), -- optional parameters
    privateData                          ( 2), -- optional parameters
    privateDataInAck                    ( 3) } -- optional parameters

Stop ::= BIT STRING
{
    msgToBeStopped                     ( 2), -- optional parameters
    resource                            ( 3), -- optional parameters
    privateData                         ( 0), -- optional parameters
    privateDataInAck                   ( 1) } -- optional parameters

Suspend ::= BIT STRING
{
    message                            ( 0), -- optional parameters
    resource                            ( 3), -- optional parameters
    privateData                         ( 1), -- optional parameters
    privateDataInAck                   ( 2) } -- optional parameters

SynthesizeMsg ::= BIT STRING
{
    genderMale                          ( 0), -- optional parameters
    genderFemale                        ( 1), -- optional parameters
    privateData                         ( 2), -- optional parameters
    privateDataInAck                   ( 3) } -- optional parameters

```

```

VoiceUnitEvtList ::= SEQUENCE
{
    bookmarkReached
    completed
    dtmfDetected
    emptied
    interruptionDetected
    notRecognized
    play
    record
    recognized
    review
    started
    silenceTimeoutExpired
    speechDetected
    stop
    suspendPlay
    suspendRecord
    voiceAttribChanged
    voiceErrorOccured
        [ 7] IMPLICIT BookmarkReached           OPTIONAL,
        [ 8] IMPLICIT Completed                OPTIONAL,
        [ 9] IMPLICIT DtmfDetected             OPTIONAL,
        [10] IMPLICIT Emptied                 OPTIONAL,
        [11] IMPLICIT InterruptionDetected    OPTIONAL,
        [12] IMPLICIT NotRecognized          OPTIONAL,
        [ 0] IMPLICIT Play                   OPTIONAL,
        [ 1] IMPLICIT Record                OPTIONAL,
        [13] IMPLICIT Recognized            OPTIONAL,
        [ 2] IMPLICIT ReviewEvent          OPTIONAL,
        [14] IMPLICIT Started              OPTIONAL,
        [15] IMPLICIT SilenceTimeoutExpired OPTIONAL,
        [16] IMPLICIT SpeechDetected       OPTIONAL,
        [ 3] IMPLICIT StopEvent            OPTIONAL,
        [ 4] IMPLICIT SuspendPlay          OPTIONAL,
        [ 5] IMPLICIT SuspendRecord        OPTIONAL,
        [ 6] IMPLICIT VoiceAttribChanged   OPTIONAL,
        [17] IMPLICIT VoiceErrorOccured    OPTIONAL }

BookmarkReached ::= BIT STRING
{
    resource
    currentPosition
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3) }   -- optional parameters

Completed ::= BIT STRING
{
    resource
    cause
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3) }   -- optional parameters

DtmfDetected ::= BIT STRING
{
    resource
    cause
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3) }   -- optional parameters

Emptied ::= BIT STRING
{
    resource
    cause
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3) }   -- optional parameters

InterruptionDetected ::= BIT STRING
{
    resource
    cause
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3) }   -- optional parameters

NotRecognized ::= BIT STRING
{
    resource
    result
    cause
    servicesPermitted
    privateData
        ( 0),    -- optional parameters
        ( 1),    -- optional parameters
        ( 2),    -- optional parameters
        ( 3),    -- optional parameters
        ( 4) }   -- optional parameters

Play ::= BIT STRING
{
    length
        ( 0),    -- optional parameters

```

```

currentPosition          ( 1),    -- optional parameters
speed                   ( 2),    -- optional parameters
cause                   ( 3),    -- optional parameters
servicesPermitted        ( 4),    -- optional parameters
privateData              ( 5) }  -- optional parameters

Recognized ::= BIT STRING
{
    resource             ( 0),    -- optional parameters
    cause                 ( 1),    -- optional parameters
    servicesPermitted     ( 2),    -- optional parameters
    privateData           ( 3) }  -- optional parameters

Record ::= BIT STRING
{
    length               ( 0),    -- optional parameters
    currentPosition       ( 1),    -- optional parameters
    speed                 ( 2),    -- optional parameters
    cause                 ( 3),    -- optional parameters
    servicesPermitted     ( 4),    -- optional parameters
    privateData           ( 5) }  -- optional parameters

ReviewEvent ::= BIT STRING
{
    message              ( 5),    -- optional parameters
    resource              ( 6),    -- optional parameters
    length                ( 0),    -- optional parameters
    currentPosition        ( 1),    -- optional parameters
    cause                 ( 2),    -- optional parameters
    servicesPermitted     ( 3),    -- optional parameters
    privateData            ( 4) }  -- optional parameters

SilenceTimeoutExpired ::= BIT STRING
{
    resource              ( 0),    -- optional parameters
    cause                 ( 1),    -- optional parameters
    servicesPermitted     ( 2),    -- optional parameters
    privateData            ( 3) }  -- optional parameters

SpeechDetected ::= BIT STRING
{
    resource              ( 0),    -- optional parameters
    cause                 ( 1),    -- optional parameters
    servicesPermitted     ( 2),    -- optional parameters
    privateData            ( 3) }  -- optional parameters

Started ::= BIT STRING
{
    resource              ( 0),    -- optional parameters
    cause                 ( 1),    -- optional parameters
    servicesPermitted     ( 2),    -- optional parameters
    privateData            ( 3) }  -- optional parameters

StopEvent ::= BIT STRING
{
    message              ( 6),    -- optional parameters
    resource              ( 7),    -- optional parameters
    length                ( 0),    -- optional parameters
    currentPosition        ( 1),    -- optional parameters
    speed                 ( 2),    -- optional parameters
    cause                 ( 3),    -- optional parameters
    servicesPermitted     ( 4),    -- optional parameters
    privateData            ( 5) }  -- optional parameters

SuspendPlay ::= BIT STRING
{
    message              ( 5),    -- optional parameters

```

```

resource          ( 6),    -- optional parameters
length           ( 0),    -- optional parameters
currentPosition  ( 1),    -- optional parameters
cause             ( 2),    -- optional parameters
servicesPermitted ( 3),   -- optional parameters
privateData       ( 4) } -- optional parameters

SuspendRecord ::= BIT STRING
{
  message          ( 5),    -- optional parameters
  resource          ( 6),    -- optional parameters
  length           ( 0),    -- optional parameters
  currentPosition  ( 1),    -- optional parameters
  cause             ( 2),    -- optional parameters
  servicesPermitted ( 3),   -- optional parameters
  privateData       ( 4) } -- optional parameters

VoiceAttribChanged ::= BIT STRING
{
  message          ( 7),    -- optional parameters
  resource          ( 8),    -- optional parameters
  playVolumeAbs    ( 0),    -- optional parameters
  playVolumeInc    ( 1),    -- optional parameters
  recordGain       ( 2),    -- optional parameters
  speed             ( 3),    -- optional parameters
  currentPosition  ( 4),    -- optional parameters
  grammars          ( 9),    -- optional parameters
  language          (10),   -- optional parameters
  mode              (11),   -- optional parameters
  retainAudio      (12),   -- optional parameters
  silenceTimeout   (13),   -- optional parameters
  maxTimeout        (14),   -- optional parameters
  babbleTimeout    (15),   -- optional parameters
  endSilence        (16),   -- optional parameters
  rejectionThreshold (17),  -- optional parameters
  autoInterruptable (18),  -- optional parameters
  innerXML          (19),  -- optional parameters
  interdigitTimeout (20),  -- optional parameters
  preflush          (21),  -- optional parameters
  cause              ( 5),    -- optional parameters
  privateData        ( 6) } -- optional parameters

VoiceErrorOccured ::= BIT STRING
{
  resource          ( 0),    -- optional parameters
  cause              ( 1),    -- optional parameters
  servicesPermitted ( 2),   -- optional parameters
  privateData        ( 3) } -- optional parameters

CDRServList ::= SEQUENCE
{
  cdrNotification   [ 0] IMPLICIT  CdrNotification      OPTIONAL,
  cdrReport         [ 1] IMPLICIT  CdrReport          OPTIONAL,
  sendStoredCDRs   [ 2] IMPLICIT  SendStoredCDRs     OPTIONAL,
  startCDRTransmission [ 3] IMPLICIT  StartCDRTransmission OPTIONAL,
  stopCDRTransmission [ 4] IMPLICIT  StopCDRTransmission OPTIONAL }

CdrNotification ::= BIT STRING
{
  cdrReasonTimeout  ( 0),    -- optional parameters
  cdrReasonThresholdReached ( 1),   -- optional parameters
  cdrReasonOther    ( 2),    -- optional parameters
  privateData       ( 3),    -- optional parameters
  privateDataInAck  ( 4) } -- optional parameters

```

```

CdrReport ::= BIT STRING
{
    cdrReasonTimeout                                ( 0),      -- optional parameters
    cdrReasonThresholdReached                      ( 1),      -- optional parameters
    cdrReasonOther                                    ( 2),      -- optional parameters
    recordNumber                                     ( 3),      -- optional parameters
    recordCreationTime                             ( 4),      -- optional parameters
    callingDevice                                    ( 5),      -- optional parameters
    calledDevice                                     ( 6),      -- optional parameters
    assocCallingDevice                            ( 7),      -- optional parameters
    assocCalledDevice                            ( 8),      -- optional parameters
    netwCallingDevice                           ( 9),      -- optional parameters
    netwCalledDevice                            (10),      -- optional parameters
    callCharacteristics                         (11),      -- optional parameters
    mediaCallCharacteristics                     (12),      -- optional parameters
    chargedDeviceOperator                       (13),      -- optional parameters
    chargedDeviceNonOperator                    (14),      -- optional parameters
    recordedCall                                 (15),      -- optional parameters
    nodeNumberArea0                               (16),      -- optional parameters
    nodeNumberArea1                               (17),      -- optional parameters
    nodeNumberArea2                               (18),      -- optional parameters
    tariffTable                                  (19),      -- optional parameters
    connectionStart                             (20),      -- optional parameters
    connectionEnd                               (21),      -- optional parameters
    connectionDuration                        (22),      -- optional parameters
    accessCode                                   (23),      -- optional parameters
    carrier                                      (24),      -- optional parameters
    selectedRoute                                (25),      -- optional parameters
    billingIndicatorNormalCharging            (26),      -- optional parameters
    billingIndicatorReverseCharging           (27),      -- optional parameters
    billingIndicatorCreditCardCharging        (28),      -- optional parameters
    billingIndicatorCallForwarding             (29),      -- optional parameters
    billingIndicatorCallDeflection            (30),      -- optional parameters
    billingIndicatorCallTransfer              (31),      -- optional parameters
    billingIndicatorOther                        (32),      -- optional parameters
    chargingInfo                                 (33),      -- optional parameters
    suppServiceInfoNormalCall                (34),      -- optional parameters
    suppServiceInfoConsultationCall          (35),      -- optional parameters
    suppServiceInfoTransferCall              (36),      -- optional parameters
    suppServiceInfoCallCompletion            (37),      -- optional parameters
    suppServiceInfoCallForwarding            (38),      -- optional parameters
    suppServiceInfoCallDiversion             (39),      -- optional parameters
    suppServiceInfoConferencing              (40),      -- optional parameters
    suppServiceInfoIntrusion                 (41),      -- optional parameters
    suppServiceInfoUserUserInfo             (42),      -- optional parameters
    suppServiceInfoOther                      (43),      -- optional parameters
    reasonForTermNormalClearing              (44),      -- optional parameters
    reasonForTermUnsuccessfulCallAttempt     (45),      -- optional parameters
    reasonForTermAbnormalTermination         (46),      -- optional parameters
    reasonForTermCallTransferred            (47),      -- optional parameters
    reasonForTermOther                        (48),      -- optional parameters
    authCode                                     (49),      -- optional parameters
    accountInfo                                  (50),      -- optional parameters
    deviceCategory                             (51),      -- optional parameters
    namedDeviceTypes                          (52),      -- optional parameters
    operatorDevice                            (53),      -- optional parameters
    lastStoredCDRReportSent                  (54),      -- optional parameters
    privateData                                (55),      -- optional parameters
    privateDataInAck                           (56) }      -- optional parameters

```

```

SendStoredCDRs ::= BIT STRING
{
    timePeriod                      ( 0), -- optional parameters
    privateData                      ( 1), -- optional parameters
    privateDataInAck                 ( 2) } -- optional parameters

StartCDRTransmission ::= BIT STRING
{
    transferModeTransferAtEndOfCall ( 0), -- optional parameters
    transferModeTransferOnRequest   ( 1), -- optional parameters
    transferModeTransferOnThresholdReached ( 2), -- optional parameters
    privateData                      ( 3), -- optional parameters
    privateDataInAck                 ( 4) } -- optional parameters

StopCDRTransmission ::= BIT STRING
{
    cdrTermReasonEndOfData          ( 0), -- optional parameters
    cdrTermReasonError              ( 1), -- optional parameters
    cdrTermReasonThresholdReached   ( 2), -- optional parameters
    cdrTermReasonOther              ( 3), -- optional parameter
    privateData                      ( 4), -- optional parameter
    privateDataInAck                ( 5), -- optional parameter
    swFunctionSupportsSending       ( 6), -- miscellaneous characteristics
    swFunctionSupportsReceiving     ( 7) } -- miscellaneous characteristics

LocationServicesServList ::= SEQUENCE
{
    getLocationInformation          [ 0] IMPLICIT GetLocationInformation      OPTIONAL,
    setLocationInformation          [ 1] IMPLICIT SetLocationInformation    OPTIONAL,
    locationTrackingSessionResumed [ 2] IMPLICIT LocationTrackingSessionResumed OPTIONAL,
    locationTrackingSessionSuspended [ 3] IMPLICIT LocationTrackingSessionSuspended OPTIONAL,
    resumeLocationTrackingSession   [ 4] IMPLICIT ResumeLocationTrackingSession OPTIONAL,
    locationInformationReport        [ 5] IMPLICIT LocationInformationReport OPTIONAL,
    startLocationTrackingSession    [ 6] IMPLICIT StartLocationTrackingSession OPTIONAL,
    stopLocationTrackingSession     [ 7] IMPLICIT StopLocationTrackingSession OPTIONAL,
    suspendLocationTrackingSession  [ 8] IMPLICIT SuspendLocationTrackingSession OPTIONAL,
    getLocationTrackingCapabilities [ 9] IMPLICIT GetLocationTrackingCapabilities OPTIONAL,
    getLocationTrackingSessions     [10] IMPLICIT GetLocationTrackingSessions OPTIONAL,
    locationSessionInfo             [11] IMPLICIT LocationSessionInfo      OPTIONAL }

GetLocationInformation ::= BIT STRING
{
    privateData                      ( 0),
    locationInfoInAck               ( 1),
    privateDataInAck                 ( 2) }

SetLocationInformation ::= BIT STRING
{
    locationInfo                      ( 0),
    replaceMode                       ( 1),
    privateData                      ( 2),
    privateDataInAck                 ( 3) }

LocationTrackingSessionResumed ::= BIT STRING
{
    locReason                        ( 0),
    privateData                      ( 1),
    privateDataInAck                 ( 2) }

LocationTrackingSessionSuspended ::= BIT STRING
{
    locReason                        ( 0),
    locationInfoList                 ( 1),
    privateData                      ( 2),
    privateDataInAck                 ( 3) }

ResumeLocationTrackingSession ::= BIT STRING
{
    privateData                      ( 0),

```

```

privateDataInAck ( 1 ) }

LocationInformationReport ::= BIT STRING
{
    locationInfoList ( 0 ),
    privateData ( 1 ),
    privateDataInAck ( 2 ) }

StartLocationTrackingSession ::= BIT STRING
{
    collectionType ( 0 ),
    collectionInterval ( 1 ),
    maxCollections ( 2 ),
    collectionFilter ( 3 ),
    reportingType ( 4 ),
    reportingCount ( 5 ),
    privateData ( 6 ),
    piDFProfileOption1inAck ( 7 ),
    piDFProfileOption2inAck ( 8 ),
    privateDataInAck ( 9 ) }

StopLocationTrackingSession ::= BIT STRING
{
    reason ( 0 ),
    privateData ( 1 ),
    privateDataInAck ( 2 ) }

SuspendLocationTrackingSession ::= BIT STRING
{
    reason ( 0 ),
    privateData ( 1 ),
    privateDataInAck ( 2 ) }

GetLocationTrackingCapabilities ::= BIT STRING
{
    privateData ( 0 ),
    privateDataInAck ( 1 ) }

GetLocationTrackingSessions ::= BIT STRING
{
    privateData ( 0 ),
    privateDataInAck ( 1 ) }

LocationSessionInfo ::= BIT STRING
{
    segmentID ( 0 ),
    privateData ( 1 ) }

VendorSpecificServList ::= SEQUENCE
{
    escapeRegister [ 0 ] IMPLICIT EscapeRegister OPTIONAL,
    escapeRegisterCancel [ 1 ] IMPLICIT EscapeRegisterCancel OPTIONAL,
    escapeRegisterAbort [ 2 ] IMPLICIT EscapeRegisterAbort OPTIONAL,
    escape [ 3 ] IMPLICIT Escape OPTIONAL,
    privateDataVersionSelection [ 4 ] IMPLICIT PrivateDataVersionSelection OPTIONAL }

EscapeRegister ::= BIT STRING
{
    privateData ( 0 ), -- optional parameters
    privateDataInAck ( 1 ) -- optional parameters }

EscapeRegisterCancel ::= BIT STRING
{
    privateData ( 0 ), -- optional parameters
    privateDataInAck ( 1 ) -- optional parameters }

EscapeRegisterAbort ::= BIT STRING
{
    privateData ( 0 ), -- optional parameters
    privateDataInAck ( 1 ) -- optional parameters }

```

```

Escape ::= BIT STRING
{
    privateDataInAck                               ( 0),      -- optional parameters
    swFunctionSupportsSending                      ( 1),      -- misc characteristics
    swFunctionSupportsReceiving                   ( 2) }     -- misc characteristics

PrivateDataVersionSelection ::= BIT STRING
{
    privateDataInAck                               ( 0) }     -- optional parameters

VendorSpecificEvtsList ::= SEQUENCE
{
    privateEvent                                [0] IMPLICIT   PrivateEvent
                                                OPTIONAL }

PrivateEvent ::= BIT STRING

-- other Types

DeviceIDFormat ::= BIT STRING
{
    dialableDigitsAsterix                         ( 0),
    dialableDigitsHash                           ( 1),
    dialableDigitsABCD                          ( 2),
    dialableDigitsExclamation                  ( 3),
    dialableDigitsP                            ( 4),
    dialableDigitsT                            ( 5),
    dialableDigitsComma                        ( 6),
    dialableDigitsW                            ( 7),
    dialableDigitsAt                            ( 8),
    dialableDigitsDollar                       ( 9),
    dialableDigitsSemicolon                   (10),
    sFReprExclamation                         (11),
    sFReprEt                                 (12),
    sFReprSlash                             (13),
    sFReprPercent                           (14),
    sFReprNM                                (15),
    sFReprGeneric                           (16),
    sFReprImplicitTON                      (17),
    sFReprPubTONUnkown                     (18),
    sFReprPubTONInternal                   (19),
    sFReprPubTONNational                   (20),
    sFReprPubTONSubscriber                 (21),
    sFReprPubTONAbbreviated                (22),
    sFReprPriTONUnknown                    (23),
    sFReprPriTONLevel3                    (24),
    sFReprPriTONLevel2                    (25),
    sFReprPriTONLevel1                    (26),
    sFReprPriTONLocal                     (27),
    sFReprPriTONAbbreviated               (28),
    sFReprOther                            (29),
    sFRResourceID                          (31),
    privateNumber                           (32),
    privateName                            (33),
    deviceNumber                           (30) }

SwDomainFeatures ::= BIT STRING
{
    isForwardingBefore                      ( 0),
    isForwardingAfter                       ( 1),
    swFunctionDefaultSettings              ( 2),
    userSpecific                           ( 3),
    userSpecificDefaultFowardingType     ( 4),
    userSpecificDefaultForwardDestination ( 5),
    negativeAcknowledgment                ( 6),
    supportFailedWithAssConn             ( 7),
}

```

```

supportFailedWithoutAssConn          ( 8),
supportFailedWithAssConnNotReported ( 9),
recall                            (10),
callBack                           (11),
extCallsIncoming                  (12),
extCallsOutgoing                  (13),
prompting                         (14) }

SwAppearanceAddressability ::= BIT STRING
{
    nonAddressable                 ( 0),
    addressable                    ( 1) }

SwAppearanceTypes ::= BIT STRING
{
    selectedStandard              ( 0),
    basicStandard                 ( 1),
    basicBridged                  ( 2),
    exclusiveBridged              ( 3),
    independentSharedBridged      ( 4),
    interIndependentSharedBridged ( 5) }

IgnoreUnsupportedParameters ::= ENUMERATED
{
    ignoreParameters               ( 0),
    rejectMessage                  ( 1) }

PauseTime ::= INTEGER (1..2000)

TimeStampMode ::= BIT STRING
{
    allEvents                      ( 0),
    allAcks                        ( 1),
    allServReqs                     ( 2) }

MiscMonitorCaps ::= BIT STRING
{
    groupInclusivModel             ( 0),
    groupExclusiveModel            ( 1),
    monitorPhysicalElement         ( 2),
    acdDeviceInclusiv              ( 3),
    acdDeviceExclusiv              ( 4) }

MaxLengthParameters ::= SEQUENCE
{
    accountInfo                   INTEGER (0..32),
    authCode                      INTEGER (0..32),
    agentID                       INTEGER (0..32),
    agentPassword                 INTEGER (0..32),
    callIDInConnectionID          INTEGER (0..8),
    correlatorData                INTEGER (0..32),
    privateData                   INTEGER,
    deviceIdentifiers              INTEGER (0..128),
    userData                      INTEGER (0..256),
    buttonLabel                   INTEGER (0..64),
    lampLabel                      INTEGER (0..64),
    charactersToSend               INTEGER (0..64) }

MaxLengthParametersContinued ::= SEQUENCE
{
    monitorCrossRefID              INTEGER,
    callQualifyingData              INTEGER,
    subDomainCallLinkageData        INTEGER,
    subDomainThreadID               INTEGER,
    ioData                          INTEGER,
    messageInfo                     INTEGER }

```

```

FilterThreshold ::= SEQUENCE
{
    getLogicalDeviceInformation           INTEGER,
    getPhysicalDeviceInformation         INTEGER,
    getSwitchingFunctionCaps            INTEGER,
    getSwitchingFunctionDevices          INTEGER,
    switchingFunctionDevices             INTEGER,
    changeSystemStatusFilter             INTEGER,
    systemStatusRegister                INTEGER,
    systemStatusRegisterAbort           INTEGER,
    systemStatusRegisterCancel          INTEGER,
    requestSystemStatus                 INTEGER,
    systemStatus                       INTEGER,
    switchingFunctionCapsChanged        INTEGER,
    switchingFunctionDevsChanged        INTEGER,
    changeMonitorFilter                 INTEGER,
    monitorStart                        INTEGER,
    monitorStop                         INTEGER,
    snapshotCall                        INTEGER,
    snapshotDevice                      INTEGER,
    snapshotCallData                    INTEGER,
    snapshotDeviceData                  INTEGER,
    acceptCall                          INTEGER,
    alternateCall                       INTEGER,
    answerCall                          INTEGER,
    callBackCallRelated                 INTEGER,
    callBackMessageCallRelated          INTEGER,
    campOnCall                          INTEGER,
    clearCall                           INTEGER,
    clearConnection                     INTEGER,
    conferenceCall                      INTEGER,
    consultationCall                   INTEGER,
    deflectCall                         INTEGER,
    dialDigits                          INTEGER,
    directedPickupCall                 INTEGER,
    groupPickupCall                     INTEGER,
    holdCall                            INTEGER,
    intrudeCall                         INTEGER,
    joinCall                            INTEGER,
    makeCall                            INTEGER,
    makePredictiveCall                 INTEGER,
    parkCall                            INTEGER,
    reconnectCall                       INTEGER,
    retrieveCall                        INTEGER,
    singleStepConferenceCall            INTEGER,
    singleStepTransferCall              INTEGER,
    transferCall                         INTEGER,
    associateData                       INTEGER,
    cancelTelephonyTone                 INTEGER,
    generateDigits                      INTEGER,
    generateTelephonyTone               INTEGER,
    sendUserInformation                 INTEGER,
    startDTMFDigitsCollection          INTEGER,
    startTelephonyTonesCollection       INTEGER,
    stopDTMFDigitsCollection            INTEGER,
    stopTelephonyTonesCollection         INTEGER,
    attachMediaService                  INTEGER,
    detachMediaService                  INTEGER,
    routeRegister                      INTEGER,
    routeRegisterAbort                  INTEGER,
    routeRegisterCancel                 INTEGER,
}

```

reRoute	INTEGER,
routeEnd	INTEGER,
routeReject	INTEGER,
routeRequest	INTEGER,
routeSelect	INTEGER,
routeUsed	INTEGER,
buttonPress	INTEGER,
getAuditoryApparatusInfo	INTEGER,
getButtonInformation	INTEGER,
getDisplay	INTEGER,
getHookswitchStatus	INTEGER,
getLampInformation	INTEGER,
getLampMode	INTEGER,
getMicrophoneGain	INTEGER,
getMicrophoneMute	INTEGER,
getMessageWaitingIndicator	INTEGER,
getRingerStatus	INTEGER,
getSpeakerMute	INTEGER,
getSpeakerVolume	INTEGER,
setButtonInformation	INTEGER,
setDisplay	INTEGER,
setHookswitchStatus	INTEGER,
setLampMode	INTEGER,
setMsgWaitingIndicator	INTEGER,
setMicrophoneGain	INTEGER,
setMicrophoneMute	INTEGER,
setRingerStatus	INTEGER,
setSpeakerMute	INTEGER,
setSpeakerVolume	INTEGER,
callBackMessageNonCallRelated	INTEGER,
callBackNonCallRelated	INTEGER,
cancelCallBack	INTEGER,
cancelCallBackMessage	INTEGER,
getAgentState	INTEGER,
getAutoAnswer	INTEGER,
getAutoWorkMode	INTEGER,
getCallerIDStatus	INTEGER,
getDoNotDisturb	INTEGER,
getForwarding	INTEGER,
getLastNumberDialed	INTEGER,
getRouteingMode	INTEGER,
setAgentState	INTEGER,
setAutoAnswer	INTEGER,
setAutoWorkMode	INTEGER,
setCallerIDStatus	INTEGER,
setDoNotDisturb	INTEGER,
setForwarding	INTEGER,
setRouteingMode	INTEGER,
backInService	INTEGER,
deviceCaosChanged	INTEGER,
outOfService	INTEGER,
partiallyInService	INTEGER,
ioRegister	INTEGER,
ioRegisterAbort	INTEGER,
ioRegisterCancel	INTEGER,
dataPathResumed	INTEGER,
dataPathSuspended	INTEGER,
fastData	INTEGER,
resumeDataPath	INTEGER,
sendBroadcastData	INTEGER,

```

sendData                                INTEGER ,
sendMulticastData                        INTEGER ,
startDataPath                            INTEGER ,
stopDataPath                             INTEGER ,
suspendDataPath                          INTEGER ,
concatenateMsg                           INTEGER ,
deleteMsg                               INTEGER ,
playMsg                                  INTEGER ,
queryVoiceAttribute                     INTEGER ,
recordMsg                               INTEGER ,
reposition                               INTEGER ,
resume                                   INTEGER ,
review                                    INTEGER ,
setVoiceAttribute                        INTEGER ,
stop                                     INTEGER ,
suspend                                  INTEGER ,
synthesizeMsg                           INTEGER ,
cDRNotification                         INTEGER ,
cDRReport                               INTEGER ,
sendStoredCDRs                           INTEGER ,
startCDRTransmission                   INTEGER ,
stopCDRTransmission                    INTEGER ,
escapeRegister                          INTEGER ,
escapeRegisterAbort                    INTEGER ,
escapeRegisterCancel                  INTEGER ,
escape                                    INTEGER ,
privateDataVersion                      INTEGER }

```

```

MediaServiceCapsList ::= SEQUENCE OF SEQUENCE
{
    mediaServiceType                      MediaServiceType,
    mediaServiceVersion                   INTEGER
                                         OPTIONAL,
    mediaServiceInstanceId               MediaServiceInstanceId
                                         OPTIONAL,
    connectionMode                      ConnectionModeBMap
                                         OPTIONAL,
    mediaStreamIDSupported              BOOLEAN }

```

```

DeviceCategory ::= ENUMERATED
{
    acd                           ( 0 ),
    group                         ( 1 ),
    networkInterface                ( 2 ),
    park                           ( 3 ),
    routeingDevice                 ( 4 ),
    station                        ( 5 ),
    voiceUnit                      ( 6 ),
    genericInteractiveVoice        ( 8 ),
    listenerInteractiveVoice       ( 9 ),
    dtmfInteractiveVoice          (10),
    promptInteractiveVoice         (11),
    promptQueueInteractiveVoice   (12),
    messageInteractiveVoice       (13),
    conference                      (14),
    other                           ( 7) }

```

```

GroupDeviceAttributes ::= BIT STRING
{
    acd                           ( 0 ),
    hunt                          ( 1 ),
    pick                          ( 2 ),
    user                           ( 4 ),
    agent                          ( 5 ),
    other                           ( 3) }

```

```

NamedDeviceTypes ::= ENUMERATED
{
    acd                      ( 0),
    acdGroup                 ( 1),
    button                   ( 2),
    buttonGroup              ( 3),
    conferenceBridge         ( 4),
    line                     ( 5),
    lineGroup                ( 6),
    operator                 ( 7),
    operatorGroup            ( 8),
    parkingDevice            ( 9),
    station                  (10),
    stationGroup             (11),
    trunk                    (12),
    trunkGroup               (13),
    other                    (14),
    otherGroup               (15) }

ACDModels ::= BIT STRING
{
    visibleACDRelatedDevices ( 0),
    nonVisibleACDRelatedDevices ( 1) }

AgentLogOnModels ::= BIT STRING
{
    logOnToACDDevice          ( 0),
    logOnToACDGroupExplOneStep ( 1),
    logOnToACDGroupExplTwoSteps ( 2),
    logOnToACDIImplOneStep    ( 3) }

AppearanceType ::= ENUMERATED
{
    selectedStandard          ( 0),
    basicStandard              ( 1),
    basicBridged               ( 2),
    exclusiveBridged           ( 3),
    independentSharedBridged   ( 4),
    interdependentSharedBridged ( 5) }

TransAndConfSetup ::= BIT STRING
{
    consultationCall          ( 0),
    holdCallMakeCall           ( 1),
    alternateCall               ( 2),
    twoCallsInHold              ( 3),
    twoCallsInConnected         ( 4) }

END -- of CSTA-capability-exchange

```

9.11 Call Detail Record

```

CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) }

DEFINITIONS ::=

BEGIN

EXPORTS
CDRCrossRefID, CDRInfo, CDRReason, CDRTermReason, CDRTimePeriod,
CDRTransferMode;

IMPORTS
DeviceID, CalledDeviceID, CallingDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceCategory, NamedDeviceTypes FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

CDRCrossRefID ::= OCTET STRING

CDRReason ::= ENUMERATED
{
  timeout                      (0),
  thresholdReached              (1),
  other                         (2) }

CDRInfo ::= SEQUENCE OF CDRInformationItem

CDRInformationItem ::= SEQUENCE
{
  recordNumber                  INTEGER (1..128)                                OPTIONAL,
  recordCreationTime            TimeInfo,                                     OPTIONAL,
  callingDevice                 CallingDeviceID,                            OPTIONAL,
  calledDevice                  CalledDeviceID,                            OPTIONAL,
  associatedCallingDevice       AssociatedCallingDeviceID,          OPTIONAL,
  associatedCalledDevice        AssociatedCalledDeviceID,          OPTIONAL,
}

```

networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
callCharacteristics	[0] IMPLICIT CallCharacteristics	OPTIONAL,
mediaCallCharacteristics	[1] IMPLICIT MediaCallCharacteristics	OPTIONAL,
chargedDevice	[2] ChargedDevice	OPTIONAL,
recordedCall	ConnectionID	OPTIONAL,
nodeNumber	[3] IMPLICIT NodeNumber	OPTIONAL,
tariffTable	[4] IMPLICIT INTEGER	OPTIONAL,
connectionStart	[5] IMPLICIT TimeInfo	OPTIONAL,
connectionEnd	[6] IMPLICIT TimeInfo	OPTIONAL,
connectionDuration	[7] IMPLICIT INTEGER	OPTIONAL,
accessCode	[8] IMPLICIT OCTET STRING	OPTIONAL,
carrier	[9] IMPLICIT INTEGER	OPTIONAL,
selectedRoute	[10] IMPLICIT INTEGER	OPTIONAL,
billingID	[11] IMPLICIT BillingID	OPTIONAL,
chargingInfo	[12] IMPLICIT ChargingInfo	OPTIONAL,
supplServiceInfo	[13] IMPLICIT SupplServiceInfo	OPTIONAL,
reasonForTerm	[14] IMPLICIT ReasonForTerm	OPTIONAL,
authCode	[15] IMPLICIT AuthCode	OPTIONAL,
accountInfo	[16] IMPLICIT AccountInfo	OPTIONAL,
deviceCategory	[17] IMPLICIT DeviceCategory	OPTIONAL,
namedDeviceTypes	[18] IMPLICIT NamedDeviceTypes	OPTIONAL,
operatorDevice	[19] DeviceID	OPTIONAL }

ChargedDevice ::= CHOICE

```
{
    operator          [ 0] IMPLICIT   DeviceID,
    nonOperator       [ 1] IMPLICIT   DeviceID }
```

NodeNumber ::= SEQUENCE

```
{
    area0            [ 0] IMPLICIT   INTEGER      OPTIONAL,
    area1            [ 1] IMPLICIT   INTEGER      OPTIONAL,
    area2            [ 2] IMPLICIT   INTEGER      OPTIONAL }
```

BillingID ::= ENUMERATED

```
{
    normalCharging   (0),
    reverseCharging  (1),
    creditCardCharging (2),
    callForwarding   (3),
    callDeflection   (4),
    callTransfer     (5),
    other             (6) }
```

SupplServiceInfo ::= BIT STRING

```
{
    normalCall        (0),
    consultationCall  (1),
    transferCall      (2),
    callCompletion    (3),
    callForwarding    (4),
    callDiversion     (5),
    conferencing      (6),
    intrusion         (7),
    userUserInfo      (8),
    other              (9) }
```

ReasonForTerm ::= ENUMERATED

```
{
    normalClearing    (0),
    unsuccessfulCallAttempt (1),
    abnormalTermination (2),
    callTransferred   (3),
    other              (4) }
```

```
CDRTimePeriod ::= SEQUENCE
{
    beginningOfCDR           TimeInfo,
    endOfCDR                 TimeInfo
}

CDRTransferMode ::= ENUMERATED
{
    transferAtEndOfCall      (0),
    transferOnRequest         (1),
    transferOnThresholdReached (2)
}

CDRTermReason ::= ENUMERATED
{
    endOfDataDetected         (0),
    errorDetected              (1),
    thresholdReached           (2),
    other                      (3)
}

END -- of CSTA-call-detail-record
```

9.12 Charge information

```

CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }

DEFINITIONS ::=

BEGIN

EXPORTS
ChargingInfo;

ChargingInfo ::= SEQUENCE
{   numberUnits           NumberUnits,
    typeOfChargingInfo    ENUMERATED
    {     subTotal          (0),
          total             (1) } }

NumberUnits ::= CHOICE
{   numberOfChargeUnits    [0] IMPLICIT  NumberOfChargingUnits,
    numberOfCurrencyUnits [1] IMPLICIT  NumberOfCurrencyUnits }

NumberOfChargingUnits ::= SEQUENCE OF SEQUENCE
{   chargingUnits         INTEGER,
    typeOfUnits            OCTET STRING  OPTIONAL }

NumberOfCurrencyUnits ::= SEQUENCE
{   currencyType          OCTET STRING,    -- size 0 indicates default currency
    currencyAmount         INTEGER,
    currencyMultiplier     ENUMERATED
    {     oneThousandth      (0),
          oneHundredth       (1),
          oneTenth            (2),
          one                 (3),
          ten                (4),
          hundred            (5),
          thousand           (6)
    }
}

END -- of CSTA-charge-info

```

9.13 Data call types

```
CSTA-data-call-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-call-types( 134) }

DEFINITIONS ::=

BEGIN

EXPORTS
NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList;

NumberOfChannels ::= INTEGER

MaxChannelBind ::= INTEGER

ConnectionRateList ::= SEQUENCE OF INTEGER

DelayToleranceList ::= SEQUENCE OF INTEGER

END -- of CSTA-data-call-types
```

9.14 Escape types

```
CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) }

DEFINITIONS ::=

BEGIN

EXPORTS
EscapeRegisterID;

EscapeRegisterID ::= [ 0 ] OCTET STRING

END -- of CSTA-escape-types
```

9.15 Media services

```

CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) }

DEFINITIONS ::=

BEGIN

EXPORTS
ConnectionInformation, ConnectionMode, ConnectionModeBMap, MediaCallCharacteristics,
MediaServiceInstanceID, MediaServiceType, MediaStreamID, MediaClass;

MediaServiceType ::= ENUMERATED
{
  cstaVoiceUnit                      ( 0 ),
  dataModem                          ( 1 ),
  digitalDataIsochronousIeee1394     ( 2 ),
  digitalDataIsochronousGeoport      ( 3 ),
  digitalDataIsochronousIeeeAtm     ( 4 ),
  digitalDataIsochronousIeeeIsdn    ( 5 ),
  digitalDataApi                     ( 6 ),
  ectfS100MediaServicesDefault       ( 7 ),
  ectfS100MediaServicesAppServices  ( 8 ),
  cstaIVRScript1                     ( 9 ),
  cstaIVRScript2                     (10),
  cstaIVRScript3                     (11),
  cstaIVRScript4                     (12),
  cstaIVRScript5                     (13),
  cstaIVRScript6                     (14),
  cstaIVRScript7                     (15),
  cstaIVRScript8                     (16),
  cstaIVRScript9                     (17),
  cstaIVRScript10                    (18),
  liveSoundCaptureAnalog           (19),
  liveSoundTransmitAnalog          (20),
  liveSoundCaptureIeee1394          (21),
  liveSoundTransmitIeee1394         (22),
  liveSoundCaptureTransmitGeoport   (23),
  liveSoundCaptureTransmitAtm      (24),
  liveSoundCaptureTransmitISDN     (25),
  soundCaptureTransmitADPCM        (26),
  soundCaptureTransmitApi          (27),
  usb                                (28),
  sfSpecific1                       (29),
  sfSpecific2                       (30),
  sfSpecific3                       (31),
  sfSpecific4                       (32),
  sfSpecific5                       (33),
  sfSpecific6                       (34),
  sfSpecific7                       (35),
  sfSpecific8                       (36),
  sfSpecific9                       (37),
  sfSpecific10                      (38) }

MediaStreamID ::= OCTET STRING

MediaServiceInstanceID ::= OCTET STRING

ConnectionInformation ::= SEQUENCE

```

```

{   flowDirection          ENUMERATED
    {
        transmit           (0),
        receive             (1),
        transmitAndReceive (2),
        none                (3) }  OPTIONAL,
numberOfChannels      INTEGER      DEFAULT 1,
mediaSessionInformation IA5String  OPTIONAL     }

ConnectionMode ::= ENUMERATED
{
    consultationConference      (0),
    consultationConferenceHold (1),
    deflect                     (2),
    directedPickup              (3),
    join                        (4),
    singleStepConference        (5),
    singleStepConferenceHold   (6),
    singleStepTransfer          (7),
    transfer                    (8),
    direct                      (9) }

ConnectionModeBMap ::= BIT STRING
{
    consultationConference      (0),
    consultationConferenceHold (1),
    deflect                     (2),
    directedPickup              (3),
    join                        (4),
    singleStepConference        (5),
    singleStepConferenceHold   (6),
    singleStepTransfer          (7),
    transfer                    (8),
    direct                      (9) }

MediaCallCharacteristics ::= SEQUENCE
{
    mediaClass                  MediaClass,
    connectionRate               [0] IMPLICIT INTEGER
                                OPTIONAL,
                                -- value 0 indicates that
                                -- the connection rate is
                                -- unknown
    bitRate                     [1] IMPLICIT ENUMERATED
    {
        constant      (0),
        variable      (1) }  DEFAULT constant,
    delayTolerance              [2] IMPLICIT INTEGER
                                OPTIONAL,
    switchingSubDomainCCIEType [3] IMPLICIT ENUMERATED
    {
        isdn         (0),
        atm          (1),
        isoEthernet (2),
        rsvp         (3),
        other        (4),
        sip          (5) }  OPTIONAL,
    switchingSubDomainInformationElements OCTET STRING
                                OPTIONAL }
                                -- is mandatory, if the switchingSubDomainCCIEType is present,
                                -- should be ignored otherwise

MediaClass ::= BIT STRING
{
    voice          ( 0),
    data           ( 1),
    image          ( 2),
    audio          ( 4),
    other          ( 3),
    notKnown       ( 5),

```

```
chat          ( 6 ),  
email        ( 7 ),  
message      ( 8 ),  
im           ( 9 ),  
sms          (10 ),  
mms          (11 ) }
```

END -- of CSTA-media-services

9.16 Physical device features

```

CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

DEFINITIONS ::=

BEGIN

EXPORTS
AuditoryApparatusID, AuditoryApparatusList, ButtonID, CharacterSet, DisplayID, LampBrightness,
LampColor, LampID, LampMode, MicGainAbs, MicrophoneGain, RingerID, RingMode,
VolAbs, Volume, HookswitchID;

AuditoryApparatusList ::= SEQUENCE OF SEQUENCE
{
    auditoryApparatus      AuditoryApparatusID,
    auditoryApparatusType   ENUMERATED
    {
        speakerphone          (0),
        handset                (1),
        headset                 (2),
        speakerOnlyPhone       (3),
        other                   (4) },
    speaker      BIT STRING
    {
        present                (0),
        volumeSettable          (1),
        volumeReadable           (2),
        muteSettable             (3),
        muteReadable              (4) },
    microphone  BIT STRING
    {
        present                (0),
        gainSettable             (1),
        gainReadable              (2),
        muteSettable             (3),
        muteReadable              (4) },
    hookswitch   BIT STRING
    {
        hookswitchSettable       (0),
        hookswitchOnHook         (1) },
    hookswitchID HookswitchID }
}

AuditoryApparatusID ::= OCTET STRING

ButtonID ::= OCTET STRING

CharacterSet ::= ENUMERATED
{
    ascii                  (0),
    unicode                (1),
    proprietary            (2) }

DisplayID ::= OCTET STRING

HookswitchID ::= OCTET STRING

LampBrightness ::= ENUMERATED
{
    unspecified            (0),
    dim                     (1),
    ...
}

```

```

bright          (2) }

LampColor ::= INTEGER
{
    noColor      (0),
    red          (1),
    yellow       (2),
    green         (3),
    blue          (4),
    unknown       (5) } (0..100)

LampID ::= OCTET STRING

LampMode ::= INTEGER
{
    brokenFlutter (0),
    flutter        (1),
    off            (2),
    steady         (3),
    wink           (4),
    unknown        (5) } (0..100)

MicrophoneGain ::= CHOICE
{
    micGainAbs     MicGainAbs,
    micGainInc     MicGainInc }

MicGainInc ::= ENUMERATED
{
    increment      (0),
    decrement      (1) }

MicGainAbs ::= INTEGER (0..100)

RingerID ::= OCTET STRING

RingMode ::= ENUMERATED
{
    ringing        (0),
    notRinging     (1) }

volume ::= CHOICE
{
    volAbs         VolAbs,
    volInc         VolInc }

VolInc ::= ENUMERATED
{
    increment      (0),
    decrement      (1) }

VolAbs ::= INTEGER (0..100)

END -- of CSTA-physical-device-feature

```

9.17 Data Collection

```
CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) }

DEFINITIONS ::=

BEGIN

EXPORTS
DcollCrossRefID;

DcollCrossRefID ::= OCTET STRING

END -- of CSTA-data-collection
```

9.18 Event Cause

```

CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }

DEFINITIONS ::=

BEGIN

EXPORTS
EventCause;

EventCause ::= ENUMERATED
{
  aCDBusy                      ( 57),
  aCDFForward                   ( 58),
  aCDSaturated                  ( 59),
  activation                     ( 88),
  activeParticipation           (  1),
  alertTimeExpired               ( 60),
  alternate                      (  2),
  autoWork                       ( 61),
  babble                         ( 89),
  badAttribute                   ( 90),
  badGrammar                     ( 91),
  badVoice                       ( 92),
  badUri                         ( 93),
  blocked                        ( 35),
  busy                           (  3),
  busyOverflow                   ( 94),
  calendarOverflow              ( 95),
  callBack                       (  4),
  callCancelled                  (  5),
  callForward                    (  9),
  callForwardImmediate          (  6),
  callForwardBusy                (  7),
  callForwardNoAnswer            (  8),
  callNotAnswered                ( 10),
  callPickup                     ( 11),
  campOn                         ( 12),
  campOnTrunks                  ( 62),
  capacityOverflow               ( 96),
  characterCountReached          ( 36),
  conference                      ( 63),
  consultation                   ( 37),
  destDetected                   ( 64),
  destNotObtainable              ( 13),
  destOutOfOrder                 ( 65),
  distributed                     ( 38),
  distributionDelay               ( 66),
  doNotDisturb                   ( 14),
  dTMFDigitDetected              ( 39),
  duplicateDTMF                  ( 97),
  durationExceeded                ( 40),
  earlyStop                       ( 98),
  emptyQueue                      ( 99),
  endOfMessageDetected            ( 41),
  enteringDistribution             ( 42),
  forcedPause                     ( 43),
  forcedTransition                ( 67),
}

```

incompatibleDestination	(15),
interDigitTimeout	(100),
intrude	(68),
invalidAccountCode	(16),
invalidConnection	(101),
invalidConnectionState	(102),
invalidNumberFormat	(69),
joinCall	(70),
keyOperation	(17),
keyOperationInUse	(71),
lockout	(18),
maintenance	(19),
makeCall	(44),
makeConnection	(103),
makePredictiveCall	(72),
maxTimeout	(104),
messageDurationExceeded	(73),
messageSizeExceeded	(45),
multipleAlerting	(74),
multipleQueuing	(75),
networkCongestion	(20),
networkDialling	(76),
networkNotObtainable	(21),
networkOutOfOrder	(77),
networkSignal	(46),
newCall	(22),
nextMessage	(47),
noAudioSaved	(105),
noAvailableAgents	(23),
noQueue	(106),
normal	(78),
normalClearing	(48),
noRule	(107),
noSpeechDetected	(49),
notAvailableBearerService	(79),
notSupportedBearerService	(80),
numberChanged	(50),
numberUnallocated	(81),
outOfGrammar	(108),
overflow	(26),
override	(24),
park	(25),
pathReplacement	(109),
queueCleared	(82),
queueTimeOverflow	(110),
recall	(27),
recallBusy	(111),
recallForwarded	(112),
recallNoAnswer	(113),
recallResourcesNotAvailable	(114),
redirected	(28),
remainsInQueue	(83),
reorderTone	(29),
reserved	(84),
resourcesNotAvailable	(30),
selectedTrunkBusy	(85),
silentParticipation	(31),
singleStepConference	(51),
singleStepTransfer	(52),
speechDetected	(53),

```
suspend          ( 86),
switchingFunctionTerminated ( 54),
terminationCharacterReceived ( 55),
timeout           ( 56),
transfer          ( 32),
trunksBusy        ( 33),
unauthorisedBearerService ( 87),
unknownOverflow    (115) }
-- voiceUnitInitiator   ( 34)
-- *** note that the voiceUnitOriginator ( 34) is no longer used (commented out) ***

END -- of CSTA-event-causes
```

9.19 Error Value

```

CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

DEFINITIONS ::=

BEGIN

EXPORTS
UniversalFailure, universalFailure, ErrorValue;

IMPORTS
ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) };

universalFailure ERROR ::=

{
  PARAMETER    UniversalFailure
  CODE         local:1 }

ErrorValue ::= UniversalFailure

UniversalFailure ::= CHOICE
{
  operation                  [0] OperationErrors,
  security                   [1] SecurityErrors,
  stateIncompatibility      [2] StateIncompatibilityErrors,
  systemResourceAvailability [3] SystemResourceAvailabilityErrors,
  subscribedResourceAvailability [4] SubscribedResourceAvailabilityErrors,
  performanceManagement     [5] PerformanceManagementErrors,
  privateData                [6] PrivateDataInfoErrors,
  unspecified                [7] UnspecifiedErrors }

OperationErrors ::= ENUMERATED -- in CSTA2 added in CSTA3
{
  generic                    ( 1),
  atLeastOneConditionalParameterNotProvided ( 29),
  featureAlreadySet          ( 30),
  invalidMsgID               ( 25),
  invalidParameterValue       ( 31),
  invalidAccountCode          ( 21),
  invalidAgentGroup           ( 32),
  invalidAgentIdentifier     ( 33),
  invalidAgentPassword        ( 34),
  invalidAgentState           ( 35),
  invalidAlertTime            ( 36),
  invalidAllocationState      ( 16),
  invalidAuthCode              ( 22),
  invalidAutoAnswer            ( 37),
  invalidBitRate               ( 38),
  invalidButtonIdentifier     ( 39),
  invalidCallType              ( 42),
  invalidConnectionRate        ( 43),
  invalidConsultPurpose        ( 44),
  invalidCorrelatorData        ( 20),
  invalidCrossRefID            ( 17),
  invalidDelayTolerance        ( 45),
  invalidDestination           ( 14),
  invalidDestinationDetect     ( 46),
  invalidDoNotDisturb          ( 47),
  invalidEscapeCrossRefID      ( 48),
}

```

invalidFeature	(15),
invalidFile	(28),
invalidFlowDirection	(49),
invalidForwardingDestination	(7),
invalidForwardingFlag	(51),
invalidForwardingType	(52),
invalidHookswitchType	(53),
invalidHookswitchComponent	(54),
invalidLampMode	(55),
invalidLampID	(56),
invalidMessageWaitingSetting	(57),
invalidMicrophoneGain	(58),
invalidMicrophoneMute	(59),
invalidMonitorCrossRefID	(60),
invalidMonitorFilter	(61),
invalidMonitorObject	(62),
invalidMonitorType	(63),
invalidNumberOFChannels	(64),
invalidParticipationType	(65),
invalidRemainRetry	(66),
invalidRingCount	(67),
invalidRingPattern	(68),
invalidRingVolume	(69),
invalidRouteingAlgorithm	(70),
invalidRouteingCrossRefID	(71),
invalidRouteRegistrationCrossRefID	(72),
invalidSpeakerVolume	(73),
invalidSpeakerMute	(74),
invalidSwitchingSubdomainCharsType	(75),
invalidObjectType	(18),
invalidActiveCallObject	(76),
invalidCalledDeviceObjectType	(77),
invalidCallingDeviceObjectType	(78),
invalidCallToBePickedUpObjectType	(79),
invalidCallToDivertObjectType	(80),
invalidCallToParkObjectType	(81),
invalidDestinationDeviceObject	(195),
invalidHeldCallObject	(82),
invalidMonitorObjectType	(83),
invalidParkToObject-Type	(84),
messageIDRequired	(26),
notDifferentDevices	(85),
notSameDevice	(86),
objectNotKnown	(4),
invalidCallID	(11),
invalidActiveCallID	(87),
invalidHeldCallID	(88),
invalidConnectionID	(13),
invalidActiveConnectionID	(89),
invalidHeldConnectionID	(90),
invalidDeviceID	(12),
invalidActiveDeviceID	(91),
invalidCalledDeviceID	(6),
invalidCallingDeviceID	(5),
invalidCallToParkDeviceID	(92),
invalidDestinationDeviceID	(93),
invalidDivertingDeviceID	(94),
invalidHeldDeviceID	(95),
invalidParkToDeviceID	(96),
invalidPickUpDeviceID	(97),

parameterNotSupported	(98),
accountCodeNotSupported	(99),
agentGroupNotSupported	(100),
agentPasswordNotSupported	(101),
agentStateNotSupported	(102),
alertTimeNotSupported	(103),
allocationNotSupported	(104),
authorisationCodeNotSupported	(105),
autoAnswerNotSupported	(106),
bitRateNotSupported	(107),
buttonNotSupported	(108),
callTypeNotSupported	(109),
charactersToSendNotSupported	(110),
connectionRateNotSupported	(111),
connectionReservationNotSupported	(112),
consultPurposeNotSupported	(113),
correlatorDataNotSupported	(114),
delayToleranceNotSupported	(115),
destinationDetectNotSupported	(116),
digitModeNotSupported	(117),
errorValueNotSupported	(118),
flowDirectionNotSupported	(119),
forwardingDestinationNotSupported	(120),
lampNotSupported	(121),
monitorTypeNotSupported	(122),
numberOfChannelsNotSupported	(123),
parameterTypeNotSupported	(124),
priorityNotSupported	(125),
privateDataNotSupported	(126),
pulseDurationNotSupported	(127),
pulseRateNotSupported	(128),
remainRetryNotSupported	(129),
ringCountNotSupported	(130),
routeUsedNotSupported	(131),
securityNotSupported	(132),
swSubdomainCCIETypeNotSupported	(133),
toneDurationNotSupported	(134),
sysStatRegIDNotSupported	(135),
userDataNotSupported	(136),
privilegeViolationSpecifiedDevice	(8),
privilegeViolationActiveDevice	(137),
privilegeViolationCalledDevice	(9),
privilegeViolationCallingDevice	(10),
privilegeViolationCallToParkDevice	(138),
privilegeViolationDestinationDevice	(139),
privilegeViolationOnDivertingDevice	(140),
privilegeViolationHeldDevice	(141),
privilegeViolationOnParkToDevice	(142),
privilegeViolationPickUpDevice	(143),
routeingTimerExpired	(144),
requestIncompatibleWithObject	(2),
requestIncompatibleWithConnection	(145),
requestIncompatibleWithActiveConnection	(146),
requestIncompatibleWithHeldConnection	(147),
requestIncompatibleWithDevice	(148),
requestIncompatibleWithCalledDevice	(24),
requestIncompatibleWithCallingDevice	(23),
requestIncompatibleWithSubjectDevice	(149),
requestIncompatibleWithActiveDevice	(150),
requestIncompatibleWithCallToParkDevice	(151),

```

requestIncompatibleWithDestinationDevice      (152),
requestIncompatibleWithDivertingDevice        (153),
requestIncompatibleWithHeldDevice            (154),
requestIncompatibleWithMedia                 ( 27),
requestIncompatibleWithParkToDevice          (155),
requestIncompatibleWithPickupDevice          (156),
serviceNotSupported                         ( 50),
securityViolation                           ( 19),
valueOutOfRange                            (  3),
agentStateOutOfRange                       (157),
alertTimeOutOfRange                        (158),
allocationOutOfRange                      (159),
autoAnswerOutOfRange                      (160),
bitRateOutOfRange                          (161),
callTypeOutOfRange                        (162),
connectionRateOutOfRange                  (163),
connectionReservaoationOutOfRange         (164),
consultPurposeOutOfRange                  (165),
correlatorDataOutOfRange                  (166),
delayToleranceOutOfRange                  (167),
destinationDetectOutOfRange              (168),
digitModeOutOfRange                       (169),
doNotDisturbOutOfRange                   (170),
flowDirectionOutOfRange                  (171),
forwardingFlagOutOfRange                (172),
forwardingTypeOutOfRange                 (173),
hookswitchComponentOutOfRange           (174),
hookswitchTypeOutOfRange                 (175),
lampModeOutOfRange                       (176),
messageWaitingSettingOutOfRange          (177),
micGainOutOfRange                        (178),
micMuteOutOfRange                        (179),
monitorTypeOutOfRange                   (180),
numberOfChannelsOutOfRange              (181),
participationTypeOutOfRange             (182),
pulseDurationOutOfRange                 (183),
pulseRateOutOfRange                     (184),
ringCountOutOfRange                     (185),
ringPatternOutOfRange                  (186),
ringVolumnOutOfRange                   (187),
routeingAlgorithmOutOfRange             (188),
speakerMuteOutOfRange                  (189),
speakerVolumeOutOfRange                 (190),
switchingCcittTypeOutOfRange           (191),
systemStatusOutOfRange                  (192),
toneCharacterOutOfRange                 (193),
toneDurationOutOfRange                  (194) }

```

```

SecurityErrors ::= ENUMERATED
{
    generic                      ( 0),
    sequenceNumberViolated       ( 1),
    timeStampViolated            ( 2),
    securityInfoViolated         ( 4) }

```

```

StateIncompatibilityErrors ::= ENUMERATED
{
    generic                      ( 1),
    invalidObjectState           ( 2),
    invalidDeviceState           (15),
    connectedCallExists          (16),
    invalidActiveDeviceState     (17),
}

```

```

invalidCalledDeviceState          (18),
invalidCallingDeviceState        (19),
invalidCallToParkDeviceState    (20),
invalidDestinationDeviceState   (21),
invalidDivertingDeviceState     (22),
invalidHeldDeviceState          (23),
invalidParkToDeviceState        (24),
invalidConnectionState          (25),
invalidActiveConnectionState    (26),
invalidConnectionIDForActiveCall ( 3),
invalidHeldConnectionState     (27),
noActiveCall                   ( 4),
noCallToAnswer                 ( 8),
noCallToClear                  ( 6),
noCallToComplete                ( 9),
noConnectionToClear             ( 7),
noHeldCall                      ( 5),
incorrectMsgState               (28),
beginningOfMsg                  (13),
endOfMsg                        (12),
msgSuspended                     (14),
notAbleToPlay                   (10),
notAbleToResume                 (11) }
```

```

SystemResourceAvailabilityErrors ::= ENUMERATED
{
    generic                      ( 1),
    resourceBusy                 ( 2),
    internalResourceBusy          ( 3),
    classifierBusy                ( 9),
    noMediaChannelsAvailable      (10),
    channelsInUseForBridgedDevices (11),
    channelsInUseForData          (12),
    toneDetectorBusy              (13),
    toneGeneratorBusy             (14),
    networkBusy                  ( 5),
    resourceOutOfService           ( 4),
    deviceOutOfService             (15),
    activeDeviceOutOfService       (16),
    calledDeviceOutOfService       (17),
    callingDeviceOutOfService      (18),
    callToParkDeviceOutOfService   (19),
    destinationDeviceOutOfService (20),
    divertingDeviceOutOfService    (21),
    heldDeviceOutOfService         (22),
    parkToDeviceOutOfService       (23),
    pickupDeviceOutOfService       (24),
    networkOutOfService            ( 6),
    otherResourceOutOfService      (25),
    resourceLimitExceeded          (26),
    overallMonitorLimitExceeded    ( 7),
    conferenceMemberLimitExceeded  ( 8),
    registrationLimitExceeded      (27),
    conferenceResourceCannotBeSatisfied (28),
    maxDevicesExceeded             (29),
    startTimeOutOfRange             (30),
    durationExceeded               (31) }
```

```

SubscribedResourceAvailabilityErrors ::= ENUMERATED
{
    generic                      ( 1),
    objectMonitorLimitExceeded    ( 2),
```

```
trunkLimitExceeded          ( 3),
outstandingReqLimitExceeded ( 4),
objectRegistrationLimitExceeded ( 5) }

PerformanceManagementErrors ::= ENUMERATED
{
    generic                  ( 1),
    performanceLimitExceeded ( 2) }

PrivateDataInfoErrors ::= ENUMERATED
{
    cSTAPrivateDataInfoError ( 1) }

UnspecifiedErrors ::= NULL

END -- of CSTA-error-definition
```

10 Event Report Service

```

CSTA-event-report-definitions
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-report-definitions( 21) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
CallClearedEvent FROM CSTA-call-cleared-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-cleared-event( 22) }
ConferencedEvent FROM CSTA-conferenced-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conferenced-event( 23) }
ConnectionClearedEvent FROM CSTA-connection-cleared-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-cleared-event( 24) }
DeliveredEvent FROM CSTA-delivered-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delivered-event( 25) }
DivertedEvent FROM CSTA-diverted-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) diverted-event( 26) }
EstablishedEvent FROM CSTA-established-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) established-event( 27) }
FailedEvent FROM CSTA-failed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) failed-event( 28) }
HeldEvent FROM CSTA-held-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) held-event( 29) }
NetworkReachedEvent FROM CSTA-network-reached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-reached-event( 30) }
OriginatedEvent FROM CSTA-originated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) originated-event( 31) }
QueuedEvent FROM CSTA-queued-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queued-event( 32) }
RetrievedEvent FROM CSTA-retrieved-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieved-event( 33) }
ServiceInitiatedEvent FROM CSTA-service-initiated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-initiated-event( 34) }
TransferredEvent FROM CSTA-transferred-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) transferred-event( 35) }
AutoAnswerEvent FROM CSTA-auto-answer-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-answer-event( 40) }

```

```
CallInformationEvent FROM CSTA-call-information-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-information-event( 41 ) }

DoNotDisturbEvent FROM CSTA-do-not-disturb-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) do-not-disturb-event( 42 ) }

ForwardingEvent FROM CSTA-forwarding-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) forwarding-event( 43 ) }

MessageWaitingEvent FROM CSTA-message-waiting-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) message-waiting-event( 44 ) }

MicrophoneMuteEvent FROM CSTA-microphone-mute-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) microphone-mute-event( 45 ) }

SpeakerMuteEvent FROM CSTA-speaker-mute-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) speaker-mute-event( 46 ) }

SpeakerVolumeEvent FROM CSTA-speaker-volume-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) speaker-volume-event( 47 ) }

AgentBusyEvent FROM CSTA-agent-busy-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) agent-busy-event( 319 ) }

AgentLoggedOnEvent FROM CSTA-agent-logged-on-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 ) --corrected 12/2000
  standard( 0 ) csta3( 285 ) agent-logged-on-event( 321 ) }

AgentLoggedOffEvent FROM CSTA-agent-logged-off-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) agent-logged-off-event( 320 ) }

AgentNotReadyEvent FROM CSTA-agent-not-ready-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) agent-not-ready-event( 322 ) }

AgentReadyEvent FROM CSTA-agent-ready-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) agent-ready-event( 323 ) }

AgentWorkingAfterCallEvent FROM CSTA-agent-working-after-call-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) agent-working-after-call-event( 324 ) }

BackInServiceEvent FROM CSTA-back-in-service-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) back-in-service-event( 333 ) }

OutOfServiceEvent FROM CSTA-out-of-service-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) out-of-service-event( 335 ) }

PrivateEvent FROM CSTA-private-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) private-event( 71 ) }

PlayEvent FROM CSTA-play-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) play( 75 ) }

RecordEvent FROM CSTA-record-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) record( 76 ) }

ReviewEvent FROM CSTA-review-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) review( 77 ) }

StopEvent FROM CSTA-stop-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) stop( 78 ) }
```

```

SuspendPlayEvent FROM CSTA-suspend-play-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-play( 79) }
SuspendRecordEvent FROM CSTA-suspend-record-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-record( 80) }
VoiceAttributesChangeEvent FROM CSTA-voice-attributes-change-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) voice-attributes-change-event( 74) }
MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
BridgedEvent FROM CSTA-bridged-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) bridged-event( 224) }
DigitsDialedEvent FROM CSTA-digits-dialed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-dialed-event( 225) }
NetworkCapabilitiesChangedEvent FROM CSTA-network-capabilities-changed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-capabilities-changed-event( 226) }
OfferedEvent FROM CSTA-offered-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) offered-event( 227) }
ChargingEvent FROM CSTA-charging-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charging-event( 240) }
DigitsGeneratedEvent FROM CSTA-digits-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-generated-event( 241) }
TelephonyTonesGeneratedEvent FROM CSTA-telephony-tones-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) telephony-tones-generated-event( 242) }
ServiceCompletionFailureEvent FROM CSTA-service-completion-failure-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-completion-failure-event( 243) }
MediaAttachedEvent FROM CSTA-media-attached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-attached-event( 246) }
MediaDetachedEvent FROM CSTA-media-detached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-detached-event( 247) }
ButtonInformationEvent FROM CSTA-button-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-information-event( 283) }
ButtonPressEvent FROM CSTA-button-press-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-press-event( 284) }
DisplayUpdatedEvent FROM CSTA-display-updated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) display-updated-event( 285) }
HookswitchEvent FROM CSTA-hookswitch-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) hookswitch-event( 286) }
LampModeEvent FROM CSTA-lamp-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) lamp-mode-event( 287) }
MicrophoneGainEvent FROM CSTA-microphone-gain-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) microphone-gain-event( 288) }

```

```

RingerStatusEvent FROM CSTA-ringer-status-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) ringer-status-event( 289 ) }

AutoWorkModeEvent FROM CSTA-auto-work-mode-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) auto-work-mode-event( 326 ) }

CallBackEvent FROM CSTA-call-back-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-back-event( 327 ) }

CallBackMessageEvent FROM CSTA-call-back-message-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-back-message-event( 328 ) }

CallerIDStatusEvent FROM CSTA-caller-id-status-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) caller-id-status-event( 329 ) }

RouteingModeEvent FROM CSTA-routeing-mode-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) routeing-mode-event( 332 ) }

PartiallyInServiceEvent FROM CSTA-partially-in-service-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) partially-in-service( 379 ) }

BookmarkReachedEvent FROM CSTA-bookmark-reached-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) bookmark-reached-event( 517 ) }

CompletedEvent FROM CSTA-completed-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) completed-event( 518 ) }

DtmfDetectedEvent FROM CSTA-dtmf-detected-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) dtmf-detected-event( 519 ) }

EmptiedEvent FROM CSTA-emptied-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) emptied-event( 520 ) }

InterruptionDetectedEvent FROM CSTA-interruption-detected-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) interruption-detected-event( 521 ) }

NotRecognizedEvent FROM CSTA-not-recognized-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) not-recognized-event( 522 ) }

RecognizedEvent FROM CSTA-recognized-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) recognized-event( 523 ) }

SilenceTimeoutExpiredEvent FROM CSTA-silence-timeout-expired-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) silence-timeout-expired-event( 524 ) }

SpeechDetectedEvent FROM CSTA-speech-detected-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) speech-detected-event( 525 ) }

StartedEvent FROM CSTA-started-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) started-event( 526 ) }

VoiceErrorOccuredEvent FROM CSTA-voice-error-occurred-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) voice-error-occurred-event( 527 ) }

DeviceCapsChangedEvent FROM CSTA-device-capabilities-changed-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-capabilities-changed-event( 334 ) };

CSTAEVENTREPORT OPERATION ::=
{   ARGUMENT           CSTAEVENTREPORTARGUMENT

```

```

ALWAYS RESPONDS          FALSE
CODE                      local:21 }

CSTAEventReportArgument ::= SEQUENCE
{   crossRefIdentifier      MonitorCrossRefID,
    eventSpecificInfo       EventSpecificInfo }

EventSpecificInfo ::= CHOICE
{   callControlEvents        [ 0 ] CallControlEvents,
    callAssociatedEvents     [ 1 ] CallAssociatedEvents,
    mediaAttachmentEvents    [ 2 ] MediaAttachmentEvents,
    physicalDeviceFeatureEvents [ 3 ] PhysicalDeviceFeatureEvents,
    logicalDeviceFeatureEvents [ 4 ] LogicalDeviceFeatureEvents,
    deviceMaintenanceEvents  [ 5 ] DeviceMaintenanceEvents,
    voiceUnitEvents          [ 6 ] VoiceUnitEvents,
    vendorSpecEvents         [ 7 ] VendorSpecEvents }

CallControlEvents ::= CHOICE
{   bridged                 [ 0 ] IMPLICIT BridgedEvent,
    callCleared              [ 1 ] IMPLICIT CallClearedEvent,
    conferenced              [ 2 ] IMPLICIT ConferencedEvent,
    connectionCleared        [ 3 ] IMPLICIT ConnectionClearedEvent,
    delivered                [ 4 ] IMPLICIT DeliveredEvent,
    digitsDialed              [ 5 ] IMPLICIT DigitsDialedEvent,
    diverted                 [ 6 ] IMPLICIT DivertedEvent,
    established              [ 7 ] IMPLICIT EstablishedEvent,
    failed                   [ 8 ] IMPLICIT FailedEvent,
    held                     [ 9 ] IMPLICIT HeldEvent,
    networkCapabilitiesChanged [ 10 ] IMPLICIT NetworkCapabilitiesChangedEvent,
    networkReached            [ 11 ] IMPLICIT NetworkReachedEvent,
    offered                  [ 12 ] IMPLICIT OfferedEvent,
    originated               [ 13 ] IMPLICIT OriginatedEvent,
    queued                   [ 14 ] IMPLICIT QueuedEvent,
    retrieved                [ 15 ] IMPLICIT RetrievedEvent,
    serviceInitiated         [ 16 ] IMPLICIT ServiceInitiatedEvent,
    transferred               [ 17 ] IMPLICIT TransferredEvent }

CallAssociatedEvents ::= CHOICE
{   callInformation          [ 0 ] IMPLICIT CallInformationEvent,
    charging                 [ 1 ] IMPLICIT ChargingEvent,
    digitsGeneratedEvent      [ 2 ] IMPLICIT DigitsGeneratedEvent,
    telephonyTonesGeneratedEvent [ 3 ] IMPLICIT TelephonyTonesGeneratedEvent,
    serviceCompletionFailure [ 4 ] IMPLICIT ServiceCompletionFailureEvent }

MediaAttachmentEvents ::= CHOICE
{   mediaAttached             [ 0 ] IMPLICIT MediaAttachedEvent,
    mediaDetached              [ 1 ] IMPLICIT MediaDetachedEvent }

PhysicalDeviceFeatureEvents ::= CHOICE
{   buttonInformation         [ 0 ] IMPLICIT ButtonInformationEvent,
    buttonPress                [ 1 ] IMPLICIT ButtonPressEvent,
    displayUpdated              [ 2 ] IMPLICIT DisplayUpdatedEvent,
    hookswitch                 [ 3 ] IMPLICIT HookswitchEvent,
    lampMode                   [ 4 ] IMPLICIT LampModeEvent,
    messageWaiting              [ 5 ] IMPLICIT MessageWaitingEvent,
    microphoneGain              [ 6 ] IMPLICIT MicrophoneGainEvent,
    microphoneMute              [ 7 ] IMPLICIT MicrophoneMuteEvent,
    ringerStatus                 [ 8 ] IMPLICIT RingerStatusEvent,
    speakerMute                 [ 9 ] IMPLICIT SpeakerMuteEvent,
    speakerVolume                [ 10 ] IMPLICIT SpeakerVolumeEvent }

```

```

LogicalDeviceFeatureEvents ::= CHOICE
{   agentBusy                               [ 0] IMPLICIT AgentBusyEvent,
    agentLoggedOn                            [ 1] IMPLICIT AgentLoggedOnEvent,
    agentLoggedOff                            [ 2] IMPLICIT AgentLoggedOffEvent,
    agentNotReady                           [ 3] IMPLICIT AgentNotReadyEvent,
    agentReady                                [ 4] IMPLICIT AgentReadyEvent,
    agentWorkingAfterCall                   [ 5] IMPLICIT AgentWorkingAfterCallEvent,
    autoAnswer                                [ 6] IMPLICIT AutoAnswerEvent,
    autoWorkMode                             [ 7] IMPLICIT AutoWorkModeEvent,
    callBack                                [ 8] IMPLICITCallBackEvent,
    callBackMessage                          [ 9] IMPLICIT CallBackMessageEvent,
    callerIDStatus                           [10] IMPLICIT CallerIDStatusEvent,
    doNotDisturb                            [11] IMPLICIT DoNotDisturbEvent,
    forwarding                               [12] IMPLICIT ForwardingEvent,
    routeingMode                            [13] IMPLICIT RouteingModeEvent }

DeviceMaintenanceEvents ::= CHOICE
{   backInService                           [ 0] IMPLICIT BackInServiceEvent,
    deviceCapabilityChanged                 [ 1] IMPLICIT DeviceCapsChangedEvent,
    outOfService                            [ 2] IMPLICIT OutOfServiceEvent,
    partiallyInService                     [ 3] IMPLICIT PartiallyInServiceEvent }

VoiceUnitEvents ::= CHOICE
{   bookmarkReached                        [ 7] IMPLICIT BookmarkReachedEvent,
    completed                               [ 8] IMPLICIT CompletedEvent,
    dtmfDetected                           [ 9] IMPLICIT DtmfDetectedEvent,
    emptied                                 [10] IMPLICIT EmptiedEvent,
    interruptionDetected                  [11] IMPLICIT InterruptionDetectedEvent,
    notRecognized                          [12] IMPLICIT NotRecognizedEvent,
    play                                    [ 0] IMPLICIT PlayEvent,
    recognized                             [13] IMPLICIT RecognizedEvent,
    record                                  [ 1] IMPLICIT RecordEvent,
    review                                  [ 2] IMPLICIT ReviewEvent,
    silenceTimeoutExpired                  [14] IMPLICIT SilenceTimeoutExpiredEvent,
    speechDetected                         [15] IMPLICIT SpeechDetectedEvent,
    started                                 [16] IMPLICIT StartedEvent,
    stop                                    [ 3] IMPLICIT StopEvent,
    suspendPlay                            [ 4] IMPLICIT SuspendPlayEvent,
    suspendRecord                          [ 5] IMPLICIT SuspendRecordEvent,
    voiceAttributesChange                  [ 6] IMPLICIT VoiceAttributesChangeEvent,
    voiceErrorOccured                      [17] IMPLICIT VoiceErrorOccuredEvent }

VendorSpecEvents ::= CHOICE
{   privateEvent                            [ 0] IMPLICIT PrivateEvent }

END -- of CSTA-event-report-definitions

```

11 Capability exchange services

11.1 Services

11.1.1 Get CSTA-Features

```
iOServicesServList      [10] IOServicesServList          OPTIONAL,
dataCollectionServList  [11] DataCollectionServList    OPTIONAL,
voiceServList           [12] VoiceUnitServList        OPTIONAL,
cDRServList             [13] CDRServList            OPTIONAL,
vendorSpecificServList [14] VendorSpecificServList  OPTIONAL,
locationServicesServList [15] LocationServicesServList OPTIONAL } ,  
supportedEvents SEQUENCE  
{   callControlEvtsList     [0] CallControlEvtsList    OPTIONAL,  
   callAssociatedEvtsList  [1] CallAssociatedEvtsList  OPTIONAL,  
   mediaEvtsList           [2] MediaEvtsList         OPTIONAL,  
   physDevEvtsList         [3] PhysDevEvtsList       OPTIONAL,  
   logicalEvtsList         [4] LogicalEvtsList      OPTIONAL,  
   deviceMaintEvtsList    [5] DeviceMaintEvtsList  OPTIONAL,  
   voiceEvtsList           [6] VoiceUnitEvtsList    OPTIONAL,  
   vendorSpecificEvtsList [7] VendorSpecificEvtsList OPTIONAL }  OPTIONAL,  
extensions               CSTACommonArguments          OPTIONAL }
```

END -- of CSTA-get-csta-features-service

11.1.2 Get logical device information

```

CSTA-get-logical-device-information
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) get-logical-device-information( 201 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
MonitorFilter, MonitorMediaClass FROM CSTA-status-reporting
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) status-reporting( 126 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes, ACDModels, AgentLogOnModels, AppearanceType,
MiscMonitorCaps, TransAndConfSetup, MediaServiceCapsList, RoutingServList, LogDevServList,
LogDevEvtsList, DeviceMaintEvtsList
FROM CSTA-capability-exchange
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) capability-exchange( 131 ) }
NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList
FROM CSTA-data-call-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-call-types( 134 ) };

getLogicalDeviceInformation OPERATION ::=
{   ARGUMENT          GetLogicalDeviceInformationArgument
    RESULT            GetLogicalDeviceInformationResult
    ERRORS           {universalFailure }
    CODE             local:201 };

GetLogicalDeviceInformationArgument ::= SEQUENCE
{   device                  DeviceID,
   extensions               CSTACurrentArguments
                           OPTIONAL }

GetLogicalDeviceInformationResult ::= SEQUENCE
{   deviceCategory          [ 0 ] IMPLICIT DeviceCategory
   groupDeviceAttributes    [ 1 ] IMPLICIT GroupDeviceAttributes
   namedDeviceTypes         [ 2 ] IMPLICIT NamedDeviceTypes
   shortFormDeviceID        [ 3 ] DeviceID
   hasPhysicalElement       BOOLEAN,
   acdModels                ACDModels,
   agentLogOnModels         [ 4 ] IMPLICIT AgentLogOnModels
                           OPTIONAL ,
   appearanceAddressable    BOOLEAN,
   appearanceType           AppearanceType,
   appearanceList           [ 5 ] IMPLICIT SEQUENCE OF IA5String
                           OPTIONAL ,
   otherPhysicalDeviceList  [ 6 ] IMPLICIT SEQUENCE OF DeviceID
                           OPTIONAL ,
   miscMonitorCaps          [ 7 ] IMPLICIT MiscMonitorCaps
                           OPTIONAL .
}

```

associatedGroupList	[8] IMPLICIT	SEQUENCE OF DeviceID	OPTIONAL,
maxCallbacks	[9] IMPLICIT	INTEGER	OPTIONAL,
maxAutoAnswerRings	[10] IMPLICIT	INTEGER	OPTIONAL,
maxActiveCalls	[11] IMPLICIT	INTEGER	OPTIONAL,
maxHeldCalls	[12] IMPLICIT	INTEGER	OPTIONAL,
maxFwdSettings	[13] IMPLICIT	INTEGER	OPTIONAL,
maxDevicesInConf	[14] IMPLICIT	INTEGER	OPTIONAL,
transAndConfSetup	[15] IMPLICIT	TransAndConfSetup	OPTIONAL,
deviceOnDeviceMonitorFilter	[16] IMPLICIT	MonitorFilter	OPTIONAL,
deviceOnConnectionMonitorFilter	[17] IMPLICIT	MonitorFilter	OPTIONAL,
callOnDeviceMonitorFilter	[18] IMPLICIT	MonitorFilter	OPTIONAL,
callOnConnectionMonitorFilter	[19] IMPLICIT	MonitorFilter	OPTIONAL,
mediaClassSupport	[20] IMPLICIT	MonitorMediaClass	OPTIONAL,
mediaServiceCapsList	[21] IMPLICIT	MediaServiceCapsList	OPTIONAL,
connectionRateList	[22] IMPLICIT	ConnectionRateList	OPTIONAL,
delayToleranceList	[23] IMPLICIT	DelayToleranceList	OPTIONAL,
numberOfChannels	[24] IMPLICIT	NumberOfChannels	OPTIONAL,
maxChannelBind	[25] IMPLICIT	MaxChannelBind	OPTIONAL,
routeingServList	[26] IMPLICIT	RouteingServList	OPTIONAL,
logDevServList	[27] IMPLICIT	LogDevServList	OPTIONAL,
logDevEvtsList	[28] IMPLICIT	LogDevEvtsList	OPTIONAL,
deviceMaintEvtsList	[29] IMPLICIT	DeviceMaintEvtsList	OPTIONAL,
extensions		CSTACommonArguments	OPTIONAL }

END -- of CSTA-get-logical-device-information

11.1.3 Get physical device information

```

CSTA-get-physical-device-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-physical-device-information( 202) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
MonitorFilter FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes, PhysDevServList, PhysDevEvtsList
FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

getPhysicalDeviceInformation OPERATION ::=
{
  ARGUMENT          GetPhysicalDeviceInformationArgument
  RESULT            GetPhysicalDeviceInformationResult
  ERRORS           {universalFailure }
  CODE              local:202 }

GetPhysicalDeviceInformationArgument ::= SEQUENCE
{
  device                  DeviceID,
  extensions             CSTACurrentArguments
                        OPTIONAL }

GetPhysicalDeviceInformationResult ::= SEQUENCE
{
  deviceCategory          [ 0] IMPLICIT DeviceCategory      DEFAULT station,
  groupDeviceAttributes   [ 1] IMPLICIT GroupDeviceAttributes OPTIONAL,
  namedDeviceTypes         [ 2] IMPLICIT NamedDeviceTypes    OPTIONAL,
  hasLogicalElement       BOOLEAN,
  otherLogicalDeviceList  [ 3] IMPLICIT SEQUENCE OF DeviceID  OPTIONAL,
  deviceModelName         [ 4] IMPLICIT IA5String (SIZE(0..64)) OPTIONAL,
  deviceOnDeviceMonitorFilter [ 5] IMPLICIT MonitorFilter    OPTIONAL,
  deviceOnConnectionMonitorFilter [ 6] IMPLICIT MonitorFilter    OPTIONAL,
  callOnDeviceMonitorFilter [ 7] IMPLICIT MonitorFilter    OPTIONAL,
  callOnConnectionMonitorFilter [ 8] IMPLICIT MonitorFilter    OPTIONAL,
  maxDisplays             [ 9] IMPLICIT INTEGER        OPTIONAL,
  maxButtons              [10] IMPLICIT INTEGER        OPTIONAL,
  maxLamps                [11] IMPLICIT INTEGER        OPTIONAL,
  maxRingPatterns         [12] IMPLICIT INTEGER        OPTIONAL,
  physDevServList         [13] IMPLICIT PhysDevServList  OPTIONAL,
  physDevEvtsList         [14] IMPLICIT PhysDevEvtsList  OPTIONAL,
  extensions              CSTACurrentArguments OPTIONAL }

```



INTERNATIONAL

END -- of CSTA-get-physical-device-information

11.1.4 Get switching function capabilities

```

CSTA-get-switching-function-capabilities
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-switching-function-capabilities( 203) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorMediaClass, MonitorFilter FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ACDModels, CapExchangeServList, DeviceIDFormat, FilterThreshold,
IgnoreUnsupportedParameters, CallControlServList, CallControlEvtsList,
CallAssociatedServList, CallAssociatedEvtsList, MediaServList, MediaEvtsList,
RouteingServList, PhysDevEvtsList, PhysDevServList, LogicalEvtsList, LogicalServList,
DeviceMaintEvtsList, IOServicesServList, DataCollectionServList, VoiceUnitServList,
VoiceUnitEvtsList, CDRServList, VendorSpecificServList, VendorSpecificEvtsList,
MaxLengthParameters, TransAndConfSetup, MediaServiceCapsList, MiscMonitorCaps,
MonitoringServList, PauseTime, SnapshotServList, SwAppearanceAddressability,
MaxLengthParametersContinued, SwAppearanceTypes, SwDomainFeatures, SystemStatusServList,
TimeStampMode, LocationServicesServList
FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }

NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList

FROM CSTA-data-call-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-call-types( 134) };

getSwitchingFunctionCapabilities OPERATION ::=
{
  ARGUMENT      GetSwitchingFunctionCapsArgument
  RESULT        GetSwitchingFunctionCapsResult
  ERRORS        {universalFailure }
  CODE          local:203 }

GetSwitchingFunctionCapsArgument ::= CHOICE
{
  extensions    CSTACurrentArguments,
  noData       NULL }

GetSwitchingFunctionCapsResult ::= SEQUENCE

```

```

{
    switchingSubDomainName IA5String (SIZE(0..64)),
    manufacturerName IA5String (SIZE(0..64)),
    profiles Profiles,
    deviceIDFormat DeviceIDFormat,
    swDomainFeatures SwDomainFeatures,
    swAppearanceAddressability SwAppearanceAddressability,
    swAppearanceTypes SwAppearanceTypes,
    ignoreUnsupportedParameters IgnoreUnsupportedParameters,
    callCharacteristicsSupported [ 0] IMPLICIT CallCharacteristics OPTIONAL,
    mediaClassSupport [ 1] IMPLICIT MonitorMediaClass OPTIONAL,
    numberOfChannels [ 2] IMPLICIT NumberOfChannels OPTIONAL,
    maxChannelBind [ 3] IMPLICIT MaxChannelBind OPTIONAL,
    miscMediaCallCharacteristics [ 4] IMPLICIT MiscMediaCallCharacteristics OPTIONAL,
    connectionRateList [ 5] IMPLICIT ConnectionRateList OPTIONAL,
    delayToleranceList [ 6] IMPLICIT DelayToleranceList OPTIONAL,
    pauseTime [ 7] IMPLICIT PauseTime OPTIONAL,
    currentTime [ 8] IMPLICIT TimeInfo OPTIONAL,
    messageSeqNumbers [ 9] IMPLICIT MessageSeqNumbers OPTIONAL,
    timeStampMode [10] IMPLICITTimeStampMode OPTIONAL,
    securityMode [11] IMPLICIT SecurityMode OPTIONAL,
    securityFormat [12] IMPLICIT SecurityFormat OPTIONAL,
    privateDataFormat [13] IMPLICIT SecurityFormat OPTIONAL,
    transAndConfSetup [14] IMPLICIT TransAndConfSetup OPTIONAL,
    monitorFilterItems [15] IMPLICIT MonitorFilterItems OPTIONAL,
    miscMonitorCaps [16] IMPLICIT MiscMonitorCaps OPTIONAL,
    correlatorDataSupported [17] IMPLICIT BOOLEAN OPTIONAL,
    dynamicFeatureSupported [18] IMPLICIT DynamicFeatureSupported OPTIONAL,
    callLinkageOptions [28] IMPLICIT CallLinkageOptions OPTIONAL,
    aCDModels [19] IMPLICIT ACDModels OPTIONAL,
    agentLogOnModels [20] IMPLICIT AgentLogOnModels OPTIONAL,
    agentStateModels [21] IMPLICIT AgentStateModels OPTIONAL,
    connectionView ConnectionView,
    maxLengthParameters maxLengthParameters,
    maxLengthParametersContinued [28] IMPLICIT maxLengthParametersContinued OPTIONAL,
    servEvtsList [22] IMPLICIT ServeEvtsList OPTIONAL,
    privateDataVersionList [23] IMPLICIT PrivateDataVersionList OPTIONAL,
    systemStatusTimer [24] IMPLICIT INTEGER (0..180) OPTIONAL,
    simpleThreshold [25] IMPLICIT INTEGER OPTIONAL,
    filterThreshold [26] IMPLICIT FilterThreshold OPTIONAL,
    mediaServiceCapsList [27] IMPLICIT MediaServiceCapsList OPTIONAL,
    maxDeviceHistoryLength [29] IMPLICIT INTEGER OPTIONAL,
    maxDestinationDevicesForDeflect [30] IMPLICIT INTEGER OPTIONAL,
    extensions CSTACurrentArguments OPTIONAL }

MonitorFilterItems ::= SEQUENCE
{
    deviceOnDeviceMonitorFilter [0] IMPLICIT MonitorFilter OPTIONAL,
    deviceOnConnectionMonitorFilter [1] IMPLICIT MonitorFilter OPTIONAL,
    callOnDeviceMonitorFilter [2] IMPLICIT MonitorFilter OPTIONAL,
    callOnConnectionMonitorFilter [3] IMPLICIT MonitorFilter OPTIONAL }

MessageSeqNumbers ::= BIT STRING
{
    allEvents (0),
    allAcks (1),
    allServReqs (2) }

SecurityMode ::= ENUMERATED
{
    allEvents (0),
    allAcks (1),
    allServReqs (2) }

```

```

SecurityFormat ::= BIT STRING
{
    octetStringFromSF                (0),
    otherTypeFromSF                  (1),
    octetStringToSF                  (2),
    otherTypeToSF                    (3) }

Profiles ::= BIT STRING
{
    basicTelephonyProfile           (0),
    routeingProfile                 (1),
    levellaVoiceBrowserProfile      (2),
    levellbVoiceBrowserProfile      (3),
    level2VoiceBrowserProfile       (4),
    minimalUaCSTAControlProfile    (5),
    basicUaCSTAControlProfile      (6),
    advancedUaCSTAControlProfile   (7),
    conferencingUaCSTAControlProfile(8),
    basicUaCSTAFeatureProfile      (9),
    advancedUaCSTAFeatureProfile   (10),
    speakerUACSTAFeatureProfile   (11),
    basicSpeechServiceProfile       (12),
    advancedSpeechServiceProfile    (13) }

DynamicFeatureSupported ::= ENUMERATED
{
    none                           (0),
    all                            (1),
    some                           (2) }

CallLinkageOptions ::= BIT STRING
{
    callLinkageFeatureSupported     (0),
    threadLinkageFeatureSupported   (1) }

AgentLogOnModels ::= BIT STRING
{
    logOnACDDevice                 (0),
    logOnACDGroupExplOneStep       (1),
    logOnACDGroupExplTwoSteps      (2),
    logOnACDGroupImplOneStep       (3) }

AgentStateModels ::= BIT STRING
{
    multiState                     (0),
    multiStateSemiIndependentLinked(1),
    agentOriented                  (2) }

ConnectionView ::= ENUMERATED
{
    fixed                          (0),
    local                          (1) }

ServEvtsList ::= SEQUENCE
{
    capExchangeServList          [ 0] IMPLICIT CapExchangeServList OPTIONAL,
    systemServList                [ 1] IMPLICIT SystemStatusServList OPTIONAL,
    monitoringServList            [ 2] IMPLICIT MonitoringServList OPTIONAL,
    snapshotServList              [ 3] IMPLICIT SnapshotServList OPTIONAL,
    callControlServList           [ 4] IMPLICIT CallControlServList OPTIONAL,
    callControlEvtsList           [ 5] IMPLICIT CallControlEvtsList OPTIONAL,
    callAssociatedServList         [ 6] IMPLICIT CallAssociatedServList OPTIONAL,
    callAssociatedEvtsList         [ 7] IMPLICIT CallAssociatedEvtsList OPTIONAL,
    mediaServList                  [ 8] IMPLICIT MediaServList OPTIONAL,
    mediaEvtsList                  [ 9] IMPLICIT MediaEvtsList OPTIONAL,
    routeingServList               [10] IMPLICIT RouteingServList OPTIONAL,
    physDevServList                [11] IMPLICIT PhysDevServList OPTIONAL,
    physDevEvtsList                [12] IMPLICIT PhysDevEvtsList OPTIONAL,
}

```

```
logicalServList          [13] IMPLICIT   LogicalServList           OPTIONAL,
logicalEvtsList          [14] IMPLICIT   LogicalEvtsList          OPTIONAL,
deviceMaintEvtsList      [15] IMPLICIT   DeviceMaintEvtsList      OPTIONAL,
ioServicesServList       [16] IMPLICIT   IOServicesServList        OPTIONAL,
dataCollectionServList   [17] IMPLICIT   DataCollectionServList  OPTIONAL,
voiceUnitServList        [18] IMPLICIT   VoiceUnitServList        OPTIONAL,
voiceUnitEvtsList        [19] IMPLICIT   VoiceUnitEvtsList       OPTIONAL,
cdrServList              [20] IMPLICIT   CDRServList             OPTIONAL,
vendorSpecificServList   [21] IMPLICIT   VendorSpecificServList  OPTIONAL,
vendorSpecificEvtsList   [22] IMPLICIT   VendorSpecificEvtsList  OPTIONAL,
statusReportingServList  [23] IMPLICIT   StatusReportingServList OPTIONAL,
locationServList         [24] IMPLICIT   LocationServicesServList OPTIONAL }

StatusReportingServList ::= SEQUENCE
{
    monitoringServices      [ 0] IMPLICIT   MonitoringServList        OPTIONAL,
    snapshotServices        [ 1] IMPLICIT   SnapshotServList          OPTIONAL,
    systemServices          [ 2] IMPLICIT   SystemStatusServList     OPTIONAL
}

MiscMediaCallCharacteristics ::= BIT STRING
{
    supportAdjustment      (0) }

PrivateDataVersionList ::= SEQUENCE OF INTEGER

END -- of CSTA-get-switching-function-capabilities
```

11.1.5 Get switching function devices

```

CSTA-get-switching-function-devices
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-switching-function-devices( 204) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

getSwitchingFunctionDevices OPERATION ::=
{   ARGUMENT          GetSwitchingFunctionDevicesArgument
   RESULT            GetSwitchingFunctionDevicesResult
   ERRORS           {universalFailure }
   CODE             local:204 }

GetSwitchingFunctionDevicesArgument ::= SEQUENCE
{   requestedDeviceID        DeviceID           OPTIONAL,
   requestedDeviceCategory    ReqDeviceCategory  OPTIONAL,
   extensions                 CSTACurrentArguments OPTIONAL }

GetSwitchingFunctionDevicesResult ::= SEQUENCE
{   serviceCrossRefID        ServiceCrossRefID,
   extensions                 CSTACurrentArguments OPTIONAL }

ReqDeviceCategory ::= ENUMERATED
{   acd                  ( 0),
   conference            (11),
   dtmfIV               (12),
   genericIV             (13),
   groupACD              ( 1),
   groupHunt              ( 2),
   groupPick              ( 3),
   groupOther              ( 4),
   groupUser              (14),
   listenerIV             (15),
   messageIV              (16),
   networkInterface       ( 5),
   park                  ( 6),
   promptIV              (17),
   promptQueue             (18),
   routeingDevice          ( 7),
   station                ( 8),
}

```

```
voiceUnit          ( 9 ),  
other            (10) }  
  
END -- of CSTA-get-switching-function-devices
```

11.1.6 Switching function devices

```

CSTA-switching-function-devices
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-devices( 205) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID, DeviceCategory, NamedDeviceTypes FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

switchingFunctionDevices OPERATION ::=

{   ARGUMENT      SwitchingFunctionDevicesArgument
    ERRORS        {universalFailure }
    CODE          local:205 }

SwitchingFunctionDevicesArgument ::= SEQUENCE
{   serviceCrossRefID      ServiceCrossRefID,
    segmentID            INTEGER                      OPTIONAL,
    lastSegment           BOOLEAN,
    deviceList             DeviceList,
    extensions             CSTACurrentArguments       OPTIONAL }

DeviceList ::= SEQUENCE OF SEQUENCE
{   deviceID              DeviceID,
    deviceCategory         [0] IMPLICIT DeviceCategory      DEFAULT station,
    namedDeviceTypes       [1] IMPLICIT NamedDeviceTypes  OPTIONAL,
    deviceAttributes       DeviceAttributes            OPTIONAL,
    deviceModelName        IA5String (SIZE(0..64))     OPTIONAL,
    nidGroup               DeviceID                   OPTIONAL }

DeviceAttributes ::= BIT STRING
{   mediaAccessDevice      ( 0),
    routeingDevice         ( 1),
    groupACD               ( 2),
    groupHunt              ( 3),
    groupPick              ( 4) }

END -- of CSTA-switching-function-devices

```

12 System services

12.1 Registration services

12.1.1 Change system status filter

```
CSTA-change-system-status-filter
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) change-system-status-filter( 206) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

changeSysStatFilter OPERATION ::=
{
  ARGUMENT          ChangeSysStatFilterArg
  RESULT            ChangeSysStatFilterRes
  ERRORS           {universalFailure }
  CODE              local: 206 }

ChangeSysStatFilterArg ::= SEQUENCE
{
  sysStatRegisterID      SysStatRegisterID,
  requestedStatusFilter   SystemStatus,
  extensions             CSTACurrentArguments OPTIONAL }

ChangeSysStatFilterRes ::= SEQUENCE
{
  actualStatusFilter     SystemStatus,
  extensions             CSTACurrentArguments OPTIONAL }

END -- of CSTA-change-system-status-filter
```

12.1.2 System register

```

CSTA-system-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) system-register( 207) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

systemRegister OPERATION ::=

{ ARGUMENT      SystemRegisterArgument
  RESULT        SystemRegisterResult
  ERRORS        {universalFailure }
  CODE          local: 207 }

SystemRegisterArgument ::= SEQUENCE
{ requestTypes           RequestTypes,
  requestedStatusFilter   StatusFilter           OPTIONAL,
  extensions              CSTACurrentArguments OPTIONAL }

SystemRegisterResult ::= SEQUENCE
{ sysStatRegisterID       SysStatRegisterID,
  actualStatusFilter      StatusFilter           OPTIONAL,
  extensions              CSTACurrentArguments OPTIONAL }

StatusFilter ::= BIT STRING
{ initializing            ( 0),
  enabled                 ( 1),
  normal                  ( 2),
  messageLost             ( 3),
  disabled                ( 4),
  partiallyDisabled       ( 5),
  overloadImminent        ( 6),
  overloadReached         ( 7),
  overloadRelieved        ( 8) }

RequestTypes ::= BIT STRING
{ systemStatus             ( 0),
  requestSystemStatus      ( 1),
  switchingFunctionCapsChanged ( 2),
  switchingFunctionDevicesChanged ( 3) }

END -- of CSTA-system-register

```

12.1.3 System register abort

```

CSTA-system-register-abort
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) system-register-abort( 208) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }

SysStatRegisterID FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }

CSTACurrentArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

systemRegisterAbort OPERATION ::=

{
    ARGUMENT          SystemRegisterAbortArgument
    ERRORS            {universalFailure }
    ALWAYS RESPONDS   FALSE
    CODE              local: 208 }

SystemRegisterAbortArgument ::= SEQUENCE
{
    sysStatRegisterID     SysStatRegisterID,
    extensions           CSTACurrentArguments        OPTIONAL }

END -- of CSTA-system-register-abort

```

12.1.4 System register cancel

```

CSTA-system-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) system-register-cancel( 209) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

systemRegisterCancel OPERATION ::=
{
  ARGUMENT          SystemRegisterCancelArgument
  RESULT            SystemRegisterCancelResult
  ERRORS           {universalFailure }
  CODE              local: 209 }

SystemRegisterCancelArgument ::= SEQUENCE
{
  sysStatRegisterID    SysStatRegisterID,
  extensions          CSTACurrentArguments        OPTIONAL }

SystemRegisterCancelResult ::= CHOICE
{
  extensions          CSTACurrentArguments,
  noData              NULL }

END -- of CSTA-system-register-cancel

```

12.2 Services

12.2.1 Request system status

```

CSTA-request-system-status
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) request-system-status( 210) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    { joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

requestSysStat OPERATION ::=

{   ARGUMENT          RequestSysStatArg
   RESULT             RequestSysStatRes
   ERRORS            {universalFailure }
   CODE              local: 210 }

RequestSysStatArg ::= SEQUENCE
{   sysStatRegisterID      SysStatRegisterID      OPTIONAL,
   extensions            CSTACurrentArguments  OPTIONAL }

RequestSysStatRes ::= SEQUENCE
{   systemStatus          SystemStatus,
   extensions            CSTACurrentArguments  OPTIONAL }

END -- of CSTA-request-system-status

```

12.2.2 System status

```

CSTA-system-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) system-status( 211) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

systemStatus OPERATION ::=

{ ARGUMENT          SystemStatusArg
  RESULT            SystemStatusRes
  ERRORS           {universalFailure }
  CODE              local: 211 }

SystemStatusArg ::= SEQUENCE
{ sysStatRegisterID   SysStatRegisterID           OPTIONAL,
  systemStatus        SystemStatus,
  extensions         CSTACurrentArguments        OPTIONAL }

SystemStatusRes ::= CHOICE
{ extensions         CSTACurrentArguments,
  noData             NULL }

END -- of CSTA-system-status

```

12.2.3 Switching function capabilities changed

```

CSTA-switching-function-capabilities-changed
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) switching-function-capabilities-changed( 212 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

swFunctionCapsChanged OPERATION ::=

{ ARGUMENT      SwFunctionCapsChangedArg
  RESULT        SwFunctionCapsChangedRes
  ERRORS        {universalFailure }
  CODE          local: 212 }

SwFunctionCapsChangedArg ::= SEQUENCE
{ sysStatRegisterID      SysStatRegisterID           OPTIONAL,
  extensions            CSTACurrentArguments       OPTIONAL }

SwFunctionCapsChangedRes ::= CHOICE
{ extensions          CSTACurrentArguments,
  noData              NULL }

END -- of CSTA-switching-function-capabilities-changed

```

12.2.4 Switching function devices changed

```

CSTA-switching-function-devices-changed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-devices-changed( 213) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

swFunctionDevicesChanged OPERATION ::=

{ ARGUMENT          SwFunctionDevicesChangedArg
  RESULT            SwFunctionDevicesChangedRes
  ERRORS           {universalFailure }
  CODE              local: 213 }

SwFunctionDevicesChangedArg ::= SEQUENCE
{ sysStatRegisterID      SysStatRegisterID      OPTIONAL,
  extensions             CSTACurrentArguments OPTIONAL }

SwFunctionDevicesChangedRes ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-switching-function-devices-changed

```

12.2.5 Get Registrations

```

CSTA-get-registrations
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) get-registrations( 371) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    { joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
RegistrationTypeList FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) }
RegistrationList FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
CSTACurrentArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

getRegistrations OPERATION ::=
{   ARGUMENT      GetRegistrationsArg
   RESULT        GetRegistrationsRes
   ERRORS        {universalFailure }
   CODE          local: 371 }

GetRegistrationsArg ::= SEQUENCE
{   requestedRegTypes      RegistrationTypeList      OPTIONAL,
   extensions            CSTACurrentArguments    OPTIONAL }

GetRegistrationsRes ::= SEQUENCE
{   crossRefIDorRegistrationData CHOICE
   {   serviceCrossRefID     ServiceCrossRefID,
       registrationList     RegistrationList },
   extensions            CSTACurrentArguments    OPTIONAL }

END -- of CSTA-get-registrations

```

12.2.6 Registration Info

```

CSTA-registration-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) registration-info( 372) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
RegistrationList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

registrationInfo OPERATION ::=
{   ARGUMENT      RegistrationInfoArg
    ERRORS        {universalFailure }
    CODE          local: 372 }

RegistrationInfoArg ::= SEQUENCE
{   serviceCrossRefID   ServiceCrossRefID,
    segmentID           INTEGER                      OPTIONAL,
    lastSegment         BOOLEAN,
    registrationList    RegistrationList,
    extensions          CSTACurrentArguments        OPTIONAL }

END -- of CSTA-registration-info

```

13 Monitoring services

13.1 Services

13.1.1 Change monitor filter

```
CSTA-change-monitor-filter
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) change-monitor-filter( 102 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
MonitorFilter, MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) status-reporting( 126 ) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

changeMonitorFilter OPERATION ::=
{   ARGUMENT          ChangeMonitorFilterArgument
   RESULT            ChangeMonitorFilterResult
   ERRORS           {universalFailure }
   CODE             local: 72 }

ChangeMonitorFilterArgument ::= SEQUENCE
{   crossRefIdentifier      MonitorCrossRefID,
   requestedFilterList       MonitorFilter,
   extensions                CSTACCommonArguments      OPTIONAL }

ChangeMonitorFilterResult ::= SEQUENCE
{   actualFilterList         MonitorFilter      OPTIONAL,
   extensions                 CSTACCommonArguments OPTIONAL }

END -- of CSTA-change-monitor-filter
```

13.1.2 Monitor start

```

CSTA-monitor-start
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-start( 101) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorObject, MonitorFilter, MonitorType, MonitorMediaClass,
MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

monitorStart OPERATION ::=
{
  ARGUMENT      MonitorStartArgument
  RESULT        MonitorStartResult
  ERRORS        {universalFailure }
  CODE          local: 71 }

MonitorStartArgument ::= SEQUENCE
{
  monitorObject      MonitorObject,
  requestedMonitorFilter [0] IMPLICIT MonitorFilter      OPTIONAL,
  monitorType        MonitorType                      OPTIONAL,
  requestedMonitorMediaClass [1] IMPLICIT MonitorMediaClass OPTIONAL,
  extensions         CSTACurrentArguments           OPTIONAL }

MonitorStartResult ::= SEQUENCE
{
  crossRefIdentifier MonitorCrossRefID,
  actualMonitorFilter [0] IMPLICIT MonitorFilter      OPTIONAL,
  actualMonitorMediaClass [1] IMPLICIT MonitorMediaClass OPTIONAL,
  monitorExistingCalls BOOLEAN                      OPTIONAL,
  extensions         CSTACurrentArguments           OPTIONAL }

END -- of CSTA-monitor-start

```

13.1.3 Monitor stop

```

CSTA-monitor-stop
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-stop( 103) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

monitorStop OPERATION ::=

{ ARGUMENT          MonitorStopArgument
  RESULT            MonitorStopResult
  ERRORS           {universalFailure }
  CODE              local: 73 }

MonitorStopArgument ::= SEQUENCE
{ crossRefIdentifier  MonitorCrossRefID,
  extensions         CSTACCommonArguments           OPTIONAL }

MonitorStopResult ::= CHOICE
{ extensions        CSTACCommonArguments,
  noData            NULL }

END -- of CSTA-monitor-stop

```

13.1.4 Get Monitor

```

CSTA-get-monitor
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-monitor( 373) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getMonitors OPERATION ::=
{   ARGUMENT          GetMonitorArgument
   RESULT            GetMonitorResult
   ERRORS           {universalFailure }
   CODE             local: 373 }

GetMonitorArgument ::= SEQUENCE
{   extensions          CSTACurrentArguments      OPTIONAL }

GetMonitorResult ::= SEQUENCE
{   crossRefIDorRegistrationData CHOICE
{   serviceCrossRefID    ServiceCrossRefID,
   monitorList         MonitorList },
   extensions          CSTACurrentArguments      OPTIONAL }

END -- of CSTA-get-monitor

```

13.1.5 Monitor Info

```

CSTA-monitor-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-info( 374) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

monitorInfo OPERATION ::=
{   ARGUMENT          MonitorInfoArgument
    ERRORS            {universalFailure }
    CODE              local: 374 }

MonitorInfoArgument ::= SEQUENCE
{   serviceCrossRefID      ServiceCrossRefID,
    segmentID           INTEGER                  OPTIONAL,
    lastSegment         BOOLEAN,
    monitorList         MonitorList,
    extensions          CSTACurrentArguments     OPTIONAL }

END -- of CSTA-monitor-info

```

14 Snapshot services

14.1 Services

14.1.1 Snapshot call

```
CSTA-snapshot-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-call( 105) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CallingDeviceID, CalledDeviceID, AssociatedCallingDeviceID,
AssociatedCalledDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
SnapshotCallData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
SubjectOfCall, LanguagePreferences, MessageInfo, DeviceHistory
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

snapshotCall OPERATION ::=
{   ARGUMENT      SnapshotCallArgument
   RESULT        SnapshotCallResult
   ERRORS        {universalFailure }
   CODE          local: 75 }

SnapshotCallArgument ::= SEQUENCE
```

```
{   snapshotObject           ConnectionID,  
extensions                  CSTACurrentArguments      OPTIONAL }
```

```
SnapshotCallResult ::= SEQUENCE  
{   crossRefIDorSnapshotData CHOICE  
   {     serviceCrossRefID      [0] IMPLICIT ServiceCrossRefID,  
        snapshotData          SnapshotCallData },  
     mediaCallCharacteristics MediaCallCharacteristics      OPTIONAL,  
     callCharacteristics      CallCharacteristics      OPTIONAL,  
     callingDevice            CallingDeviceID      OPTIONAL,  
     calledDevice             CalledDeviceID      OPTIONAL,  
     associatedCallingDeviceID AssociatedCallingDeviceID      OPTIONAL,  
     associatedCalledDeviceID AssociatedCalledDeviceID      OPTIONAL,  
     correlatorData          [1] IMPLICIT CorrelatorData      OPTIONAL,  
     callLinkageData          [2] IMPLICIT CallLinkageData      OPTIONAL,  
     subjectOfCall            [3] IMPLICIT SubjectOfCall      OPTIONAL,  
     messageInfo              [4] IMPLICIT MessageInfo      OPTIONAL,  
     languagePreferences      [5] IMPLICIT LanguagePreferences      OPTIONAL,  
     deviceHistory            [6] IMPLICIT DeviceHistory      OPTIONAL,  
     extensions                CSTACurrentArguments      OPTIONAL }
```

```
END -- of CSTA-snapshot-call
```

14.1.2 Snapshot device

```

CSTA-snapshot-device
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-device( 104) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
SnapshotDeviceData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

snapshotDevice OPERATION ::=
{ ARGUMENT          SnapshotDeviceArgument
  RESULT            SnapshotDeviceResult
  ERRORS           {universalFailure }
  CODE              local: 74 }

SnapshotDeviceArgument ::= SEQUENCE
{ snapshotObject   DeviceID,
  extensions       CSTACurrentArguments      OPTIONAL }

SnapshotDeviceResult ::= SEQUENCE
{ crossRefIDorSnapshotData CHOICE
  { serviceCrossRefID   ServiceCrossRefID,
    snapshotData        SnapshotDeviceData },
  extensions         CSTACurrentArguments OPTIONAL }

END -- of CSTA-snapshot-device

```

14.1.3 Snapshot calldata

```

CSTA-snapshot-call-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-call-data(106) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SnapshotCallData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACustomArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

snapshotCallData OPERATION ::=
{   ARGUMENT          SnapshotCallDataArgument
    ERRORS            {universalFailure }
    ALWAYS RESPONDS  FALSE
    CODE              local: 76 }

SnapshotCallDataArgument ::= SEQUENCE
{   serviceCrossRefID      ServiceCrossRefID,
    segmentID             INTEGER                  OPTIONAL,
    lastSegment            BOOLEAN,
    snapshotData           SnapshotCallData,
    extensions             CSTACustomArguments  OPTIONAL }

END -- of CSTA-snapshot-call-data

```

14.1.4 Snapshot devicedata

```

CSTA-snapshot-device-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-device-data(107) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SnapshotDeviceData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

snapshotDeviceData OPERATION ::=
{   ARGUMENT          SnapshotDeviceDataArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS  FALSE
  CODE              local: 77 }

SnapshotDeviceDataArgument ::= SEQUENCE
{   serviceCrossRefID    ServiceCrossRefID,
  segmentID           INTEGER                      OPTIONAL,
  lastSegment         BOOLEAN,
  snapshotData        SnapshotDeviceData,
  extensions          CSTACurrentArguments      OPTIONAL }

END -- of CSTA-snapshot-device-data

```

15 Call control services and events

15.1 Services

15.1.1 Accept call

```
CSTA-accept-call
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) accept-call( 214 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

acceptCall OPERATION ::=

{   ARGUMENT      AcceptCallArgument
    RESULT        AcceptCallResult
    ERRORS        {universalFailure }
    CODE          local: 214 }

AcceptCallArgument ::= SEQUENCE
{   callToBeAccepted   ConnectionID,
    correlatorData     CorrelatorData      OPTIONAL,
    userData           UserData            OPTIONAL,
    extensions         CSTACurrentArguments OPTIONAL }

AcceptCallResult ::= CHOICE
{   extensions       CSTACurrentArguments,
    noData           NULL   }

END -- of CSTA-accept-call
```

15.1.2 Alternate call

```

CSTA-alternate-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) alternate-call( 1) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConsultOptions FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

alternateCall OPERATION ::=
{ ARGUMENT      AlternateCallArgument
  RESULT        AlternateCallResult
  ERRORS        {universalFailure }
  CODE          local: 1 }

AlternateCallArgument ::= SEQUENCE
{ heldCall           ConnectionID,
  activeCall          ConnectionID,
  connectionReservation BOOLEAN           OPTIONAL,
  consultOptions       ConsultOptions      DEFAULT unrestricted,
  extensions          CSTACurrentArguments OPTIONAL }

AlternateCallResult ::= CHOICE
{ extensions          CSTACurrentArguments,
  noData              NULL }

END -- of CSTA-alternate-call

```

15.1.3 Answer call

```

CSTA-answer-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) answer-call( 2) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

answerCall OPERATION ::=
{   ARGUMENT          AnswerCallArgument
    RESULT            AnswerCallResult
    ERRORS           {universalFailure }
    CODE              local: 2 }

AnswerCallArgument ::= SEQUENCE
{   callToBeAnswered      ConnectionID,
    correlatorData       CorrelatorData      OPTIONAL,
    userData             UserData            OPTIONAL,
    extensions           CSTACurrentArguments OPTIONAL }

AnswerCallResult ::= CHOICE
{   extensions          CSTACurrentArguments,
    noData               NULL   }

END -- of CSTA-answer-call

```

15.1.4 Call back call-related

```

CSTA-call-back-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-call-related( 215) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
SubjectOfCall,LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

callBack OPERATION ::=
{ ARGUMENT          CallBackArgument
  RESULT            CallBackResult
  ERRORS           {universalFailure }
  CODE              local: 215 }

CallBackArgument ::= SEQUENCE
{ callbackConnection      ConnectionID,
  callCharacteristics    CallCharacteristics          OPTIONAL,
  subjectOfCall          [0] IMPLICIT SubjectOfCall    OPTIONAL,
  languagePreferences     [1] IMPLICIT LanguagePreferences OPTIONAL,
  extensions             CSTACurrentArguments        OPTIONAL }

CallBackResult ::= SEQUENCE
{ targetDevice           DeviceID                  OPTIONAL,
  extensions             CSTACurrentArguments        OPTIONAL }

END -- of CSTA-call-back-call-related

```

15.1.5 Call back message call-related

```

CSTA-call-back-message-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-message-call-related( 216) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };
callBackMessage OPERATION ::=

{ ARGUMENT         CallBackMessageArgument
  RESULT           CallBackMessageResult
  ERRORS           {universalFailure }
  CODE              local: 216 }

CallBackMessageArgument ::= SEQUENCE
{ callbackMessageConnection   ConnectionID,
  extensions                  CSTACCommonArguments
                            OPTIONAL }

CallBackMessageResult ::= SEQUENCE
{ targetDevice             DeviceID
  extensions                CSTACCommonArguments
                            OPTIONAL }

END -- of CSTA-call-back-message-call-related

```

15.1.6 Camp on call

```

CSTA-camp-on-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) camp-on-call( 217) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

camponCall OPERATION ::=
{ ARGUMENT          CamponCallArgument
  RESULT            CamponCallResult
  ERRORS           {universalFailure }
  CODE              local: 217 }

CamponCallArgument ::= SEQUENCE
{ camponConnection   ConnectionID,
  extensions         CSTACurrentArguments      OPTIONAL }

CamponCallResult ::= CHOICE
{ extensions         CSTACurrentArguments,
  noData             NULL }

END -- of CSTA-camp-on-call

```

15.1.7 Clear call

```

CSTA-clear-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear-call( 4) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clearCall OPERATION ::=

{ ARGUMENT           ClearCallArgument
  RESULT             ClearCallResult
  ERRORS             {universalFailure }
  CODE               local: 4 }

ClearCallArgument ::= SEQUENCE
{ callToBeCleared    ConnectionID,
  userData          UserData           OPTIONAL,
  reason            EventCause         OPTIONAL,
  extensions        CSTACurrentArguments OPTIONAL }

ClearCallResult ::= CHOICE
{ extensions        CSTACurrentArguments,
  noData            NULL   }

END -- of CSTA-clear-call

```

15.1.8 Clear Connection

```

CSTA-clear-connection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear-connection( 5) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clearConnection OPERATION ::=
{ ARGUMENT           ClearConnectionArgument
  RESULT             ClearConnectionResult
  ERRORS            {universalFailure }
  CODE              local: 5 }

ClearConnectionArgument ::= SEQUENCE
{ connectionToBeCleared   ConnectionID,
  correlatorData        CorrelatorData      OPTIONAL,
  userData              UserData          OPTIONAL,
  reason                EventCause        OPTIONAL,
  extensions            CSTACurrentArguments OPTIONAL }

ClearConnectionResult ::= CHOICE
{ extensions          CSTACurrentArguments,
  noData               NULL             }

END -- of CSTA-clear-connection

```

15.1.9 Conference call

```

CSTA-conference-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conference-call( 6) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

conferenceCall OPERATION ::=
{   ARGUMENT      ConferenceCallArgument
    RESULT        ConferenceCallResult
    ERRORS        {universalFailure }
    CODE          local: 6 }

ConferenceCallArgument ::= SEQUENCE
{   heldCall       ConnectionID,
   activeCall      ConnectionID,
   extensions      CSTACCommonArguments
                  OPTIONAL }

ConferenceCallResult ::= SEQUENCE
{   conferenceCall ConnectionID,
   connections     [0] IMPLICIT   ConnectionList
                  OPTIONAL,
   conferenceCallInfo [1] IMPLICIT   ConnectionInformation
                  OPTIONAL,
   extensions      CSTACCommonArguments
                  OPTIONAL }

END -- of CSTA-conference-call

```

15.1.10 Consultation call

```

CSTA-consultation-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) consultation-call( 7) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, ConsultOptions FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

consultationCall OPERATION ::=
{ ARGUMENT          ConsultationCallArgument
  RESULT            ConsultationCallResult
  ERRORS           {universalFailure }
  CODE              local: 7 }

ConsultationCallArgument ::= SEQUENCE
{ existingCall          [0] IMPLICIT ConnectionID,
  consultedDevice        [1] DeviceID,
  connectionReservation  [2] IMPLICIT BOOLEAN OPTIONAL,
  accountCode            [3] IMPLICIT AccountInfo OPTIONAL,
  authCode               [4] IMPLICIT AuthCode OPTIONAL,
  correlatorData         [5] IMPLICIT CorrelatorData OPTIONAL,
  userData               [6] IMPLICIT UserData OPTIONAL,
  callCharacteristics    [7] IMPLICIT CallCharacteristics OPTIONAL,
  mediaCallCharacteristics [8] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callingConnectionInfo  [9] IMPLICIT ConnectionInformation OPTIONAL,
  consultOptions          [10] IMPLICIT ConsultOptions DEFAULT unrestricted,
  subjectOfCall          [11] IMPLICIT SubjectOfCall OPTIONAL,
  languagePreferences     [12] IMPLICIT LanguagePreferences OPTIONAL,
  extensions             CSTACurrentArguments OPTIONAL }

```

```
ConsultationCallResult ::= SEQUENCE
{   initiatedCall           ConnectionID,
    mediaCallCharacteristics [0] IMPLICIT MediaCallCharacteristics OPTIONAL,
    initiatedCallInfo        [1] IMPLICIT ConnectionInformation OPTIONAL,
    extensions               CSTACurrentArguments OPTIONAL }
```

END -- of CSTA-consultation-call

15.1.11 Deflect call

```

CSTA-deflect-call
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) deflect-call( 218) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  { joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) event-causes( 121) }
CallCharacteristics FROM CSTA-call-control
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-control( 130) }
CSTACurrentArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

deflectCall OPERATION ::=
{   ARGUMENT          DeflectCallArgument
  RESULT             DeflectCallResult
  ERRORS            {universalFailure }
  CODE              local: 218 }

DeflectCallArgument ::= SEQUENCE
{   callToBeDiverted      ConnectionID,
  newDestination        DeviceID,
  addNewDestinationsList DeviceIDList           OPTIONAL,
                           -- List of additional new Destinations
  correlatorData        CorrelatorData         OPTIONAL,
  userData              UserData               OPTIONAL,
  callCharacteristics   [0] IMPLICIT CallCharacteristics OPTIONAL,
  subjectOfCall          [1] IMPLICIT SubjectOfCall    OPTIONAL,
  languagePreferences    [2] IMPLICIT LanguagePreferences OPTIONAL,
  reason                [3] IMPLICIT EventCause     OPTIONAL,
  extensions            CSTACurrentArguments  OPTIONAL }

DeflectCallResult ::= CHOICE
{   extensions          CSTACurrentArguments,
  noData               NULL   }

```

DeviceIDList ::= SEQUENCE OF DeviceID

END -- of CSTA-deflect-call

15.1.12 Dial digits

```

CSTA-dial-digits
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) dial-digits( 219) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

dialDigits OPERATION ::=
{ ARGUMENT          DialDigitsArgument
  RESULT            DialDigitsResult
  ERRORS           {universalFailure }
  CODE              local: 219 }

DialDigitsArgument ::= SEQUENCE
{ diallingConnection      ConnectionID,
  diallingSequence        DeviceID,
  correlatorData          CorrelatorData           OPTIONAL,
  extensions              CSTACurrentArguments   OPTIONAL }

DialDigitsResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-dial-digits

```

15.1.13 Directed pickup call

```

CSTA-directed-pickup-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) directed-pickup-call( 220) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

directedPickupCall OPERATION ::=

{   ARGUMENT      DirectedPickupCallArgument
    RESULT        DirectedPickupCallResult
    ERRORS        {universalFailure }
    CODE          local: 220 }

DirectedPickupCallArgument ::= SEQUENCE
{   callToBePickedUp      ConnectionID,
   requestingDevice       DeviceID,
   correlatorData         CorrelatorData           OPTIONAL,
   userData               UserData                 OPTIONAL,
   extensions             CSTACurrentArguments  OPTIONAL }

DirectedPickupCallResult ::= SEQUENCE
{   pickedCall            ConnectionID           OPTIONAL,
   pickedCallInfo          ConnectionInformation  OPTIONAL,
   extensions              CSTACurrentArguments  OPTIONAL }

END -- of CSTA-directed-pickup-call

```

15.1.14 Group pickup call

```
CSTA-group-pickup-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) group-pickup-call( 221) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

groupPickupCall OPERATION ::=
{ ARGUMENT          GroupPickupCallArgument
  RESULT            GroupPickupCallResult
  ERRORS           {universalFailure }
  CODE              local: 221 }

GroupPickupCallArgument ::=SEQUENCE
{ newDestination      DeviceID,
  pickGroup          DeviceID                  OPTIONAL,
  correlatorData     CorrelatorData           OPTIONAL,
  userData           UserData                 OPTIONAL,
  extensions         CSTACurrentArguments    OPTIONAL }

GroupPickupCallResult ::= SEQUENCE
{ pickedCall         ConnectionID             OPTIONAL,
  pickedCallInfo     ConnectionInformation    OPTIONAL,
  extensions         CSTACurrentArguments    OPTIONAL }

END -- of CSTA-group-pickup-call
```

15.1.15 Hold call

```

CSTA-hold-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) hold-call( 9) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

holdCall OPERATION ::=

{ ARGUMENT      HoldCallArgument
  RESULT        HoldCallResult
  ERRORS        {universalFailure }
  CODE          local: 9 }

HoldCallArgument ::= SEQUENCE
{ callToBeHeld           ConnectionID,
  connectionReservation  BOOLEAN           OPTIONAL,
  extensions             CSTACurrentArguments  OPTIONAL }

HoldCallResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-hold-call

```

15.1.16 Intrude call

```

CSTA-intrude-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) intrude-call( 222) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ParticipationType, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

intrudeCall OPERATION ::=
{   ARGUMENT          IntrudeCallArgument
    RESULT            IntrudeCallResult
    ERRORS           {universalFailure }
    CODE              local: 222 }

IntrudeCallArgument ::= SEQUENCE
{   intrude           ConnectionID,
    participationType ParticipationType      DEFAULT active,
    userData           UserData             OPTIONAL,
    extensions         CSTACurrentArguments OPTIONAL }

IntrudeCallResult ::= SEQUENCE
{   conferencedCall   ConnectionID      OPTIONAL,
    conferencedCallInfo ConnectionInformation OPTIONAL,
    extensions         CSTACurrentArguments OPTIONAL }

END -- of CSTA-intrude-call

```

15.1.17 Join call

```

CSTA-join-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) join-call( 223) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

AccountInfo, AuthCode, CorrelatorData, ParticipationType, UserData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }

AutoOriginate FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

joinCall OPERATION ::=
{   ARGUMENT      JoinCallArgument
   RESULT        JoinCallResult
   ERRORS        {universalFailure }
   CODE          local: 223 }

JoinCallArgument ::= SEQUENCE
{   activeCall           ConnectionID,
   joiningDevice         DeviceID,
   autoOriginate         [0] IMPLICIT AutoOriginate     DEFAULT prompt,
   participationType    [1] IMPLICIT ParticipationType  DEFAULT active,
   accountCode           [2] IMPLICIT AccountInfo      OPTIONAL,
   authCode              [3] IMPLICIT AuthCode        OPTIONAL,
   correlatorData        [4] IMPLICIT CorrelatorData   OPTIONAL,
   userData              UserData                     OPTIONAL,
   extensions            CSTACurrentArguments  OPTIONAL }

JoinCallResult ::= SEQUENCE
{   conferencedCall      ConnectionID,
   conferencedCallInfo   ConnectionInformation    OPTIONAL,
   extensions            CSTACurrentArguments  OPTIONAL }

END -- of CSTA-join-call

```

15.1.18 Make call

```

CSTA-make-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-call( 10) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makeCall OPERATION ::=
{ ARGUMENT      MakeCallArgument
  RESULT        MakeCallResult
  ERRORS        {universalFailure }
  CODE          local: 10 }

MakeCallArgument ::= SEQUENCE
{ callingDevice           DeviceID,
  calledDirectoryNumber   DeviceID,
  accountCode             [0] IMPLICIT AccountInfo
  authCode                [1] IMPLICIT AuthCode
  autoOriginate            [3] IMPLICIT AutoOriginate
  correlatorData           [2] IMPLICIT CorrelatorData
  userData                UserData
  callCharacteristics     CallCharacteristics
  mediaCallCharacteristics [4] IMPLICIT MediaCallCharacteristics
  callingConnectionInfo    [5] IMPLICIT ConnectionInformation
  subjectOfCall             [6] IMPLICIT SubjectOfCall
}

```

```
languagePreferences      [ 7 ] IMPLICIT LanguagePreferences      OPTIONAL,
reason                  [ 8 ] IMPLICIT EventCause      OPTIONAL,
extensions              CSTACommonArguments      OPTIONAL }

MakeCallResult ::= SEQUENCE
{   callingDevice          ConnectionID,
   mediaCallCharacteristics [ 0 ] IMPLICIT MediaCallCharacteristics      OPTIONAL,
   initiatedCallInfo        [ 1 ] IMPLICIT ConnectionInformation      OPTIONAL,
   extensions               CSTACommonArguments      OPTIONAL }

END -- of CSTA-make-call
```

15.1.19 Make connection

```

CSTA-make-connection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-connection( 375) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makeConnection OPERATION ::=
{
  ARGUMENT           MakeConnectionArgument
  RESULT             MakeConnectionResult
  ERRORS            {universalFailure }
  CODE              local: 375 }

MakeConnectionArgument ::= SEQUENCE
{
  initiatingDevice      DeviceID,
  accountCode          [ 0] IMPLICIT AccountInfo
  authCode              [ 1] IMPLICIT AuthCode
  autoOriginate         [ 2] IMPLICIT AutoOriginate
  correlatorData        [ 3] IMPLICIT CorrelatorData
  callCharacteristics   [ 4] IMPLICIT CallCharacteristics
  mediaCallCharacteristics [ 5] IMPLICIT MediaCallCharacteristics
  connectionInfo        [ 6] IMPLICIT ConnectionInformation
}
  OPTIONAL,
  OPTIONAL,
  DEFAULT prompt,
  OPTIONAL,
  OPTIONAL,
  OPTIONAL,
  OPTIONAL,
  OPTIONAL,
```

```

subjectOfCall           [ 7] IMPLICIT SubjectOfCall          OPTIONAL,
languagePreferences    [ 8] IMPLICIT LanguagePreferences  OPTIONAL,
reason                 [ 9] IMPLICIT EventCause          OPTIONAL,
maxDevices             [10] IMPLICIT INTEGER            OPTIONAL,
startTime              [11] IMPLICIT TimeInfo           OPTIONAL,
duration               [12] IMPLICIT INTEGER            OPTIONAL,
extensions             CSTACurrentArguments        OPTIONAL }

MakeConnectionResult ::= SEQUENCE
{
  initiatingDevice      ConnectionID,
  mediaCallCharacteristics [0] IMPLICIT MediaCallCharacteristics  OPTIONAL,
  initiatedCallInfo     [1] IMPLICIT ConnectionInformation  OPTIONAL,
  extensions             CSTACurrentArguments        OPTIONAL }

END -- of CSTA-make-connection

```

15.1.20 Make predictive call

```

CSTA-make-predictive-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-predictive-call( 11) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM
CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makePredictiveCall OPERATION ::=
{ ARGUMENT           MakePredictiveCallArgument
  RESULT             MakePredictiveCallResult
  ERRORS            {universalFailure }
  CODE              local: 11 }

MakePredictiveCallArgument ::= SEQUENCE
{ callingDevice          DeviceID,
  calledDirectoryNumber   DeviceID,
  signallingDetection     [ 0] IMPLICIT SignallingDetection
                           OPTIONAL,
  destinationDetection    [ 1] IMPLICIT DestinationDetection
                           OPTIONAL,
  defaultAction           [ 2] IMPLICIT DefaultAction
                           OPTIONAL,
  accountCode             [ 3] IMPLICIT AccountInfo
                           OPTIONAL,
  authCode                [ 4] IMPLICIT AuthCode
                           OPTIONAL,
  autoOriginate           [ 5] IMPLICIT AutoOriginate
                           DEFAULT prompt,
  alertTime               [ 6] IMPLICIT INTEGER
                           OPTIONAL,
  correlatorData          [ 7] IMPLICIT CorrelatorData
                           OPTIONAL,
  callCharacteristics     [ 8] IMPLICIT CallCharacteristics
                           OPTIONAL,
  userData                UserData
                           OPTIONAL,
  subjectOfCall           [ 9] IMPLICIT SubjectOfCall
                           OPTIONAL,
}

```

```

languagePreferences           [10] IMPLICIT LanguagePreferences      OPTIONAL,
extensions                  CSTACCommonArguments          OPTIONAL }

MakePredictiveCallResult ::= SEQUENCE
{   initiatedCall             ConnectionID,                OPTIONAL,
    initiatedCallInfo          ConnectionInformation        OPTIONAL,
    extensions                 CSTACCommonArguments        OPTIONAL }

SignallingDetection ::= SEQUENCE
{   signallingCondition        SignallingCondition,
    signallingConditionsAction SignallingConditionsAction }

SignallingCondition ::= ENUMERATED
{   callDelivered              (0),
    callEstablished            (1)  }

SignallingConditionsAction ::= ENUMERATED
{   destinationDetection       (0),
    remainConnected            (1)  }

DestinationDetection ::= SEQUENCE OF SEQUENCE
{   destinationCondition       DestinationCondition,
    detectionAction             DetectionAction  }

DestinationCondition ::= ENUMERATED
{   humanVoice                 (0),
    answeringMachine            (1),
    facsimileMachine            (2)  }

DefaultAction ::= DetectionAction

DetectionAction ::= ENUMERATED
{   clearCalledConnection       (0),
    remainConnected              (1)  }

END -- of CSTA-make-predictive-call

```

15.1.21 Park call

```

CSTA-park-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) park-call( 18) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
SubjectOfCall,LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

parkCall OPERATION ::=
{ ARGUMENT          ParkCallArgument
  RESULT            ParkCallResult
  ERRORS           {universalFailure }
  CODE             local: 18 }

ParkCallArgument ::= SEQUENCE
{ parking           ConnectionID,
  parkTo            DeviceID,
  correlatorData    CorrelatorData           OPTIONAL,
  subjectOfCall     [0] IMPLICIT SubjectOfCall   OPTIONAL,
  languagePreferences [1] IMPLICIT LanguagePreferences OPTIONAL,
  extensions         CSTACurrentArguments      OPTIONAL }

ParkCallResult ::= SEQUENCE
{ parkedTo          ConnectionID           OPTIONAL,
  extensions        CSTACurrentArguments      OPTIONAL }

END -- of CSTA-park-call

```

15.1.22 Reconnect call

```

CSTA-reconnect-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) reconnect-call( 13) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

reconnectCall OPERATION ::=
{ ARGUMENT          ReconnectCallArgument
  RESULT            ReconnectCallResult
  ERRORS           {universalFailure }
  CODE              local: 13 }

ReconnectCallArgument ::= SEQUENCE
{ activeCall          ConnectionID,
  heldCall            ConnectionID,
  extensions          CSTACCommonArguments      OPTIONAL }

ReconnectCallResult ::= CHOICE
{ extensions          CSTACCommonArguments,
  noData              NULL }

END -- of CSTA-reconnect-call

```

15.1.23 Retrieve call

```

CSTA-retrieve-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieve-call( 14) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

retrieveCall OPERATION ::=
{ ARGUMENT          RetrieveCallArgument
  RESULT            RetrieveCallResult
  ERRORS           {universalFailure }
  CODE              local: 14 }

RetrieveCallArgument ::= SEQUENCE
{ callToBeRetrieved      ConnectionID,
  extensions           CSTACurrentArguments
                      OPTIONAL }

RetrieveCallResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData               NULL }

END -- of CSTA-retrieve-call

```

15.1.24 Single step conference call

```

CSTA-single-step-conference
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) single-step-conference( 20) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

AccountInfo, AuthCode, CorrelatorData, ParticipationType, UserData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

singleStepConf OPERATION ::=
{   ARGUMENT          SingleStepConfArgument
    RESULT            SingleStepConfResult
    ERRORS           {universalFailure }
    CODE              local: 20 }

SingleStepConfArgument ::= SEQUENCE
{   activeCall        ConnectionID,
    deviceToJoin      DeviceID,
    participationType ParticipationType           DEFAULT active,
    accountCode       [0] IMPLICIT AccountInfo        OPTIONAL,
    authCode          [1] IMPLICIT AuthCode         OPTIONAL,
    correlatorData    [2] IMPLICIT CorrelatorData     OPTIONAL,
    userData          UserData                     OPTIONAL,
    subjectOfCall     [3] IMPLICIT SubjectOfCall      OPTIONAL,
    languagePreferences [4] IMPLICIT LanguagePreferences OPTIONAL,
    extensions         CSTACurrentArguments        OPTIONAL }

SingleStepConfResult ::= SEQUENCE
{   conferencedCall   ConnectionID,
    conferencedCallInfo ConnectionInformation        OPTIONAL,
    extensions         CSTACurrentArguments        OPTIONAL }

```

END -- of CSTA-single-step-conference

15.1.25 Send Message

```

CSTA-send-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-message( 376) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }

CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

AccountInfo, AuthCode, CorrelatorData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

SubjectOfCall, LanguagePreferences, MessageInfo
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

sendMessage OPERATION ::=
{   ARGUMENT      SendMessageArgument
   RESULT        SendMessageResult
   ERRORS        {universalFailure}
   CODE          local: 376 }

SendMessageArgument ::= SEQUENCE
{   callingDevice           DeviceID,
   destinationDevices       DeviceListItems,
   messageInfo              MessageInfo,
   accountCode               [0] IMPLICIT AccountInfo             OPTIONAL,
   authCode                  [1] IMPLICIT AuthCode            OPTIONAL,
   correlatorData            [2] IMPLICIT CorrelatorData        OPTIONAL,
   callCharacteristics       [3] IMPLICIT CallCharacteristics    OPTIONAL,
   mediaCallCharacteristics [4] IMPLICIT MediaCallCharacteristics OPTIONAL,
   subjectOfCall              [5] IMPLICIT SubjectOfCall         OPTIONAL,
   languagePreferences        [6] IMPLICIT LanguagePreferences     OPTIONAL,
   extensions                CSTACurrentArguments           OPTIONAL }

```

```
SendMessageResult ::= SEQUENCE
{   connectionList           ConnectionListItems,
    mediaCallCharacteristics MediaCallCharacteristics      OPTIONAL,
    extensions                CSTACCommonArguments        OPTIONAL }
```

```
DeviceListItems ::= SEQUENCE
{   device                   DeviceID }
```

```
ConnectionListItems ::= SEQUENCE
{   connection               ConnectionID }
```

```
END -- of CSTA-send-message
```

15.1.26 Single step transfer call

```

CSTA-single-step-transfer
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) single-step-conference( 50 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
ConnectionList FROM CSTA-connection-states
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) connection-states( 125 ) }
AccountInfo, AuthCode, CorrelatorData, UserData
FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
SubjectOfCall,LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
EventCause FROM CSTA-event-causes
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) event-causes( 121 ) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) };

singleStepTrans OPERATION ::=
{ ARGUMENT      SingleStepTransArgument
  RESULT        SingleStepTransResult
  ERRORS        {universalFailure }
  CODE          local: 50 }

SingleStepTransArgument ::= SEQUENCE
{ activeCall      ConnectionID,
  transferredTo   DeviceID,
  accountCode     [0] IMPLICIT AccountInfo           OPTIONAL,
  authCode        [1] IMPLICIT AuthCode            OPTIONAL,
  correlatorData  [2] IMPLICIT CorrelatorData       OPTIONAL,
  userData        UserData                         OPTIONAL,
  callCharacteristics [3] IMPLICIT CallCharacteristics OPTIONAL,
}

```

```
subjectOfCall      [4] IMPLICIT SubjectOfCall           OPTIONAL,
languagePreferences [5] IMPLICIT LanguagePreferences   OPTIONAL,
reason            [6] IMPLICIT EventCause             OPTIONAL,
extensions        CSTACCommonArguments          OPTIONAL }

SingleStepTransResult ::= SEQUENCE
{ transferredCall     ConnectionID,
connections          [0] IMPLICIT ConnectionList       OPTIONAL,
transferredCallInfo  [1] IMPLICIT ConnectionInformation OPTIONAL,
extensions          CSTACCommonArguments          OPTIONAL }

END -- of CSTA-single-step-transfer
```

15.1.27 Transfer call

```

CSTA-transfer-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) transfer-call( 16) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
transferCall OPERATION ::=

{   ARGUMENT      TransferCallArgument
    RESULT        TransferCallResult
    ERRORS        {universalFailure }
    CODE          local: 16 }

TransferCallArgument ::= SEQUENCE
{   heldCall           ConnectionID,
   activeCall          ConnectionID,
   extensions          CSTACCommonArguments
                      OPTIONAL }

TransferCallResult ::= SEQUENCE
{   transferredCall    ConnectionID,
   connections         [0] IMPLICIT ConnectionList
                      OPTIONAL,
   transferredCallInfo [1] IMPLICIT ConnectionInformation
                      OPTIONAL,
   extensions          CSTACCommonArguments
                      OPTIONAL }

END -- of CSTA-transfer-call

```

15.2 Events

15.2.1 Bridged

```
CSTA-bridged-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) bridged-event( 224) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

BridgedEvent ::= SEQUENCE
{ bridgedConnection          ConnectionID,
  bridgedAppearance          SubjectDeviceID,
  localConnectionInfo        LocalConnectionState           OPTIONAL,
  correlatorData             [0] IMPLICIT CorrelatorData    OPTIONAL,
  userData                   UserData                         OPTIONAL,
  cause                      EventCause,
  servicesPermitted          [1] IMPLICIT ServicesPermitted   OPTIONAL,
  mediaCallCharacteristics   [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics         [3] IMPLICIT CallCharacteristics  OPTIONAL,
  bridgedConnectionInfo      [4] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageData             [5] IMPLICIT CallLinkageData       OPTIONAL,
  languagePreferences         [6] IMPLICIT LanguagePreferences    OPTIONAL,
  locationInfo               [7] IMPLICIT LocationInfoList     OPTIONAL,
```

extensions

CSTACommonArguments

OPTIONAL }

END -- of CSTA-bridged-event

15.2.2 Call cleared

```

CSTA-call-cleared-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-cleared-event( 22) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

CallClearedEvent ::= SEQUENCE
{ clearedCall           ConnectionID,
  correlatorData        [1] IMPLICIT CorrelatorData          OPTIONAL,
  userData              UserData                           OPTIONAL,
  cause                 EventCause,
  mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics   [3] IMPLICIT CallCharacteristics    OPTIONAL,
  callLinkageData       [4] IMPLICIT CallLinkageData      OPTIONAL,
  languagePreferences   [5] IMPLICIT LanguagePreferences    OPTIONAL,
  locationInfo          [6] IMPLICIT LocationInfoList     OPTIONAL,
  extensions            CSTACurrentArguments             OPTIONAL }

END -- of CSTA-call-cleared-event

```

15.2.3 Conferenced

```

CSTA-conferenced-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conferenced-event( 23) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState, ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageDataList, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ConferencedEvent ::= SEQUENCE
{ primaryOldCall           ConnectionID,
  secondaryOldCall          ConnectionID
                                         OPTIONAL,
  conferencingDevice        SubjectDeviceID,
  addedParty                SubjectDeviceID,
  conferenceConnections     ConnectionList,
  localConnectionInfo       LocalConnectionState
                                         OPTIONAL,
  correlatorData            [1] IMPLICIT CorrelatorData
                                         OPTIONAL,
  userData                 UserData
                                         OPTIONAL,
  cause                     EventCause,
  servicesPermitted         [2] IMPLICIT ServicesPermitted
                                         OPTIONAL,
  mediaCallCharacteristics  [3] IMPLICIT MediaCallCharacteristics
                                         OPTIONAL,
  callCharacteristics       [4] IMPLICIT CallCharacteristics
                                         OPTIONAL,
  callLinkageDataList       [6] IMPLICIT CallLinkageDataList
                                         OPTIONAL,
  languagePreferences       [7] IMPLICIT LanguagePreferences
                                         OPTIONAL,
  deviceHistory             [8] IMPLICIT DeviceHistory
                                         OPTIONAL,
  locationInfo              [9] IMPLICIT LocationInfoList
                                         OPTIONAL,
}

```

extensions

[5] IMPLICIT

CSTACommonArguments

OPTIONAL }

END -- of CSTA-conferenced-event

15.2.4 Connection cleared

```

CSTA-connection-cleared-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) connection-cleared-event( 24 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) event-causes( 121 ) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) connection-states( 125 ) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) charge-info( 133 ) }
LocationInfoList FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) };

ConnectionClearedEvent ::= SEQUENCE
{ droppedConnection      ConnectionID,
  releasingDevice        SubjectDeviceID,
  localConnectionInfo    LocalConnectionState          OPTIONAL,
  correlatorData         [0] IMPLICIT CorrelatorData   OPTIONAL,
  userData               UserData                      OPTIONAL,
  chargingInfo           [1] IMPLICIT ChargingInfo    OPTIONAL,
  cause                  EventCause,
  servicesPermitted      [2] IMPLICIT ServicesPermitted OPTIONAL,
  mediaCallCharacteristics [3] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics     [4] IMPLICIT CallCharacteristics OPTIONAL,
  droppedConnectionInfo  [5] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageData         [6] IMPLICIT CallLinkageData    OPTIONAL,
  languagePreferences     [7] IMPLICIT LanguagePreferences OPTIONAL,
}

```

```
deviceHistory          [8] IMPLICIT DeviceHistory  
locationInfo          [9] IMPLICIT LocationInfoList  
extensions            CSTACurrentArguments  
  
OPTIONAL,  
OPTIONAL,  
OPTIONAL }
```

END -- of CSTA-connection-cleared-event

15.2.5 Delivered

```

CSTA-delivered-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delivered-event( 25) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,
AssociatedCalledDeviceID, AssociatedCallingDeviceID,
NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences, SubjectOfCall,
MessageInfo, DeviceHistory FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

DeliveredEvent ::= SEQUENCE
{ connection                  ConnectionID,
  alertingDevice               SubjectDeviceID,
  callingDevice                CallingDeviceID,
  calledDevice                 CalledDeviceID,
  lastRedirectionDevice        RedirectionDeviceID,
  originatingNIDConnection    ConnectionID                               OPTIONAL,
  localConnectionInfo          LocalConnectionState                     OPTIONAL,
  correlatorData               [ 0 ] IMPLICIT CorrelatorData        OPTIONAL,
  userData                     UserData                                OPTIONAL,
  cause                        EventCause,
  servicesPermitted            [ 1 ] IMPLICIT ServicesPermitted      OPTIONAL,
  networkCallingDevice         NetworkCallingDeviceID                 OPTIONAL,
}

```

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
connectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[6] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[7] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-delivered-event

15.2.6 Digits dialed

```

CSTA-digits-dialed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-dialed-event( 225) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, DeviceID, AssociatedCalledDeviceID, AssociatedCallingDeviceID,
NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

DigitsDialedEvent ::= SEQUENCE
{
  dialingConnection          ConnectionID,
  dialingDevice               SubjectDeviceID,
  dialingSequence             DeviceID,
  localConnectionInfo         LocalConnectionState OPTIONAL,
  correlatorData              [0] IMPLICIT CorrelatorData OPTIONAL,
  cause                       EventCause,
  servicesPermitted           [1] IMPLICIT ServicesPermitted OPTIONAL,
  networkCallingDevice        NetworkCallingDeviceID OPTIONAL,
  networkCalledDevice          NetworkCalledDeviceID OPTIONAL,
  associatedCallingDevice     AssociatedCallingDeviceID OPTIONAL,
  associatedCalledDevice       AssociatedCalledDeviceID OPTIONAL,
  dialingConnectionInfo       [2] IMPLICIT ConnectionInformation OPTIONAL,
  callCharacteristics         [3] IMPLICIT CallCharacteristics OPTIONAL,
  callLinkageData              [4] IMPLICIT CallLinkageData OPTIONAL,
}

```

```
languagePreferences      [ 5 ] IMPLICIT LanguagePreferences      OPTIONAL,
locationInfo           [ 6 ] IMPLICIT LocationInfoList      OPTIONAL,
extensions             CSTACommonArguments      OPTIONAL }

END -- of CSTA-digits-dialed-event
```

15.2.7 Diverted

```

CSTA-diverted-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) diverted-event( 26) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID , CallingDeviceID, CalledDeviceID, RedirectionDeviceID,
AssociatedCalledDeviceID, AssociatedCallingDeviceID,
NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences, SubjectOfCall, MessageInfo,
DeviceHistory FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

DivertedEvent ::= SEQUENCE
{ connection                  ConnectionID,
  divertingDevice             SubjectDeviceID,
  newDestination              SubjectDeviceID,
  callingDevice                CallingDeviceID           OPTIONAL,
  calledDevice                 CalledDeviceID          OPTIONAL,
  lastRedirectionDevice       RedirectionDeviceID,
  localConnectionInfo          LocalConnectionState   OPTIONAL,
  correlatorData               [ 0 ] IMPLICIT CorrelatorData  OPTIONAL,
  userData                     UserData                OPTIONAL,
  cause                        EventCause,
  servicesPermitted            [ 1 ] IMPLICIT ServicesPermitted  OPTIONAL,
  mediaCallCharacteristics    [ 2 ] IMPLICIT MediaCallCharacteristics  OPTIONAL,
}

```

callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
connectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[6] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[7] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-diverted-event

15.2.8 Established

```

CSTA-established-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) established-event( 27) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, CalledDeviceID, CallingDeviceID, RedirectionDeviceID,
AssociatedCalledDeviceID, AssociatedCallingDeviceID,
NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences, SubjectOfCall, MessageInfo,
DeviceHistory FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

EstablishedEvent ::= SEQUENCE
{ establishedConnection           ConnectionID,
  answeringDevice                SubjectDeviceID,
  callingDevice                  CallingDeviceID,
  calledDevice                   CalledDeviceID,
  lastRedirectionDevice          RedirectionDeviceID,
  originatingNIDConnection      ConnectionID
                                OPTIONAL,
  localConnectionInfo            LocalConnectionState
                                OPTIONAL,
  correlatorData                 [ 1] IMPLICIT CorrelatorData
                                OPTIONAL,
  userData                       UserData
                                OPTIONAL,
  cause                          EventCause,
  servicesPermitted              [ 2] IMPLICIT ServicesPermitted
                                OPTIONAL,
  networkCallingDevice           NetworkCallingDeviceID
                                OPTIONAL,
}

```

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[3] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
establishedConnectionInfo	[5] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[6] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[7] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[8] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[9] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[10] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[11] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-established-event

15.2.9 Failed

```

CSTA-failed-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) failed-event( 28 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) event-causes( 121 ) }
SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,
AssociatedCalledDeviceID, AssociatedCallingDeviceID,
NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) connection-states( 125 ) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
LocationInfoList FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
LanguagePreferences, SubjectOfCall, MessageInfo,
DeviceHistory FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) };

FailedEvent ::= SEQUENCE
{ failedConnection          ConnectionID,
  failingDevice              SubjectDeviceID,
  callingDevice               CallingDeviceID,
  calledDevice                CalledDeviceID,
  lastRedirectionDevice      RedirectionDeviceID,
  originatingNIDConnection  ConnectionID                               OPTIONAL,
  localConnectionInfo         LocalConnectionState                  OPTIONAL,
  correlatorData              [ 0 ] IMPLICIT CorrelatorData        OPTIONAL,
  userData                   UserData                                OPTIONAL,
  cause                      EventCause,
  servicesPermitted           [ 1 ] IMPLICIT ServicesPermitted    OPTIONAL,
  networkCallingDevice        NetworkCallingDeviceID            OPTIONAL,
}

```

```
networkCalledDevice      NetworkCalledDeviceID           OPTIONAL,  
associatedCallingDevice AssociatedCallingDeviceID     OPTIONAL,  
associatedCalledDevice  AssociatedCalledDeviceID    OPTIONAL,  
mediaCallCharacteristics [ 2] IMPLICIT MediaCallCharacteristics OPTIONAL,  
callCharacteristics     [ 3] IMPLICIT CallCharacteristics OPTIONAL,  
failedConnectionInfo   [ 4] IMPLICIT ConnectionInformation OPTIONAL,  
                           --corrected 06/2001  
callLinkageData         [ 5] IMPLICIT CallLinkageData    OPTIONAL,  
subjectOfCall            [ 6] IMPLICIT SubjectOfCall    OPTIONAL,  
messageInfo              [ 7] IMPLICIT MessageInfo     OPTIONAL,  
languagePreferences     [ 8] IMPLICIT LanguagePreferences OPTIONAL,  
deviceHistory            [ 9] IMPLICIT DeviceHistory    OPTIONAL,  
locationInfo             [10] IMPLICIT LocationInfoList  OPTIONAL,  
extensions               CSTACCommonArguments        OPTIONAL }
```

END -- of CSTA-failed-event

15.2.10 Held

```

CSTA-held-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) held-event( 29) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

HeldEvent ::= SEQUENCE
{ heldConnection          ConnectionID,
  holdingDevice           SubjectDeviceID,
  localConnectionInfo     LocalConnectionState OPTIONAL,
  correlatorData          [0] IMPLICIT CorrelatorData OPTIONAL,
  cause                   EventCause,
  servicesPermitted       [1] IMPLICIT ServicesPermitted OPTIONAL,
  mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics     [3] IMPLICIT CallCharacteristics OPTIONAL,
  heldConnectionInfo      [4] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageData          [5] IMPLICIT CallLinkageData OPTIONAL,
  languagePreferences      [6] IMPLICIT LanguagePreferences OPTIONAL,
  locationInfo            [7] IMPLICIT LocationInfoList OPTIONAL,
  extensions              CSTACommonArguments OPTIONAL }

END -- of CSTA-held-event

```

15.2.11 Network capabilities changed

```

CSTA-network-capabilities-changed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-capabilities-changed-event( 226) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, CalledDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, NetworkCapability, ProgressIndicator,
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

NetworkCapabilitiesChangedEvent ::= SEQUENCE
{ outboundConnection          ConnectionID,
  networkInterfaceUsed        SubjectDeviceID,
  calledDevice                CalledDeviceID,
  progressIndicator           ProgressIndicator,
  localConnectionInfo         LocalConnectionState OPTIONAL,
  correlatorData              CorrelatorData OPTIONAL,
  userData                    UserData OPTIONAL,
  networkCapability           [0] IMPLICIT NetworkCapability OPTIONAL,
  cause                       EventCause,
  servicesPermitted           [1] IMPLICIT ServicesPermitted OPTIONAL,
  mediaCallCharacteristics    [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics          [3] IMPLICIT CallCharacteristics OPTIONAL,
  outboundConnectionInfo      [4] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageData              [5] IMPLICIT CallLinkageData OPTIONAL,
  languagePreferences          [6] IMPLICIT LanguagePreferences OPTIONAL,
}

```

```
locationInfo          [ 7 ] IMPLICIT    LocationInfoList      OPTIONAL,  
extensions           CSTACurrentArguments  OPTIONAL }  
  
END -- of CSTA-network-capabilities-changed-event
```

15.2.12 Network reached

```

CSTA-network-reached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-reached-event( 30) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, NetworkCapability,
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceHistory, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

NetworkReachedEvent ::= SEQUENCE
{
  outboundConnection          ConnectionID,
  networkInterfaceUsed        SubjectDeviceID,
  callingDevice                CallingDeviceID,
  calledDevice                 CalledDeviceID,
  lastRedirectionDevice       RedirectionDeviceID,
  originatingNIDConneciton    ConnectionID,
  localConnectionInfo          LocalConnectionState,
  correlatorData               [0] IMPLICIT CorrelatorData,
  userData                     UserData,
  networkCapability            [1] IMPLICIT NetworkCapability,
  cause                        EventCause,
  servicesPermitted            [2] IMPLICIT ServicesPermitted,
  mediaCallCharacteristics     [3] IMPLICIT MediaCallCharacteristics
}

```

callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
outboundConnectionInfo	[5] IMPLICIT ConnectionInformation	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
callLinkageData	[6] IMPLICIT CallLinkageData	OPTIONAL,
languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[9] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-network-reached-event

15.2.13 Offered

```

CSTA-offered-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) offered-event( 227) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceHistory, LanguagePreferences, SubjectOfCall,
MessageInfo FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

OfferedEvent ::= SEQUENCE
{ offeredConnection           ConnectionID,
  offeredDevice                SubjectDeviceID,
  callingDevice                 CallingDeviceID,
  calledDevice                  CalledDeviceID,
  lastRedirectionDevice        RedirectionDeviceID,
  originatingNIDConnection     ConnectionID,
  localConnectionInfo          LocalConnectionState,
  correlatorData                CorrelatorData,
  userData                      UserData,
  cause                         EventCause,
  servicesPermitted             [0] IMPLICIT ServicesPermitted,
  networkCallingDevice          NetworkCallingDeviceID,
  networkCalledDevice           NetworkCalledDeviceID
}

```

associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[1] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[2] IMPLICIT CallCharacteristics	OPTIONAL,
offeredConnectionInfo	[3] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[4] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[5] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[6] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[9] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-offered-event

15.2.14 Originated

```

CSTA-originated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) originated-event( 31) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, CallingDeviceID, CalledDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID, SubjectDeviceID
FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences, SubjectOfCall, MessageInfo FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

OriginatedEvent ::= SEQUENCE
{ originatedConnection          ConnectionID,
  callingDevice                 SubjectDeviceID,
  calledDevice                  CalledDeviceID,
  originatingDevice             DeviceID                               OPTIONAL,
  localConnectionInfo           LocalConnectionState                OPTIONAL,
  correlatorData                [ 2] IMPLICIT CorrelatorData      OPTIONAL,
  cause                         EventCause,
  servicesPermitted             [ 3] IMPLICIT ServicesPermitted    OPTIONAL,
  networkCallingDevice          NetworkCallingDeviceID            OPTIONAL,
  networkCalledDevice           NetworkCalledDeviceID            OPTIONAL,
  associatedCallingDevice       AssociatedCallingDeviceID        OPTIONAL,
  associatedCalledDevice        AssociatedCalledDeviceID        OPTIONAL,
  mediaCallCharacteristics     [ 4] IMPLICIT MediaCallCharacteristics  OPTIONAL,
  callCharacteristics          [ 5] IMPLICIT CallCharacteristics   OPTIONAL,
}

```

```
originatedConnectionInfo      [ 6] IMPLICIT ConnectionInformation      OPTIONAL,  
callLinkageData              [ 7] IMPLICIT CallLinkageData      OPTIONAL,  
subjectOfCall                [ 8] IMPLICIT SubjectOfCall      OPTIONAL,  
messageInfo                  [ 9] IMPLICIT MessageInfo      OPTIONAL,  
languagePreferences          [10] IMPLICIT LanguagePreferences  OPTIONAL,  
locationInfo                 [11] IMPLICIT LocationInfoList  OPTIONAL,  
extensions                   CSTACommonArguments      OPTIONAL }  
  
END -- of CSTA-originated-event
```

15.2.15 Queued

```

CSTA-queued-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queued-event( 32) }

DEFINITIONS::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CalledDeviceID,CallingDeviceID,RedirectionDeviceID,SubjectDeviceID,AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID,
NetworkCallingDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocationInfoList,CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceHistory,CorrelatorData, UserData,LanguagePreferences,
SubjectOfCall, MessageInfo FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

QueuedEvent ::= SEQUENCE
{ queuedConnection          ConnectionID,
  queue                      SubjectDeviceID,
  callingDevice               CallingDeviceID,
  calledDevice                CalledDeviceID,
  lastRedirectionDevice      RedirectionDeviceID,
  numberQueued                [ 0] IMPLICIT INTEGER           OPTIONAL,
  callsInFront                [ 1] IMPLICIT INTEGER           OPTIONAL,
  localConnectionInfo         LocalConnectionState        OPTIONAL,
  correlatorData              [ 2] IMPLICIT CorrelatorData    OPTIONAL,
  userData                    UserData                     OPTIONAL,
  cause                       EventCause,
  servicesPermitted           [ 3] IMPLICIT ServicesPermitted   OPTIONAL,
  networkCallingDevice        NetworkCallingDeviceID     OPTIONAL,
  networkCalledDevice         NetworkCalledDeviceID     OPTIONAL,
  associatedCallingDevice    AssociatedCallingDeviceID   OPTIONAL,
  associatedCalledDevice     AssociatedCalledDeviceID   OPTIONAL,
  mediaCallCharacteristics   [ 4] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics         [ 5] IMPLICIT CallCharacteristics  OPTIONAL,
  queuedConnectionInfo       [ 6] IMPLICIT ConnectionInformation OPTIONAL,
}

```

```
callLinkageData      [ 7] IMPLICIT CallLinkageData          OPTIONAL,  
subjectOfCall        [ 8] IMPLICIT SubjectOfCall        OPTIONAL,  
messageInfo         [ 9] IMPLICIT MessageInfo        OPTIONAL,  
languagePreferences [10] IMPLICIT LanguagePreferences    OPTIONAL,  
deviceHistory        [11] IMPLICIT DeviceHistory       OPTIONAL,  
locationInfo        [12] IMPLICIT LocationInfoList    OPTIONAL,  
extensions          CSTACurrentArguments           OPTIONAL }  
  
END -- of CSTA-queued-event
```

15.2.16 Retrieved

```

CSTA-retrieved-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieved-event( 33) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

RetrievedEvent ::= SEQUENCE
{ retrievedConnection      ConnectionID,
  retrievingDevice        SubjectDeviceID,
  localConnectionInfo     LocalConnectionState OPTIONAL,
  correlatorData          [0] IMPLICIT CorrelatorData OPTIONAL,
  cause                   EventCause,
  servicesPermitted       [1] IMPLICIT ServicesPermitted OPTIONAL,
  mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics     [3] IMPLICIT CallCharacteristics OPTIONAL,
  retrievedConnectionInfo [4] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageData          [5] IMPLICIT CallLinkageData OPTIONAL,
  languagePreferences      [6] IMPLICIT LanguagePreferences OPTIONAL,
  locationInfo            [7] IMPLICIT LocationInfoList OPTIONAL,
  extensions              CSTACurrentArguments OPTIONAL }

END -- of CSTA-retrieved-event

```

15.2.17 Service initiated

```

CSTA-service-initiated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-initiated-event( 34) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID, AssociatedCallingDeviceID, NetworkCalledDeviceID,
NetworkCallingDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MessageInfo, SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CalledDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ServiceInitiatedEvent ::= SEQUENCE
{ initiatedConnection      ConnectionID,
  initiatingDevice        SubjectDeviceID,
  calledDevice             CalledDeviceID          OPTIONAL,
  localConnectionInfo     LocalConnectionState    OPTIONAL,
  correlatorData          [ 0] IMPLICIT CorrelatorData   OPTIONAL,
  cause                   EventCause,
  servicesPermitted       [ 1] IMPLICIT ServicesPermitted OPTIONAL,
  mediaCallCharacteristics [ 2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics     [ 3] IMPLICIT CallCharacteristics OPTIONAL,
}

```

```
initiatedConnectionInfo [ 4] IMPLICIT ConnectionInformation           OPTIONAL,
networkCallingDevice    NetworkCallingDeviceID                  OPTIONAL,
networkCalledDevice     NetworkCalledDeviceID                 OPTIONAL,
associatedCallingDevice AssociatedCallingDeviceID            OPTIONAL,
callLinkageData         [ 5] IMPLICIT CallLinkageData          OPTIONAL,
subjectOfCall           [ 7] IMPLICIT SubjectOfCall           OPTIONAL,
messageInfo             [ 8] IMPLICIT MessageInfo            OPTIONAL,
languagePreferences     [ 9] IMPLICIT LanguagePreferences        OPTIONAL,
locationInfo            [10] IMPLICIT LocationInfoList       OPTIONAL,
extensions              CSTACurrentArguments                OPTIONAL }

END -- of CSTA-service-initiated-event
```

15.2.18 Transferred

```

CSTA-transferred-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) transferred-event( 35 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) event-causes( 121 ) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
LocalConnectionState, ConnectionList FROM CSTA-connection-states
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) connection-states( 125 ) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
CallCharacteristics, CallLinkageDataList, ServicesPermitted FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) charge-info( 133 ) }
LocationInfoList FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) };

TransferredEvent ::= SEQUENCE
{ primaryOldCall           ConnectionID,
  secondaryOldCall          [ 0 ] IMPLICIT ConnectionID           OPTIONAL,
  transferringDevice        SubjectDeviceID,
  transferredToDevice       SubjectDeviceID,
  transferredConnections    [ 1 ] IMPLICIT ConnectionList,
  localConnectionInfo       LocalConnectionState            OPTIONAL,
  correlatorData            [ 2 ] IMPLICIT CorrelatorData      OPTIONAL,
  userData                  UserData                         OPTIONAL,
  chargingInfo              [ 3 ] IMPLICIT ChargingInfo      OPTIONAL,
  cause                     EventCause,
  servicesPermitted         [ 4 ] IMPLICIT ServicesPermitted   OPTIONAL,
  mediaCallCharacteristics  [ 5 ] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics       [ 6 ] IMPLICIT CallCharacteristics OPTIONAL,

```

```
callLinkageDataList           [ 7] IMPLICIT CallLinkageDataList      OPTIONAL,  
languagePreferences          [ 8] IMPLICIT LanguagePreferences  OPTIONAL,  
deviceHistory                [ 9] IMPLICIT DeviceHistory        OPTIONAL,  
locationInfo                 [10] IMPLICIT LocationInfoList    OPTIONAL  
extensions                  CSTACurrentArguments          OPTIONAL }  
  
END -- of CSTA-transferred-event
```

16 Call associated features

16.1 Services

16.1.1 Associate data

```

CSTA-associate-data
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) associate-data( 230 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
AccountInfo, AuthCode, CorrelatorData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
LanguagePreferences, SubjectOfCall FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) }
CallQualifyingData FROM CSTA-call-control
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-control( 130 ) };

associateData OPERATION ::=
{   ARGUMENT      AssociateDataArgument
   RESULT        AssociateDataResult
   ERRORS        {universalFailure }
   CODE          local: 230 }

AssociateDataArgument ::= SEQUENCE
{   existingCall      ConnectionID,
   accountCode       [0] IMPLICIT AccountInfo           OPTIONAL,
   authCode         [1] IMPLICIT AuthCode            OPTIONAL,
   correlatorData   [2] IMPLICIT CorrelatorData        OPTIONAL,
   callQualifyingData [3] IMPLICIT CallQualifyingData  OPTIONAL,
   callCharacteristics [4] IMPLICIT CallCharacteristics OPTIONAL,
   subjectOfCall     [5] IMPLICIT SubjectOfCall        OPTIONAL,
   languagePreferences [6] IMPLICIT LanguagePreferences OPTIONAL,
}

```

```
deviceInfo          [ 7 ] IMPLICIT DeviceID  
extensions         CSTACommonArguments  
                   OPTIONAL,  
                   OPTIONAL }  
  
AssociateDataResult ::= CHOICE  
{   extensions   CSTACommonArguments,  
     noData        NULL  }  
  
END -- of CSTA-associate-data
```

16.1.2 Cancel telephony tones

```

CSTA-cancel-telephony-tones
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) cancel-telephony-tones( 231) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

cancelTelephonyTones OPERATION ::=
{ ARGUMENT      CancelTelephonyTonesArgument
  RESULT        CancelTelephonyTonesResult
  ERRORS        {universalFailure }
  CODE          local: 231 }

CancelTelephonyTonesArgument ::= SEQUENCE
{ connectionToStopTone      ConnectionID,
  extensions                CSTACurrentArguments
                            OPTIONAL }

CancelTelephonyTonesResult ::= CHOICE
{ extensions              CSTACurrentArguments,
  noData                  NULL }

END -- of CSTA-cancel-telephony-tones

```

16.1.3 Change Connection Information

```

CSTA-change-connection-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) change-connection-information( 377) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
CSTACurrentArguments FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

changeConnectionInformation OPERATION ::=
{   ARGUMENT      ChangeConnectionInformationArgument
   RESULT        ChangeConnectionInformationResult
   ERRORS        {universalFailure }
   CODE          local: 377 }

ChangeConnectionInformationArgument ::= SEQUENCE
{   connectionToBeChanged      ConnectionID,
   requestedConnectionInfo     ConnectionInformation,
   extensions                  CSTACurrentArguments           OPTIONAL }

ChangeConnectionInformationResult ::= SEQUENCE
{   actualConnectionInfo       ConnectionInformation,
   extensions                 CSTACurrentArguments           OPTIONAL }

END -- of CSTA-change-connection-information

```

16.1.4 Generate digits

```

CSTA-generate-digits
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) generate-digits( 232) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

generateDigits  OPERATION ::=

{ ARGUMENT      GenerateDigitsArgument
  RESULT        GenerateDigitsResult
  ERRORS        {universalFailure }
  CODE          local: 232 }

GenerateDigitsArgument ::= SEQUENCE
{ connectionToSendDigits      ConnectionID,
  digitMode                  DigitMode
                                         OPTIONAL,
  charactersToSend           IA5String,
  toneDuration               [0] IMPLICIT INTEGER
                                         OPTIONAL,
  pulseRate                  [1] IMPLICIT INTEGER
                                         OPTIONAL,
  pauseDuration              [2] IMPLICIT INTEGER
                                         OPTIONAL,
  extensions                 CSTACCommonArguments
                                         OPTIONAL }

GenerateDigitsResult ::= CHOICE
{ extensions                CSTACCommonArguments,
  noData                     NULL }

DigitMode ::= ENUMERATED
{ rotaryPulse                (0),
  dTMF                       (1) }

END -- of CSTA-generate-digits

```

16.1.5 Generate telephony tones

```

CSTA-generate-telephony-tones
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) generate-telephony-tones( 233) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
TelephonyTone FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

generateTelephonyTones      OPERATION ::=
{   ARGUMENT      GenerateTelephonyTonesArgument
   RESULT        GenerateTelephonyTonesResult
   ERRORS        {universalFailure }
   CODE          local: 233 }

GenerateTelephonyTonesArgument ::= SEQUENCE
{   connectionToSendTone      ConnectionID,
   toneToSend                TelephonyTone,
   toneDuration               INTEGER                           OPTIONAL,
   extensions                 CSTACurrentArguments           OPTIONAL }

GenerateTelephonyTonesResult ::= CHOICE
{   extensions                CSTACurrentArguments,
   noData                     NULL    }

END -- of CSTA-generate-telephony-tones

```

16.1.6 Send user information

```

CSTA-send-user-information
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) send-user-information( 234 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-connection-identifiers( 124 ) }
UserData FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

sendUserInfo      OPERATION ::=

{   ARGUMENT      SendUserInfoArgument
   RESULT         SendUserInfoResult
   ERRORS         {universalFailure }
   CODE          local: 234 }

SendUserInfoArgument ::= SEQUENCE
{   existingCall      ConnectionID,
   userData           UserData,
   extensions         CSTACurrentArguments
                      OPTIONAL }

SendUserInfoResult ::= CHOICE
{   extensions       CSTACurrentArguments,
   noData            NULL }

END -- of CSTA-send-user-information

```

16.2 Events

16.2.1 Call information

```

CSTA-call-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-information-event( 41) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
CallingDeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageDataList, CallQualifyingData, ServicesPermitted
FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LanguagePreferences,SubjectOfCall FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

CallInformationEvent ::= SEQUENCE
{ connection          ConnectionID,
  device              SubjectDeviceID,
  callingDevice       CallingDeviceID           OPTIONAL,
  accountInfo         [0] IMPLICIT AccountInfo   OPTIONAL,
  authCode            [1] IMPLICIT AuthCode      OPTIONAL,
  correlatorData     [2] IMPLICIT CorrelatorData  OPTIONAL,
  servicesPermitted  [3] IMPLICIT ServicesPermitted OPTIONAL,
  userData            UserData                  OPTIONAL,
  callQualifyingData [4] IMPLICIT CallQualifyingData OPTIONAL,
  connectionInfo      ConnectionInformation    OPTIONAL,
  callLinkageDataList [5] IMPLICIT CallLinkageDataList OPTIONAL,
  callCharacteristics [6] IMPLICIT CallCharacteristics OPTIONAL,
  subjectOfCall       [7] IMPLICIT SubjectOfCall    OPTIONAL,
  languagePreferences [8] IMPLICIT LanguagePreferences OPTIONAL,
  deviceInfo          [9] IMPLICIT DeviceID      OPTIONAL,
  extensions          CSTACurrentArguments    OPTIONAL }

END -- of CSTA-call-information-event

```

16.2.2 Charging

```

CSTA-charging-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charging-event( 240) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) };

ChargingEvent ::= SEQUENCE
{ connection          ConnectionID,
  chargedDevice       DeviceID,
  chargingInfo        ChargingInfo,
  cause                EventCause           OPTIONAL,
  extensions          CSTACurrentArguments OPTIONAL }

END -- of CSTA-charging-event

```

16.2.3 Digits generated

```

CSTA-digits-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-generated-event( 241) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

DigitsGeneratedEvent ::= SEQUENCE
{ connection                  ConnectionID,
  digitGeneratedList          IA5String,
  digitDurationList           [0] IMPLICIT SEQUENCE OF INTEGER      OPTIONAL,
  pauseDurationList           [1] IMPLICIT SEQUENCE OF INTEGER      OPTIONAL,
  connectionInfo               ConnectionInformation                OPTIONAL,
  extensions                  CSTACurrentArguments             OPTIONAL }

END -- of CSTA-digits-generated-event

```

16.2.4 Telephony tones generated

```

CSTA-telephony-tones-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) telephony-tones-generated-event( 242) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
TelephonyTone FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

TelephonyTonesGeneratedEvent ::= SEQUENCE
{ connection          ConnectionID,
  toneGenerated        TelephonyTone           OPTIONAL,
  toneFrequency       [0] IMPLICIT INTEGER   OPTIONAL,
  toneDuration        [1] IMPLICIT INTEGER   OPTIONAL,
  pauseDuration       [2] IMPLICIT INTEGER   OPTIONAL,
  connectionInfo      ConnectionInformation  OPTIONAL,
  extensions          CSTACurrentArguments OPTIONAL }

END -- of CSTA-telephony-tones-generated-event

```

16.2.5 Service completion failure

```

CSTA-service-completion-failure-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-completion-failure-event( 243) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ServiceCompletionFailureEvent ::= SEQUENCE
{ primaryCall           PrimaryOrSecondaryCall,
  secondaryCall          [0] IMPLICIT PrimaryOrSecondaryCall           OPTIONAL,
  otherDevsPrimaryCallList [1] IMPLICIT SEQUENCE OF OtherCall        OPTIONAL,
  otherDevsSecondaryCallList [2] IMPLICIT SEQUENCE OF OtherCall        OPTIONAL,
  mediaCallCharacteristics [3] IMPLICIT MediaCallCharacteristics    OPTIONAL,
  cause                  EventCause,
  extensions             CSTACurrentArguments                   OPTIONAL }

PrimaryOrSecondaryCall ::= SEQUENCE
{ deviceID               DeviceID,
  connectionID            ConnectionID,
  localConnectionState     LocalConnectionState,
  connectionInfo           ConnectionInformation                OPTIONAL }

OtherCall ::= SEQUENCE
{ deviceID               DeviceID,
  connectionID            ConnectionID,
  localConnectionState     LocalConnectionState,
  connectionInfo           ConnectionInformation                OPTIONAL }

END -- of CSTA-service-completion-failure-event

```

17 Media attachment services and events

17.1 Services

17.1.1 Attach media service

```
CSTA-attach-media-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) attach-media-service( 244) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaServiceType, MediaServiceInstanceID, ConnectionMode,
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

attachMediaService OPERATION ::=
{   ARGUMENT      AttachMediaServiceArgument
    RESULT        AttachMediaServiceResult
    ERRORS        {universalFailure }
    CODE          local: 244 }

AttachMediaServiceArgument ::= SEQUENCE
{   connection           ConnectionID,
    mediaServiceType       MediaServiceType,
    mediaServiceVersion     INTEGER                               OPTIONAL,
    mediaServiceInstanceID  MediaServiceInstanceID             OPTIONAL,
    connectionMode         ConnectionMode,
    requestedConnectionState LocalConnectionState            OPTIONAL,
    extensions             CSTACurrentArguments            OPTIONAL }

AttachMediaServiceResult ::= SEQUENCE
{   mediaConnection        ConnectionID                   OPTIONAL,
    mediaDevice             [0] IMPLICIT DeviceID        OPTIONAL,
    mediaServiceInstanceID  MediaServiceInstanceID        OPTIONAL,
    mediaConnectionInfo     [1] IMPLICIT ConnectionInformation OPTIONAL,
```

```
extensions           CSTACurrentArguments          OPTIONAL }  
END -- of CSTA-attach-media-service
```

17.1.2 Detach media service

```

CSTA-detach-media-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) detach-media-service( 245) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaServiceType FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

detachMediaService OPERATION ::=
{ ARGUMENT      DetachMediaServiceArgument
  RESULT        DetachMediaServiceResult
  ERRORS        {universalFailure }
  CODE          local: 245 }

DetachMediaServiceArgument ::= SEQUENCE
{ connection           ConnectionID,
  mediaServiceType     MediaServiceType,
  extensions          CSTACCommonArguments
                      OPTIONAL }

DetachMediaServiceResult ::= CHOICE
{ extensions          CSTACCommonArguments,
  noData              NULL }

END -- of CSTA-detach-media-service

```

17.2 Events

17.2.1 Media attached

```

CSTA-media-attached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-attached-event( 246) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MediaServiceType, MediaServiceInstanceID, MediaStreamID,
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

MediaAttachedEvent ::= SEQUENCE
{ mediaConnection           ConnectionID,
  mediaDevice                SubjectDeviceID,
  mediaServiceType           MediaServiceType,
  mediaServiceVersion         INTEGER                           OPTIONAL,
  mediaServiceInstanceID      [0] IMPLICIT MediaServiceInstanceID OPTIONAL,
  mediaStreamID               [1] IMPLICIT MediaStreamID    OPTIONAL,
  mediaCallCharacteristics   [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics         CallCharacteristics          OPTIONAL,
  localConnectionInfo        LocalConnectionState        OPTIONAL,
  mediaConnectionInfo         [3] IMPLICIT ConnectionInformation OPTIONAL,
  extension                  CSTACurrentArguments       OPTIONAL }

END -- of CSTA-media-attached-event

```

17.2.2 Media detached

```

CSTA-media-detached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-detached-event( 247) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MediaServiceType, MediaServiceInstanceID, MediaStreamID,
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

MediaDetachedEvent ::= SEQUENCE
{ mediaConnection           ConnectionID,
  mediaDevice                SubjectDeviceID,
  mediaServiceType            MediaServiceType,
  mediaServiceVersion          INTEGER                           OPTIONAL,
  mediaServiceInstanceID       [0] IMPLICIT MediaServiceInstanceID OPTIONAL,
  mediaStreamID               [1] IMPLICIT MediaStreamID    OPTIONAL,
  mediaCallCharacteristics    [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics          CallCharacteristics        OPTIONAL,
  localConnectionInfo          LocalConnectionState      OPTIONAL,
  mediaConnectionInfo         [3] IMPLICIT ConnectionInformation OPTIONAL,
  extension                  CSTACommonArguments     OPTIONAL }

END -- of CSTA-media-detached-event

```

18 Routing services

18.1 Registration services

18.1.1 Route register

```
CSTA-route-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register( 248) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaClass FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

routeRegister OPERATION ::=

{ ARGUMENT          RouteRegisterArgument
  RESULT            RouteRegisterResult
  ERRORS           {universalFailure }
  CODE              local: 248 }

RouteRegisterArgument ::= SEQUENCE
{ routeingDevice           DeviceID           OPTIONAL,
  requestedRouteingMediaClass MediaClass        OPTIONAL,
  extensions               CSTACurrentArguments OPTIONAL }

RouteRegisterResult ::= SEQUENCE
{ routeRegisterReqID       RouteRegisterReqID,
  actualRouteingMediaClass MediaClass        OPTIONAL,
  extensions               CSTACurrentArguments OPTIONAL }

END -- of CSTA-route-register
```

18.1.2 Route register abort

```

CSTA-route-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register-abort( 249) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeRegisterAbort OPERATION ::=

{ ARGUMENT          RouteRegisterAbortArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 249 }

RouteRegisterAbortArgument ::= SEQUENCE
{ routeRegisterReqID      RouteRegisterReqID,
  extensions           CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-route-register-abort

```

18.1.3 Route register cancel

```

CSTA-route-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register-cancel( 250) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeRegisterCancel OPERATION ::=

{ ARGUMENT      RouteRegisterCancelArgument
  RESULT        RouteRegisterCancelResult
  ERRORS        {universalFailure }
  CODE          local: 250 }

RouteRegisterCancelArgument ::= SEQUENCE
{ routeRegisterReqID   RouteRegisterReqID,
  extensions           CSTACurrentArguments
                      OPTIONAL }

RouteRegisterCancelResult  ::= CHOICE
{ extensions         CSTACurrentArguments,
  noData             NULL }

END -- of CSTA-route-register-cancel

```

18.2 Services

18.2.1 Re-Route

```

CSTA-re-route-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) re-route-request( 82) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) };

reRouteRequest OPERATION ::=
{   ARGUMENT           ReRouteRequestArgument
    ERRORS             {universalFailure }
    ALWAYS RESPONDS    FALSE
    CODE               local: 32 }

ReRouteRequestArgument ::= SEQUENCE
{   crossRefIdentifier      RouteingCrossRefID,
    routeRegisterReqID       [0] IMPLICIT RouteRegisterReqID          OPTIONAL,
    replyTimeout              [1] IMPLICIT INTEGER                  OPTIONAL,
    correlatorData            [2] IMPLICIT CorrelatorData          OPTIONAL,
    callLinkageData           [3] IMPLICIT CallLinkageData          OPTIONAL,
    extensions                CSTACurrentArguments             OPTIONAL }

END -- of CSTA-re-route-request

```

18.2.2 Route end

```

CSTA-route-end-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-end-request( 85) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure, ErrorValue FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID  FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeEndRequest OPERATION ::=
{ ARGUMENT          RouteEndRequestArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 35 }

RouteEndRequestArgument ::= SEQUENCE {
  crossRefIdentifier    RouteingCrossRefID,
  routeRegisterReqID    [ 0] IMPLICIT RouteRegisterReqID      OPTIONAL,
  errorValue             [ 1] ErrorValue                  OPTIONAL,
  correlatorData         [ 2] IMPLICIT CorrelatorData     OPTIONAL,
  extensions             CSTACurrentArguments           OPTIONAL }

END -- of CSTA-route-end-request

```

18.2.3 Route reject

```

CSTA-route-reject
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-reject( 86) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeReject OPERATION ::=

{   ARGUMENT           RouteRejectArgument
    ERRORS             {universalFailure }
    ALWAYS RESPONDS    FALSE
    CODE               local: 36 }

RouteRejectArgument ::= SEQUENCE
{   crossRefIdentifier     RouteingCrossRefID,
    routeRegisterReqID      [0] IMPLICIT RouteRegisterReqID          OPTIONAL,
    rejectCause              [1] IMPLICIT RejectCause            OPTIONAL,
    correlatorData           [2] IMPLICIT CorrelatorData        OPTIONAL,
    extensions                CSTACurrentArguments           OPTIONAL }

RejectCause ::= ENUMERATED
{   busyOverflow          (1),
    queueTimeOverflow      (2),
    capacityOverflow       (3),
    calendarOverflow       (4),
    unknownOverflow         (5)  }

END -- of CSTA-route-reject

```

18.2.4 Route request

```

CSTA-route-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-request( 81) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
AssociatedCallingDeviceID, AssociatedCalledDeviceID, CalledDeviceID,
CallingDeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, SelectValue, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MessageInfo, LanguagePreferences, SubjectOfCall, DeviceHistory
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

routeRequest OPERATION ::=
{ ARGUMENT          RouteRequestArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 31 }

RouteRequestArgument ::= SEQUENCE
{ crossRefIdentifier      RouteingCrossRefID,
  routeRegisterReqID       [ 0] IMPLICIT RouteRegisterReqID           OPTIONAL,
  currentRoute              CalledDeviceID,
  callingDevice              CallingDeviceID,
  routeingDevice             SubjectDeviceID,
  routedCall                ConnectionID,
  routeSelAlgorithm         [ 1] IMPLICIT SelectValue,
  associatedCallingDevice   AssociatedCallingDeviceID,
  associatedCalledDevice    AssociatedCalledDeviceID,
  priority                  [ 2] IMPLICIT BOOLEAN,
  replyTimeout               [ 3] IMPLICIT INTEGER
}

```

```
correlatorData           [ 4] IMPLICIT CorrelatorData           OPTIONAL,
mediaCallCharacteristics [ 5] IMPLICIT MediaCallCharacteristics OPTIONAL,
callCharacteristics      [ 6] IMPLICIT CallCharacteristics   OPTIONAL,
routeCallInfo            [ 7] IMPLICIT ConnectionInformation OPTIONAL,
callLinkageData          [ 8] IMPLICIT CallLinkageData        OPTIONAL,
subjectOfCall             [ 9] IMPLICIT SubjectOfCall       OPTIONAL,
messageInfo              [10] IMPLICIT MessageInfo        OPTIONAL,
languagePreferences       [11] IMPLICIT LanguagePreferences OPTIONAL,
deviceHistory             [12] IMPLICIT DeviceHistory       OPTIONAL,
extensions               CSTACurrentArguments           OPTIONAL }
```

END -- of CSTA-route-request

18.2.5 Route select

```

CSTA-route-select-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-select-request( 83) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CorrelatorData, RetryValue, RouteingCrossRefID, RouteRegisterReqID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeSelectRequest OPERATION ::=
{   ARGUMENT           RouteSelectRequestArgument
    ERRORS             {universalFailure }
    ALWAYS RESPONDS    FALSE
    CODE               local: 33 }

RouteSelectRequestArgument ::= SEQUENCE
{   crossRefIdentifier   RouteingCrossRefID,
    routeRegisterReqID   [ 0] IMPLICIT RouteRegisterReqID      OPTIONAL,
    routeSelected         [ 1] DeviceID,
    alternateRoutes       [ 2] IMPLICIT SEQUENCE OF DeviceID      OPTIONAL,
    remainRetries         [ 3] RetryValue                      OPTIONAL,
    routeUsedReq          [ 4] IMPLICIT BOOLEAN                 OPTIONAL,
    correlatorData        [ 5] IMPLICIT CorrelatorData        OPTIONAL,
    extensions            CSTACurrentArguments                OPTIONAL }

END -- of CSTA-route-select-request

```

18.2.6 Route used

```

CSTA-route-used-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-used-request( 84) }

DEFINITIONS::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CallingDeviceID, CalledDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

routeUsedRequest OPERATION ::=
{   ARGUMENT          RouteUsedRequestArgument
    ERRORS            {universalFailure}
    ALWAYS RESPONDS  FALSE
    CODE              local: 34 }

RouteUsedRequestArgument ::= SEQUENCE
{   crossRefIdentifier  RouteingCrossRefID,
   routeRegisterReqID  [0] IMPLICIT RouteRegisterReqID           OPTIONAL,
   routeUsed           CalledDeviceID,
   callingDevice       CallingDeviceID,
   domain              BOOLEAN,
   correlatorData      [1] IMPLICIT CorrelatorData,
   callLinkageData     [2] IMPLICIT CallLinkageData,
   extensions          CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-route-used-request

```

19 Physical device features

19.1 Services

19.1.1 Button press

```

CSTA-button-press
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-press( 260) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

buttonPress OPERATION ::=
{   ARGUMENT      ButtonPressArgument
    RESULT        ButtonPressResult
    ERRORS        {universalFailure }
    CODE          local: 260 }

ButtonPressArgument ::= SEQUENCE
{   device           DeviceID,
    button           ButtonID,
    extensions       CSTACurrentArguments
                      OPTIONAL }

ButtonPressResult ::= CHOICE
{   extensions      CSTACurrentArguments,
    noData          NULL }

END -- of CSTA-button-press

```

19.1.2 Get auditory apparatus information

```

CSTA-get-auditory-apparatus-information
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) get-auditory-apparatus-information( 261 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
AuditoryApparatusID, AuditoryApparatusList FROM CSTA-physical-device-feature
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) physical-device-feature( 137 ) };

getAuditoryApparatusInformation OPERATION ::=
{   ARGUMENT      GetAuditoryApparatusInformationArgument
    RESULT        GetAuditoryApparatusInformationResult
    ERRORS        {universalFailure }
    CODE          local: 261 }

GetAuditoryApparatusInformationArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus   AuditoryApparatusID           OPTIONAL,
    extensions         CSTACurrentArguments          OPTIONAL }

GetAuditoryApparatusInformationResult ::= SEQUENCE
{   auditoryApparatusList   AuditoryApparatusList,
    extensions           CSTACurrentArguments        OPTIONAL }

END -- of CSTA-get-auditory-apparatus-information

```

19.1.3 Get button information

```

CSTA-get-button-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-button-information( 262) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getButtonInformation OPERATION ::=
{   ARGUMENT      GetButtonInformationArgument
    RESULT        GetButtonInformationResult
    ERRORS        {universalFailure }
    CODE          local: 262 }

GetButtonInformationArgument ::= SEQUENCE
{   device           DeviceID,
    button           ButtonID
                           OPTIONAL,
    extensions       CSTACurrentArguments
                           OPTIONAL }

GetButtonInformationResult ::= SEQUENCE
{   buttonList       ButtonList,
    extensions       CSTACurrentArguments
                           OPTIONAL }

ButtonList ::= SEQUENCE OF SEQUENCE
{   button           ButtonID,
    buttonLabel       [0] IMPLICIT IA5String
                           OPTIONAL,
    buttonLabelSettable [1] IMPLICIT BOOLEAN
                           OPTIONAL,
    buttonFunction    [2] IMPLICIT IA5String
                           OPTIONAL,
    buttonAssociatedNumber [3] IMPLICIT DeviceID
                           OPTIONAL,
    buttonAssociatedNumberSettable [4] IMPLICIT BOOLEAN
                           OPTIONAL,
    buttonPressIndicator [5] IMPLICIT BOOLEAN
                           OPTIONAL,
    lampList          SEQUENCE OF LampID
                           OPTIONAL }

END -- of CSTA-get-button-information

```

19.1.4 Get display

```

CSTA-get-display
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-display( 263) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID, CharacterSet FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getDisplay OPERATION ::=
{   ARGUMENT      GetDisplayArgument
    RESULT        GetDisplayResult
    ERRORS        {universalFailure }
    CODE          local: 263 }

GetDisplayArgument ::= SEQUENCE
{   device           DeviceID,
    display          DisplayID
                           OPTIONAL,
    extensions       CSTACurrentArguments
                           OPTIONAL }

GetDisplayResult ::= SEQUENCE
{   displayList      DisplayList,
    extensions       CSTACurrentArguments
                           OPTIONAL }

DisplayList ::= SEQUENCE OF SEQUENCE
{   displayID        DisplayID,
    logicalRows       INTEGER,
    logicalColumns    INTEGER,
    physicalRows      [0] IMPLICIT INTEGER
                           OPTIONAL,
    physicalColumns   [1] IMPLICIT INTEGER
                           OPTIONAL,
    physicalBaseRowNumber [2] IMPLICIT INTEGER
                           OPTIONAL,
    physicalBaseColumnNumber [3] IMPLICIT INTEGER
                           OPTIONAL,
    characterSet      CharacterSet
                           OPTIONAL,
    contentsOfDisplay IA5String }

END -- of CSTA-get-display

```

19.1.5 Get hookswitch status

```

CSTA-get-hookswitch-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-hookswitch-status( 264) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getHookswitchStatus OPERATION ::=
{   ARGUMENT      GetHookswitchStatusArgument
    RESULT        GetHookswitchStatusResult
    ERRORS        {universalFailure }
    CODE          local: 264 }

GetHookswitchStatusArgument ::= SEQUENCE
{   device           DeviceID,
    hookswitch        HookswitchID
                           OPTIONAL,
    extensions        CSTACurrentArguments
                           OPTIONAL }

GetHookswitchStatusResult ::= SEQUENCE
{   hookswitchStatusList   HookswitchStatusList,
    extensions          CSTACurrentArguments
                           OPTIONAL }

HookswitchStatusList ::= SEQUENCE OF SEQUENCE
{   hookswitch          HookswitchID,
    hookswitchOnHook     BOOLEAN }

END -- of CSTA-get-hookswitch-status

```

19.1.6 Get lamp information

```

CSTA-get-lamp-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-lamp-information( 265) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID, LampColor FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getLampInformation OPERATION ::=
{   ARGUMENT      GetLampInformationArgument
    RESULT        GetLampInformationResult
    ERRORS        {universalFailure }
    CODE          local: 265 }

GetLampInformationArgument ::= SEQUENCE
{   device           DeviceID,
    lamp             LampID
                           OPTIONAL,
    extensions       CSTACurrentArguments
                           OPTIONAL }

GetLampInformationResult ::= SEQUENCE
{   lampList         LampList,
    extensions       CSTACurrentArguments
                           OPTIONAL }

LampList ::= SEQUENCE OF SEQUENCE
{   lamp            LampID,
    lampLabel       [0] IMPLICIT OCTET STRING
                           OPTIONAL,
    button          [1] IMPLICIT ButtonID
                           OPTIONAL,
    lampColor       LampColor
                           OPTIONAL }

END -- of CSTA-get-lamp-information

```

19.1.7 Get lamp mode

```

CSTA-get-lamp-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-lamp-mode( 266) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID, LampColor, LampMode, LampBrightness
FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getLampMode OPERATION ::=
{   ARGUMENT      GetLampModeArgument
    RESULT        GetLampModeResult
    ERRORS        {universalFailure }
    CODElocal:   266 }

GetLampModeArgument ::= SEQUENCE
{   device          DeviceID,
    lamp            LampID
                           OPTIONAL,
    extensions      CSTACurrentArguments
                           OPTIONAL }

GetLampModeResult ::= SEQUENCE
{   lampModeList    LampModeList,
    lamp           LampID
                           OPTIONAL,
    extensions     CSTACurrentArguments
                           OPTIONAL }

LampModeList ::= SEQUENCE OF SEQUENCE
{   lamp           LampID,
    lampMode       LampMode,
    lampBrightness [0] IMPLICIT LampBrightness
                           OPTIONAL,
    lampColor      [1] IMPLICIT LampColor
                           OPTIONAL,
    button         [2] IMPLICIT ButtonID
                           OPTIONAL }

END -- of CSTA-get-lamp-mode

```

19.1.8 Get message waiting indicator

```

CSTA-get-message-waiting-indicator
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-message-waiting-indicator( 267) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getMessageWaitingIndicator OPERATION ::=

{ ARGUMENT      GetMessageWaitingIndicatorArgument
  RESULT        GetMessageWaitingIndicatorResult
  ERRORS        {universalFailure }
  CODE          local: 267 }

GetMessageWaitingIndicatorArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetMessageWaitingIndicatorResult ::= SEQUENCE
{ messageWaitingOn   BOOLEAN,
  deviceForMessage    DeviceID
                    OPTIONAL,
  lampIsPresent      BOOLEAN
                    OPTIONAL,
  extensions         CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-get-message-waiting-indicator

```

19.1.9 Get microphone gain

```

CSTA-get-microphone-gain
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-microphone-gain( 268) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicGainAbs FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getMicrophoneGain OPERATION ::=
{   ARGUMENT      GetMicrophoneGainArgument
    RESULT        GetMicrophoneGainResult
    ERRORS        {universalFailure }
    CODE          local: 268 }

GetMicrophoneGainArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus AuditoryApparatusID
                           OPTIONAL,
    extensions        CSTACurrentArguments
                           OPTIONAL }

GetMicrophoneGainResult ::= SEQUENCE
{   microphoneGainList MicrophoneGainList,
    extensions         CSTACurrentArguments
                           OPTIONAL }

MicrophoneGainList ::= SEQUENCE OF SEQUENCE
{   auditoryApparatus AuditoryApparatusID,
    micGainAbs        MicGainAbs
                           OPTIONAL }

END -- of CSTA-get-microphone-gain

```

19.1.10 Get microphone mute

```

CSTA-get-microphone-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-microphone-mute( 269) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getMicrophoneMute OPERATION ::=
{   ARGUMENT      GetMicrophoneMuteArgument
    RESULT        GetMicrophoneMuteResult
    ERRORS        {universalFailure }
    CODE          local: 269 }

GetMicrophoneMuteArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus AuditoryApparatusID           OPTIONAL,
    extensions         CSTACurrentArguments         OPTIONAL }

GetMicrophoneMuteResult ::= SEQUENCE
{   microphoneMuteList   MicrophoneMuteList,
    extensions           CSTACurrentArguments       OPTIONAL }

MicrophoneMuteList ::= SEQUENCE OF SEQUENCE
{   auditoryApparatus AuditoryApparatusID,
    microphoneMuteOn  BOOLEAN }

END -- of CSTA-get-microphone-mute

```

19.1.11 Get ringer status

```

CSTA-get-ringer-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-ringer-status( 270) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getRingerStatus OPERATION ::=
{ ARGUMENT      GetRingerStatusArgument
  RESULT        GetRingerStatusResult
  ERRORS        {universalFailure }
  CODE          local: 270 }

GetRingerStatusArgument ::= SEQUENCE
{ device           DeviceID,
  ringer           RingerID
                           OPTIONAL,
  extensions       CSTACurrentArguments
                           OPTIONAL }

GetRingerStatusResult ::= SEQUENCE
{ ringerStatusList   RingerStatusList,
  extensions        CSTACurrentArguments
                           OPTIONAL }

RingerStatusList ::= SEQUENCE OF SEQUENCE
{ ringer           RingerID,
  ringMode         RingMode,
  ringCount        [0] IMPLICIT INTEGER (0..1000)    OPTIONAL,
  ringDuration     [3] IMPLICIT INTEGER             OPTIONAL,
  ringPattern      [1] IMPLICIT INTEGER             OPTIONAL,
  ringVolAbs       [2] IMPLICIT INTEGER (0..100)    OPTIONAL }

END -- of CSTA-get-ringer-status

```

19.1.12 Get speaker mute

```

CSTA-get-speaker-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-speaker-mute( 271) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getSpeakerMute OPERATION ::=
{   ARGUMENT      GetSpeakerMuteArgument
    RESULT        GetSpeakerMuteResult
    ERRORS        {universalFailure }
    CODE          local: 271 }

GetSpeakerMuteArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus AuditoryApparatusID           OPTIONAL,
    extensions        CSTACurrentArguments          OPTIONAL }

GetSpeakerMuteResult ::= SEQUENCE
{   speakerMuteList   SpeakerMuteList,
    extensions        CSTACurrentArguments          OPTIONAL }

SpeakerMuteList ::= SEQUENCE OF SEQUENCE
{   auditoryApparatus AuditoryApparatusID,
    speakerMuteOn     BOOLEAN }

END -- of CSTA-get-speaker-mute

```

19.1.13 Get speaker volume

```

CSTA-get-speaker-volume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-speaker-volume( 272) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, VolAbs FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getSpeakerVolume OPERATION ::=
{   ARGUMENT      GetSpeakerVolumeArgument
    RESULT        GetSpeakerVolumeResult
    ERRORS        {universalFailure }
    CODE          local: 272 }

GetSpeakerVolumeArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus AuditoryApparatusID           OPTIONAL,
    extensions        CSTACurrentArguments          OPTIONAL }

GetSpeakerVolumeResult ::= SEQUENCE
{   speakerVolumeList SpeakerVolumeList,
    extensions        CSTACurrentArguments          OPTIONAL }

SpeakerVolumeList ::= SEQUENCE OF SEQUENCE
{   auditoryApparatus AuditoryApparatusID,
    speakerVolAbs     VolAbs                      OPTIONAL }

END -- of CSTA-get-speaker-volume

```

19.1.14 Set button information

```

CSTA-set-button-information
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) set-button-information( 273 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) physical-device-feature( 137 ) };

setButtonInformation OPERATION ::=
{   ARGUMENT      SetButtonInformationArgument
    RESULT        SetButtonInformationResult
    ERRORS        {universalFailure }
    CODE          local: 273 }

SetButtonInformationArgument ::= SEQUENCE
{   device           DeviceID,
    button           ButtonID,
    buttonLabel       IA5String (SIZE(0..64))           OPTIONAL,
    buttonAssociatedNumber DeviceID                   OPTIONAL,
    extensions        CSTACurrentArguments          OPTIONAL }

SetButtonInformationResult ::= CHOICE
{   extensions      CSTACurrentArguments,
    noData          NULL  }

END -- of CSTA-set-button-information

```

19.1.15 Set display

```

CSTA-set-display
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-display( 274) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setDisplay OPERATION ::=
{ ARGUMENT      SetDisplayArgument
  RESULT        SetDisplayResult
  ERRORS        {universalFailure }
  CODE          local: 274 }

SetDisplayArgument ::= SEQUENCE
{ device           DeviceID,
  display          DisplayID
                           OPTIONAL,
  physicalBaseRowNumber [0] IMPLICIT INTEGER
                           OPTIONAL,
  physicalBaseColumnNumber [1] IMPLICIT INTEGER
                           OPTIONAL,
  contentsOfDisplay IA5String (SIZE(0..240)),
  offset            [2] IMPLICIT INTEGER
                           OPTIONAL,
  extensions        CSTACurrentArguments
                           OPTIONAL }

SetDisplayResult ::= CHOICE
{ extensions        CSTACurrentArguments,
  noData            NULL }

END -- of CSTA-set-display

```

19.1.16 Set hookswitch status

```

CSTA-set-hookswitch-status
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) set-hookswitch-status( 275 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) physical-device-feature( 137 ) };

setHookswitchStatus OPERATION ::=
{   ARGUMENT      SetHookswitchStatusArgument
   RESULT        SetHookswitchStatusResult
   ERRORS        {universalFailure }
   CODE          local: 275 }

SetHookswitchStatusArgument ::= SEQUENCE
{   device           DeviceID,
   hookswitch        HookswitchID,
   hookswitchOnHook  BOOLEAN,
   extensions        CSTACurrentArguments
                     OPTIONAL }

SetHookswitchStatusResult ::= CHOICE
{   extensions      CSTACurrentArguments,
   noData          NULL }

END -- of CSTA-set-hookswitch-status

```

19.1.17 Set lamp mode

```

CSTA-set-lamp-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-lamp-mode( 276) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LampID, LampColor, LampMode, LampBrightness
FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setLampMode OPERATION ::=
{ ARGUMENT      SetLampModeArgument
  RESULT        SetLampModeResult
  ERRORS        {universalFailure }
  CODE          local: 276 }

SetLampModeArgument ::= SEQUENCE
{ device           DeviceID,
  lamp             LampID,
  lampMode         LampMode,
  lampBrightness   LampBrightness           OPTIONAL,
  lampColor        LampColor                OPTIONAL,
  extensions       CSTACurrentArguments    OPTIONAL }

SetLampModeResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData          NULL }

END -- of CSTA-set-lamp-mode

```

19.1.18 Set message waiting indicator

```

CSTA-set-message-waiting-indicator
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) set-message-waiting-indicator( 277 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

setMessageWaitingIndicator OPERATION ::=

{ ARGUMENT      SetMessageWaitingIndicatorArgument
  RESULT        SetMessageWaitingIndicatorResult
  ERRORS        {universalFailure }
  CODE          local: 277 }

SetMessageWaitingIndicatorArgument ::= SEQUENCE
{ device           DeviceID,
  messageWaitingOn BOOLEAN,
  deviceForMessage DeviceID                               OPTIONAL,
  extensions       CSTACurrentArguments                OPTIONAL }

SetMessageWaitingIndicatorResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData           NULL }

END -- of CSTA-set-message-waiting-indicator

```

19.1.19 Set microphone gain

```

CSTA-set-microphone-gain
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-microphone-gain( 278) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicrophoneGain FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setMicrophoneGain OPERATION ::=
{   ARGUMENT      SetMicrophoneGainArgument
    RESULT        SetMicrophoneGainResult
    ERRORS        {universalFailure }
    CODE          local: 278 }

SetMicrophoneGainArgument ::= SEQUENCE
{   device                  DeviceID,
    auditoryApparatus       AuditoryApparatusID,
    microphoneGain           MicrophoneGain,
    extensions               CSTACurrentArguments      OPTIONAL }

SetMicrophoneGainResult ::= CHOICE
{   extensions             CSTACurrentArguments,
    noData                 NULL }

END -- of CSTA-set-microphone-gain

```

19.1.20 Set microphone mute

```

CSTA-set-microphone-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-microphone-mute( 279) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setMicrophoneMute OPERATION ::=
{   ARGUMENT      SetMicrophoneMuteArgument
    RESULT        SetMicrophoneMuteResult
    ERRORS        {universalFailure }
    CODE          local: 279 }

SetMicrophoneMuteArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus   AuditoryApparatusID,
    microphoneMuteOn     BOOLEAN,
    extensions          CSTACurrentArguments      OPTIONAL }

SetMicrophoneMuteResult ::= CHOICE
{   extensions        CSTACurrentArguments,
    noData            NULL }

END -- of CSTA-set-microphone-mute

```

19.1.21 Set ringer status

```

CSTA-set-ringer-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-ringer-status( 280) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode, Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setRingerStatus OPERATION ::=
{ ARGUMENT      SetRingerStatusArgument
  RESULT        SetRingerStatusResult
  ERRORS        {universalFailure }
  CODE          local: 280 }

SetRingerStatusArgument ::= SEQUENCE
{ device           DeviceID,
  ringer           RingerID,
  ringMode         RingMode
                           OPTIONAL,
  ringPattern      [1] IMPLICIT INTEGER
                           OPTIONAL,
  ringVolume       [2] Volume
                           OPTIONAL,
  extensions       CSTACurrentArguments
                           OPTIONAL }

SetRingerStatusResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData          NULL }

END -- of CSTA-set-ringer-status

```

19.1.22 Set speaker mute

```

CSTA-set-speaker-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-speaker-mute( 281) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setSpeakerMute OPERATION ::=
{   ARGUMENT      SetSpeakerMuteArgument
    RESULT        SetSpeakerMuteResult
    ERRORS        {universalFailure }
    CODE          local: 281 }

SetSpeakerMuteArgument ::= SEQUENCE
{   device           DeviceID,
    auditoryApparatus   AuditoryApparatusID,
    speakerMuteOn       BOOLEAN,
    extensions         CSTACurrentArguments      OPTIONAL }

SetSpeakerMuteResult ::= CHOICE
{   extensions       CSTACurrentArguments,
    noData            NULL  }

END -- of CSTA-set-speaker-mute

```

19.1.23 Set speaker volume

```

CSTA-set-speaker-volume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-speaker-volume( 282) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setSpeakerVolume OPERATION ::=
{ ARGUMENT      SetSpeakerVolumeArgument
  RESULT        SetSpeakerVolumeResult
  ERRORS        {universalFailure }
  CODE          local: 282 }

SetSpeakerVolumeArgument ::= SEQUENCE
{ device           DeviceID,
  auditoryApparatus AuditoryApparatusID,
  speakerVolume     Volume,
  extensions        CSTACurrentArguments           OPTIONAL }

SetSpeakerVolumeResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData          NULL }

END -- of CSTA-set-speaker-volume

```

19.2 Events

19.2.1 Button information

```

CSTA-button-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-information-event( 283) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

ButtonInformationEvent ::= SEQUENCE
{   device                  SubjectDeviceID,
    button                  ButtonID,
    buttonLabel              IA5String (SIZE(0..64))      OPTIONAL,
    buttonAssociatedNumber   DeviceID                   OPTIONAL,
    buttonPressIndicator     BOOLEAN                  OPTIONAL,
    extensions               CSTACurrentArguments OPTIONAL }

END -- of CSTA-button-information-event

```

19.2.2 Button press

```

CSTA-button-press-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-press-event( 284) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

ButtonPressEvent ::= SEQUENCE
{ device                  SubjectDeviceID,
  button                 ButtonID,
  buttonLabel             IA5String (SIZE(0..64))      OPTIONAL,
  buttonAssociatedNumber DeviceID                      OPTIONAL,
  extensions              CSTACurrentArguments        OPTIONAL }

END -- of CSTA-button-press-event

```

19.2.3 Display updated

```

CSTA-display-updated-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) display-updated-event( 285 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
DisplayID, CharacterSet FROM CSTA-physical-device-feature
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) physical-device-feature( 137 ) };

DisplayUpdatedEvent ::= SEQUENCE
{
  device                  SubjectDeviceID,
  displayID               DisplayID          OPTIONAL,
  logicalRows              INTEGER,
  logicalColumns           INTEGER,
  physicalRows             [ 0 ] IMPLICIT INTEGER OPTIONAL,
  physicalColumns          [ 1 ] IMPLICIT INTEGER OPTIONAL,
  physicalBaseRowNumber    [ 2 ] IMPLICIT INTEGER OPTIONAL,
  physicalBaseColumnNumber [ 3 ] IMPLICIT INTEGER OPTIONAL,
  characterSet             CharacterSet        OPTIONAL,
  contentsOfDisplay        IA5String,
  extensions               CSTACCommonArguments OPTIONAL
}

END -- of CSTA-display-updated-event

```

19.2.4 Hookswitch

```

CSTA-hookswitch-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) hookswitch-event( 286) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

HookswitchEvent ::= SEQUENCE
{   device           SubjectDeviceID,
    hookswitch        HookswitchID,
    hookswitchOnHook  BOOLEAN,
    extensions        CSTACurrentArguments      OPTIONAL }

END -- of CSTA-hookswitch-event

```

19.2.5 Lamp mode

```

CSTA-lamp-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) lamp-mode-event( 287) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LampID, LampMode, LampBrightness, LampColor
FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

LampModeEvent ::= SEQUENCE
{ device           SubjectDeviceID,
  lamp             LampID,
  lampLabel        OCTET STRING                   OPTIONAL,
  lampMode         LampMode,
  lampBrightness   LampBrightness                OPTIONAL,
  lampColor        LampColor                     OPTIONAL,
  extensions       CSTACurrentArguments          OPTIONAL }

END -- of CSTA-lamp-mode-event

```

19.2.6 Message waiting

```
CSTA-message-waiting-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) message-waiting-event( 44) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

MessageWaitingEvent ::= SEQUENCE
{ targetDevice           SubjectDeviceID,
  deviceForMessage        DeviceID          OPTIONAL,
  messageWaitingOn        BOOLEAN,
  extensions              CSTACurrentArguments OPTIONAL }

END -- of CSTA-message-waiting-event
```

19.2.7 Microphone gain

```
CSTA-microphone-gain-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) microphone-gain-event( 288) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicrophoneGain FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

MicrophoneGainEvent ::= SEQUENCE
{ invokingDevice      SubjectDeviceID,
  auditoryApparatus   AuditoryApparatusID,
  microphoneGain       MicrophoneGain,
  extensions           CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-microphone-gain-event
```

19.2.8 Microphone mute

```
CSTA-microphone-mute-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) microphone-mute-event( 45) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

MicrophoneMuteEvent ::= SEQUENCE
{   invokingDevice      SubjectDeviceID,
    auditoryApparatus   AuditoryApparatusID,
    microphoneMuteOn     BOOLEAN,
    extensions           CSTACurrentArguments
                           OPTIONAL }

END -- of CSTA-microphone-mute-event
```

19.2.9 Ringer status

```

CSTA-ringer-status-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) ringer-status-event( 289) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode, Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

RingerStatusEvent ::= SEQUENCE
{ device           SubjectDeviceID,
  ringer           RingerID,
  ringMode         RingMode
                  OPTIONAL,
  ringCount        [0] IMPLICIT INTEGER (0..1000)
                  OPTIONAL,
  ringDuration     [3] IMPLICIT INTEGER
                  OPTIONAL,
  ringPattern      [1] IMPLICIT INTEGER
                  OPTIONAL,
  ringVolume       [2] Volume
                  OPTIONAL,
  extensions       CSTACurrentArguments
                  OPTIONAL }

END -- of CSTA-ringer-status-event

```

19.2.10 Speaker mute

```

CSTA-speaker-mute-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) speaker-mute-event( 46) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

SpeakerMuteEvent ::= SEQUENCE
{ invokingDevice      SubjectDeviceID,
  auditoryApparatus   AuditoryApparatusID,
  speakerMuteOn        BOOLEAN,
  extensions           CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-speaker-mute-event

```

19.2.11 Speaker volume

```

CSTA-speaker-volume-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) speaker-volume-event( 47) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

SpeakerVolumeEvent ::= SEQUENCE
{ invokingDevice      SubjectDeviceID,
  auditoryApparatus   AuditoryApparatusID,
  speakerVolume        Volume,
  extensions           CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-speaker-volume-event

```

20 Logical device features

20.1 Services

20.1.1 Call back non-call-related

```

CSTA-call-back-non-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-non-call-related( 300) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

callBackNonCallRelated OPERATION ::=
{ ARGUMENT     CallBackNonCallRelatedArgument
  RESULT       CallBackNonCallRelatedResult
  ERRORS        {universalFailure }
  CODE          local: 300 }

CallBackNonCallRelatedArgument ::= SEQUENCE
{ originatingDevice    DeviceID,
  targetDevice         DeviceID,
  extensions          CSTACurrentArguments           OPTIONAL }

CallBackNonCallRelatedResult ::= CHOICE
{ extensions          CSTACurrentArguments,
  noData              NULL }

END -- of CSTA-call-back-non-call-related

```

20.1.2 Call back message non-call-related

```

CSTA-call-back-message-non-call-related
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-back-message-non-call-related( 301 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

callBackMessageNonCallRelated OPERATION ::=

{ ARGUMENT     CallBackMessageNonCallRelatedArgument
  RESULT       CallBackMessageNonCallRelatedResult
  ERRORS        {universalFailure }
  CODE          local: 301 }

CallBackMessageNonCallRelatedArgument ::= SEQUENCE
{ originatingDevice   DeviceID,
  targetDevice        DeviceID,
  extensions          CSTACurrentArguments
                      OPTIONAL }

CallBackMessageNonCallRelatedResult ::= CHOICE
{ extensions        CSTACurrentArguments,
  noData            NULL }

END -- of CSTA-call-back-message-non-call-related

```

20.1.3 Cancel call back

```

CSTA-cancel-call-back
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) cancel-call-back( 302) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

cancelCallBack OPERATION ::=

{ ARGUMENT      CancelCallBackArgument
  RESULT        CancelCallBackResult
  ERRORS        {universalFailure }
  CODE          local: 302 }

CancelCallBackArgument ::= SEQUENCE
{ originatingDevice    DeviceID,
  targetDevice         DeviceID,
  extensions           CSTACurrentArguments
                      OPTIONAL }

CancelCallBackResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-cancel-call-back

```

20.1.4 Cancel call back message

```

CSTA-cancel-call-back-message
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) cancel-call-back-message( 303 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-identifiers( 123 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

cancelCallBackMessage OPERATION ::=

{ ARGUMENT      CancelCallBackMessageArgument
  RESULT        CancelCallBackMessageResult
  ERRORS        {universalFailure }
  CODE          local: 303 }

CancelCallBackMessageArgument ::= SEQUENCE
{ originatingDevice    DeviceID,
  targetDevice         DeviceID,
  extensions           CSTACurrentArguments
                      OPTIONAL }

CancelCallBackMessageResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-cancel-call-back-message

```

20.1.5 Get agent state

```

CSTA-get-agent-state
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-agent-state( 304) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentState, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getAgentState OPERATION ::=
{   ARGUMENT      GetAgentStateArgument
    RESULT        GetAgentStateResult
    ERRORS        {universalFailure }
    CODE          local: 304 }

GetAgentStateArgument ::= SEQUENCE
{   device           DeviceID,
    acdGroup         DeviceID
                           OPTIONAL,
    extensions       CSTACurrentArguments
                           OPTIONAL }

GetAgentStateResult ::= SEQUENCE
{   agentStateList   AgentStateList,
    extensions       CSTACurrentArguments
                           OPTIONAL }

AgentStateList ::= SEQUENCE SIZE (1..32) OF AgentStateEntry

AgentStateEntry ::= SEQUENCE
{   agentID          AgentID
                           OPTIONAL,
    loggedOn         BOOLEAN,
    agentInfo        SEQUENCE OF AgentInfo
                           OPTIONAL }

AgentInfo ::= SEQUENCE
{   acdGroup         DeviceID
                           OPTIONAL,
    agentState       AgentState,
    pendingAgentState [0] IMPLICIT PendingAgentState
                           OPTIONAL,
    agentStateCondition [1] IMPLICIT AgentStateCondition
                           OPTIONAL }

AgentStateCondition ::= ENUMERATED
{   forcedPause (0),
    other        (1) }

END -- of CSTA-get-agent-state

```

20.1.6 Get auto answer

```

CSTA-get-auto-answer
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-auto-answer( 305) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getAutoAnswer OPERATION ::=
{ ARGUMENT      GetAutoAnswerArgument
  RESULT        GetAutoAnswerResult
  ERRORS        {universalFailure }
  CODE          local: 305 }

GetAutoAnswerArgument ::= SEQUENCE
{ device          DeviceID,
  extensions     CSTACurrentArguments OPTIONAL }

GetAutoAnswerResult ::= SEQUENCE
{ autoAnswerOn    BOOLEAN,
  numberOfRings   INTEGER
                           OPTIONAL,
  extensions     CSTACurrentArguments
                           OPTIONAL }

END -- of CSTA-get-auto-answer

```

20.1.7 Get auto work mode

```

CSTA-get-auto-work-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-auto-work-mode( 306) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getAutoWorkMode OPERATION ::=
{ ARGUMENT      GetAutoWorkModeArgument
  RESULT        GetAutoWorkModeResult
  ERRORS        {universalFailure }
  CODE          local: 306 }

GetAutoWorkModeArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetAutoWorkModeResult ::= SEQUENCE
{ autoWorkOn        BOOLEAN,
  autoWorkInterval   INTEGER
                    OPTIONAL,
  extensions        CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-get-auto-work-mode

```

20.1.8 Get Call Back

```

CSTA-get-call-back
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-call-back( 378) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getCallBack OPERATION ::=

{ ARGUMENT      GetCallBackArgument
  RESULT        GetCallBackResult
  ERRORS        {universalFailure }
  CODE          local: 378 }

GetCallBackArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
  OPTIONAL }

GetCallBackResult ::= SEQUENCE
{ callBackList     CallBackList,
  extensions       CSTACurrentArguments
  OPTIONAL }

CallBackList ::= SEQUENCE OF SEQUENCE
{ originatingDevice   DeviceID,
  targetDevice        DeviceID,
  callBackMessageIndicator BOOLEAN
  OPTIONAL }

END -- of CSTA-get-call-back

```

20.1.9 Get caller id status

```

CSTA-get-caller-id-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-caller-id-status( 307) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getCallerIDStatus OPERATION ::=
{ ARGUMENT      GetCallerIDStatusArgument
  RESULT        GetCallerIDStatusResult
  ERRORS        {universalFailure }
  CODE          local: 307 }

GetCallerIDStatusArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetCallerIDStatusResult ::= SEQUENCE
{ callerIDProvided   BOOLEAN,
  extensions       CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-get-caller-id-status

```

20.1.10 Get do not disturb

```

CSTA-get-do-not-disturb
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-do-not-disturb( 308) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getDoNotDisturb OPERATION ::=
{   ARGUMENT      GetDoNotDisturbArgument
   RESULT        GetDoNotDisturbResult
   ERRORS        {universalFailure }
   CODE          local: 308 }

GetDoNotDisturbArgument ::= SEQUENCE
{   device           DeviceID,
   extensions        CSTACCommonArguments
                     OPTIONAL }

GetDoNotDisturbResult ::= SEQUENCE
{   doNotDisturbOn    BOOLEAN,
   callOrigination   CallOrigination
                     OPTIONAL,
   callingDeviceList SEQUENCE OF DeviceID
                     OPTIONAL,
   extensions        CSTACCommonArguments
                     OPTIONAL }

END -- of CSTA-get-do-not-disturb

```

20.1.11 Get forwarding

```

CSTA-get-forwarding
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-forwarding( 309) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardList FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getForwarding OPERATION ::=
{   ARGUMENT      GetForwardingArgument
    RESULT        GetForwardingResult
    ERRORS        {universalFailure }
    CODE          local: 309 }

GetForwardingArgument ::= SEQUENCE
{   device           DeviceID,
    extensions       CSTACurrentArguments
                      OPTIONAL }

GetForwardingResult ::= SEQUENCE
{   forwardingList   ForwardList,
    extensions       CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-get-forwarding

```

20.1.12 Get last number dialed

```

CSTA-get-last-number-dialed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-last-number-dialed( 310) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getLastNumberDialed OPERATION ::=
{ ARGUMENT      GetLastNumberDialedArgument
  RESULT        GetLastNumberDialedResult
  ERRORS        {universalFailure }
  CODE          local: 310 }

GetLastNumberDialedArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetLastNumberDialedResult ::= SEQUENCE
{ numberDialed    DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-get-last-number-dialed

```

20.1.13 Get routeing mode

```

CSTA-get-routeing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-routeing-mode( 311) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getRouteingMode OPERATION ::=
{ ARGUMENT      GetRouteingModeArgument
  RESULT        GetRouteingModeResult
  ERRORS        {universalFailure }
  CODE          local: 311 }

GetRouteingModeArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetRouteingModeResult ::= SEQUENCE
{ routeingMode     BOOLEAN,
  extensions       CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-get-routeing-mode

```

20.1.14 Set agent state

```

CSTA-set-agent-state
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-agent-state( 312) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setAgentState OPERATION ::=
{   ARGUMENT      SetAgentStateArgument
   RESULT        SetAgentStateResult
   ERRORS        {universalFailure }
   CODE          local: 312 }

SetAgentStateArgument ::= SEQUENCE
{   device           DeviceID,
   requestedAgentState ReqAgentState,
   agentID          [2] IMPLICIT AgentID           OPTIONAL,
   password          [3] IMPLICIT AgentPassword    OPTIONAL,
   group             DeviceID                     OPTIONAL,
   extensions        CSTACurrentArguments     OPTIONAL }

SetAgentStateResult ::= SEQUENCE
{   pendingAgentState PendingAgentState           OPTIONAL,
   extensions         CSTACurrentArguments     OPTIONAL }

ReqAgentState ::= ENUMERATED
{   loggedOn          (0),
   loggedOff         (1),
   notReady          (2),
   ready             (3),
   workingAfterCall (4) }

END -- of CSTA-set-agent-state

```

20.1.15 Set auto answer

```

CSTA-set-auto-answer
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-auto-answer( 313) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setAutoAnswer OPERATION ::=

{ ARGUMENT      SetAutoAnswerArgument
  RESULT        SetAutoAnswerResult
  ERRORS        {universalFailure }
  CODE          local: 313 }

SetAutoAnswerArgument ::= SEQUENCE
{ device           DeviceID,
  autoAnswerOn     BOOLEAN,
  numberOfRings    INTEGER                               OPTIONAL,
  extensions       CSTACurrentArguments               OPTIONAL }

SetAutoAnswerResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData          NULL }

END -- of CSTA-set-auto-answer

```

20.1.16 Set auto work mode

```

CSTA-set-auto-work-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-auto-work-mode( 314) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setAutoWorkMode OPERATION ::=
{ ARGUMENT      SetAutoWorkModeArgument
  RESULT        SetAutoWorkModeResult
  ERRORS        {universalFailure }
  CODE          local: 314 }

SetAutoWorkModeArgument ::= SEQUENCE
{ device           DeviceID,
  autoWorkOn       BOOLEAN,
  autoWorkInterval INTEGER (0..6000)                               OPTIONAL,
  extensions       CSTACCommonArguments                         OPTIONAL }

SetAutoWorkModeResult ::= CHOICE
{ extensions       CSTACCommonArguments,
  noData          NULL }

END -- of CSTA-set-auto-work-mode

```

20.1.17 Set caller id status

```

CSTA-set-caller-id-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-caller-id-status( 315) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setCallerIDStatus OPERATION ::=

{ ARGUMENT      SetCallerIDStatusArgument
  RESULT        SetCallerIDStatusResult
  ERRORS        {universalFailure }
  CODE          local: 315 }

SetCallerIDStatusArgument ::= SEQUENCE
{ device           DeviceID,
  callerIDProvided BOOLEAN,
  extensions       CSTACurrentArguments
                  OPTIONAL }

SetCallerIDStatusResult ::= CHOICE
{ extensions     CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-set-caller-id-status

```

20.1.18 Set do not disturb

```

CSTA-set-do-not-disturb
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-do-not-disturb( 316) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setDoNotDisturb OPERATION ::=
{   ARGUMENT      SetDoNotDisturbArgument
   RESULT        SetDoNotDisturbResult
   ERRORS        {universalFailure }
   CODE          local: 316 }

SetDoNotDisturbArgument ::= SEQUENCE
{   device           DeviceID,
   doNotDisturbOn    BOOLEAN,
   callOrigination   CallOrigination           OPTIONAL,
   callingDeviceList  SEQUENCE OF DeviceID       OPTIONAL,
   extensions        CSTACCommonArguments     OPTIONAL }

SetDoNotDisturbResult ::= CHOICE
{   extensions      CSTACCommonArguments,
   noData          NULL  }

END -- of CSTA-set-do-not-disturb

```

20.1.19 Set forwarding

```

CSTA-set-forwarding
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-forwarding( 317) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardingType FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setForwarding OPERATION ::=
{   ARGUMENT      SetForwardingArgument
    RESULT        SetForwardingResult
    ERRORS        {universalFailure }
    CODE          local: 317 }

SetForwardingArgument ::= SEQUENCE
{   device           DeviceID,
    forwardingType   ForwardingType
                           OPTIONAL,
    activateForward  BOOLEAN,
    forwardDN        DeviceID
                           OPTIONAL,
    ringCount        INTEGER (1..100)
                           OPTIONAL,
    ringDuration     [3] IMPLICIT INTEGER
                           OPTIONAL,
    extensions       CSTACurrentArguments
                           OPTIONAL }

SetForwardingResult ::= CHOICE
{   extensions       CSTACurrentArguments,
    noData           NULL }

END -- of CSTA-set-forwarding

```

20.1.20 Set routeing mode

```

CSTA-set-routeing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-routeing-mode( 318) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setRouteingMode OPERATION ::=
{ ARGUMENT      SetRouteingModeArgument
  RESULT        SetRouteingModeResult
  ERRORS        {universalFailure }
  CODE          local: 318 }

SetRouteingModeArgument ::= SEQUENCE
{ device         DeviceID,
  routeingMode   BOOLEAN,
  extensions     CSTACurrentArguments
                OPTIONAL }

SetRouteingModeResult ::= CHOICE
{ extensions     CSTACurrentArguments,
  noData        NULL }

END -- of CSTA-set-routeing-mode

```

20.2 Events

20.2.1 Agent busy

```

CSTA-agent-busy-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-busy-event( 319) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentBusyEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                AgentID                  OPTIONAL,
  acdGroup               DeviceID                OPTIONAL,
  pendingAgentState      [2] IMPLICIT PendingAgentState OPTIONAL,
  cause                  [3] IMPLICIT EventCause    OPTIONAL,
  extensions             CSTACurrentArguments OPTIONAL }

END -- of CSTA-agent-busy-event

```

20.2.2 Agent logged off

```

CSTA-agent-logged-off-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-logged-off-event( 320) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentLoggedOffEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                [ 2] IMPLICIT AgentID
                           OPTIONAL,
  acdGroup               DeviceID
                           OPTIONAL,
  agentPassword          [ 3] IMPLICIT AgentPassword
                           OPTIONAL,
  cause                  EventCause
                           OPTIONAL,
  extensions             CSTACurrentArguments
                           OPTIONAL }

END -- of CSTA-agent-logged-off-event

```

20.2.3 Agent logged on

```

CSTA-agent-logged-on-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-logged-on-event( 321) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentLoggedOnEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                [2] IMPLICIT AgentID          OPTIONAL,
  acdGroup               DeviceID                  OPTIONAL,
  agentPassword          [3] IMPLICIT AgentPassword    OPTIONAL,
  cause                  EventCause                OPTIONAL,
  extensions             CSTACurrentArguments      OPTIONAL }

END -- of CSTA-agent-logged-on-event

```

20.2.4 Agent not ready

```

CSTA-agent-not-ready-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-not-ready-event( 322) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentNotReadyEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                AgentID          OPTIONAL,
  acdGroup               DeviceID         OPTIONAL,
  cause                  EventCause        OPTIONAL,
  extensions             CSTACurrentArguments OPTIONAL }

END -- of CSTA-agent-not-ready-event

```

20.2.5 Agent ready

```

CSTA-agent-ready-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-ready-event( 323) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentReadyEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                AgentID                  OPTIONAL,
  acdGroup               DeviceID                 OPTIONAL,
  cause                  EventCause               OPTIONAL,
  extensions             CSTACurrentArguments   OPTIONAL }

END -- of CSTA-agent-ready-event

```

20.2.6 Agent working after call

```

CSTA-agent-working-after-call-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-working-after-call-event( 324) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentWorkingAfterCallEvent ::= SEQUENCE
{ agentDevice           SubjectDeviceID,
  agentID                AgentID
                                         OPTIONAL,
  acdGroup               DeviceID
                                         OPTIONAL,
  pendingAgentState      [2] IMPLICIT ENUMERATED
  { notReady      (0),
    ready        (1),
    null         (2) }                                     OPTIONAL,
  cause          [3] IMPLICIT EventCause
                                         OPTIONAL,
  extensions     CSTACurrentArguments
                                         OPTIONAL }

END -- of CSTA-agent-working-after-call-event

```

20.2.7 Auto answer

```
CSTA-auto-answer-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-answer-event( 40) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AutoAnswerEvent ::= SEQUENCE
{   invokingDevice          SubjectDeviceID,
    autoAnswerOn            BOOLEAN,
    numberOfRings           INTEGER                      OPTIONAL,
    extensions              CSTACurrentArguments        OPTIONAL }

END -- of CSTA-auto-answer-event
```

20.2.8 Auto work mode

```

CSTA-auto-work-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-work-mode-event( 326) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AutoWorkModeEvent ::= SEQUENCE
{   invokingDevice           SubjectDeviceID,
    autoWorkOn                BOOLEAN,
    autoWorkInterval          INTEGER,
    extensions                CSTACCommonArguments
                                OPTIONAL }

END -- of CSTA-auto-work-mode-event

```

20.2.9 Call back

```
CSTA-call-back-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-event( 327) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

CallBackEvent ::= SEQUENCE
{   originatingDevice           SubjectDeviceID,
    targetDevice                 SubjectDeviceID,
    callBackSetCanceled         BOOLEAN,
    extensions                  CSTACurrentArguments
                                OPTIONAL }

END -- of CSTA-call-back-event
```

20.2.10 Call back message

```

CSTA-call-back-message-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-message-event( 328) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

CallBackMessageEvent ::= SEQUENCE
{ originatingDevice           SubjectDeviceID,
  targetDevice                 SubjectDeviceID,
  callBackMsgSetCanceled      BOOLEAN,
  extensions                  CSTACCommonArguments    OPTIONAL }

END -- of CSTA-call-back-message-event

```

20.2.11 Caller id status

```
CSTA-caller-id-status-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) caller-id-status-event( 329) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

CallerIDStatusEvent ::= SEQUENCE
{   device           DeviceID,
    callerIDProvided BOOLEAN,
    extensions        CSTACurrentArguments
                      OPTIONAL }

END -- of CSTA-caller-id-status-event
```

20.2.12 Do not disturb

```

CSTA-do-not-disturb-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) do-not-disturb-event( 42) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

DoNotDisturbEvent ::= SEQUENCE
{ device                  SubjectDeviceID,
  doNotDisturbOn          BOOLEAN,
  callOrigination         CallOrigination           OPTIONAL,
  callingDeviceList        SEQUENCE OF DeviceID    OPTIONAL,
  extensions              CSTACurrentArguments   OPTIONAL }

END -- of CSTA-do-not-disturb-event

```

20.2.13 Forwarding

```

CSTA-forwarding-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) forwarding-event( 43) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardingType, ForwardDefault FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ForwardingEvent ::= SEQUENCE
{   device           SubjectDeviceID,
    forwardingType   ForwardingType
                      OPTIONAL,
    forwardStatus    BOOLEAN,
    forwardTo        DeviceID
                      OPTIONAL,
    forwardDefault   ForwardDefault
                      OPTIONAL,
    ringCount        INTEGER (1..100)
                      OPTIONAL,
    ringDuration     [4] IMPLICIT INTEGER
                      OPTIONAL,
    extensions       CSTACommonArguments
                      OPTIONAL }

END -- of CSTA-forwarding-event

```

20.2.14 Routing mode

```

CSTA-routeing-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) routeing-mode-event( 332) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

RouteingModeEvent ::= SEQUENCE
{ device                  SubjectDeviceID,
  routeingMode            BOOLEAN,
  extensions              CSTACCommonArguments
                        OPTIONAL }

END -- of CSTA-routeing-mode-event

```

21 Device maintenance events

21.1 Events

21.1.1 Back in service

```
CSTA-back-in-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) back-in-service-event( 333) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

BackInServiceEvent ::= SEQUENCE
{ device           SubjectDeviceID,
  cause            EventCause          OPTIONAL,
  extensions       CSTACurrentArguments OPTIONAL }

END -- of CSTA-back-in-service-event
```

21.1.2 Device capabilities changed

```

CSTA-device-capabilities-changed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-capabilities-changed-event( 334) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

DeviceCapsChangedEvent ::= SEQUENCE
{   device           SubjectDeviceID,
    cause            EventCause          OPTIONAL,
    extensions       CSTACurrentArguments OPTIONAL }

END -- of CSTA-device-capabilities-changed-event

```

21.1.3 Out of service

```

CSTA-out-of-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) out-of-service-event( 335) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

OutOfServiceEvent ::= SEQUENCE
{   device           SubjectDeviceID,
    cause            EventCause
                    OPTIONAL,
    extensions       CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-out-of-service-event

```

21.1.4 Partially in Service

```

CSTA-partially-in-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) partially-in-service( 379) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

PartiallyInServiceEvent ::= SEQUENCE
{   device           SubjectDeviceID,
    cause            EventCause          OPTIONAL,
    extensions       CSTACurrentArguments OPTIONAL }

END -- of CSTA-partially-in-service-event

```

22 I/O services

22.1 Registration services

22.1.1 I/O register

```

CSTA-io-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register( 340) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
IORRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegister      OPERATION ::=

{ ARGUMENT      IORRegisterArgument
  RESULT        IORRegisterResult
  ERRORS        {universalFailure }
  CODE          local: 340 }

IORRegisterArgument ::= SEQUENCE
{ ioDevice        DeviceID           OPTIONAL,
  extensions     CSTACurrentArguments OPTIONAL }

IORRegisterResult ::= SEQUENCE
{ ioRegisterReqID   IORRegisterReqID,
  extensions       CSTACurrentArguments OPTIONAL }

END -- of CSTA-io-register

```

22.1.2 I/O register abort

```

CSTA-io-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register-abort( 341) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IORRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegisterAbort OPERATION ::=

{ ARGUMENT          IORRegisterAbortArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 341 }

IORRegisterAbortArgument ::= SEQUENCE
{ ioRegisterReqID    IORRegisterReqID,
  extensions        CSTACurrentArguments
                    OPTIONAL }

END -- of CSTA-io-register-abort

```

22.1.3 I/O register cancel

```

CSTA-io-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register-cancel( 342) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegisterCancel OPERATION ::=
{ ARGUMENT      IORegisterCancelArgument
  RESULT        IORegisterCancelResult
  ERRORS        {universalFailure }
  CODE          local: 342 }

IORegisterCancelArgument ::= SEQUENCE
{ ioRegisterReqID      IORegisterReqID,
  extensions           CSTACurrentArguments           OPTIONAL }

IORegisterCancelResult ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData                NULL }

END -- of CSTA-io-register-cancel

```

22.2 Services

22.2.1 Data path resumed

```
CSTA-data-path-resumed
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-path-resumed( 118 ) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

dataPathResumed OPERATION ::=
{   ARGUMENT      DataPathResumedArgument
   RESULT        DataPathResumedResult
   ERRORS        {universalFailure }
   CODE          local: 118 }

DataPathResumedArgument ::= SEQUENCE
{   ioCrossRefID      IOCrossRefID,
   ioRegisterReqID    IORegisterReqID           OPTIONAL,
   extensions         CSTACurrentArguments     OPTIONAL }

DataPathResumedResult ::= CHOICE
{   extensions       CSTACurrentArguments,
   noData            NULL }

END -- of CSTA-data-path-resumed
```

22.2.2 Data path suspended

```

CSTA-data-path-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-path-suspended( 116) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

dataPathSuspended OPERATION ::=
{ ARGUMENT      DataPathSuspendedArgument
  RESULT        DataPathSuspendedResult
  ERRORS        {universalFailure }
  CODE          local: 116 }

DataPathSuspendedArgument ::= SEQUENCE
{ ioCrossRefID    IOCrossRefID,
  ioReqRegisterID IORegisterReqID           OPTIONAL,
  extensions      CSTACurrentArguments     OPTIONAL }

DataPathSuspendedResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-data-path-suspended

```

22.2.3 Fast data

```

CSTA-fast-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) fast-data( 119) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DataPathType, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

fastData OPERATION ::=
{   ARGUMENT      FastDataArgument
    RESULT        FastDataResult
    ERRORS        {universalFailure}
    CODE          local: 119 }

FastDataArgument ::= SEQUENCE
{   ioRegisterReqID      IORegisterReqID
    object              CSTAObject,
    dataPathType        DataPathType
    displayAttributes   DisplayAttribute
    ioData              OCTET STRING,           --corrected 12/2000
    extensions          CSTACurrentArguments }

FastDataResult ::= CHOICE
{   extensions      CSTACurrentArguments,
    noData         NULL }

DisplayAttribute ::= SEQUENCE
{   displayID        DisplayID
    physicalBaseRowNumber [0] IMPLICIT INTEGER
    physicalBaseColumnNumber [1] IMPLICIT INTEGER
    offset            [2] IMPLICIT INTEGER }

END -- of CSTA-fast-data

```

22.2.4 Resume data path

```

CSTA-resume-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-data-path( 117) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

resumeDataPath OPERATION ::=

{ ARGUMENT      ResumeDataPathArgument
  RESULT        ResumeDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 117 }

ResumeDataPathArgument ::= SEQUENCE
{ ioCrossRefID    IOCrossRefID,
  ioRegisterReqID IORegisterReqID
  extensions      CSTACurrentArguments
                  OPTIONAL,
  noData          NULL
                  OPTIONAL }

ResumeDataPathResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData          NULL }

END -- of CSTA-resume-data-path

```

22.2.5 Send broadcast data

```

CSTA-send-broadcast-data
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) send-broadcast-data( 114 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }

DataPathType, DisplayAttributeList FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

sendBroadcastData OPERATION ::=
{ ARGUMENT          SendBroadcastDataArgument
  RESULT            SendBroadcastDataResult
  ERRORS           {universalFailure }
  CODE              local: 114 }

SendBroadcastDataArgument ::= SEQUENCE
{ ioData             OCTET STRING,
  dataPathType       DataPathType
  displayAttributes  DisplayAttributeList
  extensions         CSTACurrentArguments
                     OPTIONAL,
                     OPTIONAL,
                     OPTIONAL }

SendBroadcastDataResult ::= CHOICE
{ extensions         CSTACurrentArguments,
  noData             NULL }

END -- of CSTA-send-broadcast-data

```

22.2.6 Send data

```

CSTA-send-data
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) send-data( 112) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
EventCause FROM CSTA-event-causes
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) event-causes( 121) }
IOCrossRefID, IORegisterReqID, DisplayAttributeList FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

sendData OPERATION ::=
{   ARGUMENT      SendDataArgument
   RESULT        SendDataResult
   ERRORS        {universalFailure }
   CODE          local: 112 }

SendDataArgument ::= SEQUENCE
{   ioCrossRefID      IOCrossRefID,
   ioRegisterReqID    [0] IMPLICIT IORegisterReqID      OPTIONAL,
   displayAttributes  DisplayAttributeList            OPTIONAL,
   ioData             OCTET STRING,
   ioCause            EventCause                  OPTIONAL,
   extensions         CSTACurrentArguments        OPTIONAL }

SendDataResult ::= CHOICE
{   extensions       CSTACurrentArguments,
   noData           NULL }

END -- of CSTA-send-data

```

22.2.7 Send multicast data

```

CSTA-send-multicast-data
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) send-multicast-data( 113 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
IOCrossRefID, DisplayAttributeList FROM CSTA-device-feature-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) device-feature-types( 127 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

sendMulticastData OPERATION ::=
{ ARGUMENT      SendMulticastDataArgument
  RESULT        SendMulticastDataResult
  ERRORS        {universalFailure }
  CODE          local: 113 }

SendMulticastDataArgument ::= SEQUENCE
{ ioCrossRefIDList      SEQUENCE OF IOCrossRefID,
  ioData                OCTET STRING
  displayAttributes     DisplayAttributeList
  extensions            CSTACurrentArguments
                        OPTIONAL,
                        OPTIONAL,
                        OPTIONAL }

SendMulticastDataResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-send-multicast-data

```

22.2.8 Start data path

```

CSTA-start-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-data-path( 110) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DataPathType, IOCrossRefID, IOReserveReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

startDataPath      OPERATION ::=

{ ARGUMENT      StartDataPathArgument
  RESULT        StartDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 110 }

StartDataPathArgument ::= SEQUENCE
{ ioRegisterReqID           IOReserveReqID           OPTIONAL,
  object                   CSTAObject,                OPTIONAL,
  dataPathDirection         [0] IMPLICIT DataPathDirection OPTIONAL,
  dataPathType              [1] IMPLICIT DataPathType   OPTIONAL,
  displayID                DisplayID                 OPTIONAL,
  numberOfCharactersToCollect [2] IMPLICIT INTEGER    OPTIONAL,
  terminationCharacter     IA5String (SIZE(1..1))  OPTIONAL,
  timeout                  [3] IMPLICIT INTEGER    OPTIONAL,
  extensions               CSTACurrentArguments  OPTIONAL }

StartDataPathResult ::= SEQUENCE
{ ioCrossRefID             IOCrossRefID,
  numberOfCharactersToCollect [0] IMPLICIT INTEGER    OPTIONAL,
  terminationCharacter     IA5String(SIZE(1..1))  OPTIONAL,
  timeout                  [1] IMPLICIT INTEGER    OPTIONAL,
  extensions               CSTACurrentArguments  OPTIONAL }

DataPathDirection ::= ENUMERATED
{ computeFunctionToObject      (0),
  objectToComputeFunction     (1),
  bidirectional                (2) }

END -- of CSTA-start-data-path

```

22.2.9 Stop data path

```

CSTA-stop-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-data-path( 111) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

stopDataPath OPERATION ::=

{ ARGUMENT      StopDataPathArgument
  RESULT        StopDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 111
}

StopDataPathArgument ::= SEQUENCE
{ ioCrossRefID    IOCrossRefID,
  ioRegisterReqID IORegisterReqID           OPTIONAL,
  extensions      CSTACurrentArguments   OPTIONAL }

StopDataPathResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-stop-data-path

```

22.2.10 Suspend data path

```

CSTA-suspend-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-data-path( 115) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IOReserveReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

suspendDataPath OPERATION ::=

{ ARGUMENT      SuspendDataPathArgument
  RESULT        SuspendDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 115 }

SuspendDataPathArgument ::= SEQUENCE
{ ioCrossRefID    IOCrossRefID,
  ioRegisterReqID IOReserveReqID           OPTIONAL,
  extensions      CSTACurrentArguments   OPTIONAL }

SuspendDataPathResult ::= CHOICE
{ extensions      CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-suspend-data-path

```

23 Data Collection Services

23.1 Services

23.1.1 Data Collected

```

CSTA-data-collected
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-collected( 343 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) media-services( 136 ) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-collection( 138 ) };

dataCollected OPERATION ::=
{   ARGUMENT      DataCollectedArgument
    RESULT        DataCollectedResult
    ERRORS        {universalFailure}
    CODE          local: 343 }

DataCollectedArgument ::= SEQUENCE
{   dcollCrossRefID      DcollCrossRefID,
    digitsData           [0] IMPLICIT DigitsData
                           OPTIONAL,
    telTonesData         [1] IMPLICIT TelTonesData
                           OPTIONAL,
    connectionInformation [2] IMPLICIT ConnectionInformation
                           OPTIONAL,
    dcollCause            DcollCause
                           OPTIONAL,
    extensions            CSTACurrentArguments
                           OPTIONAL }

DataCollectedResult ::= CHOICE
{   extensions          CSTACurrentArguments,
    noData               NULL }

DigitsData ::= SEQUENCE
{   digitsDetected       IA5String (SIZE(0..64)),
    digitsDuration        [0] IMPLICIT SEQUENCE OF INTEGER
                           OPTIONAL,
    digitsPauseDuration  [1] IMPLICIT SEQUENCE OF INTEGER
                           OPTIONAL }

TelTonesData ::= SEQUENCE
{   toneDetected         ToneDetected,
    toneFrequency         [0] IMPLICIT INTEGER
                           OPTIONAL,
    toneDuration          [1] IMPLICIT INTEGER
                           OPTIONAL,

```

```
tonePauseDuration [2] IMPLICIT INTEGER OPTIONAL }
```

```
ToneDetected ::= ENUMERATED
{
    beep                  ( 0),
    billing               ( 1),
    busy                  ( 2),
    carrier                ( 3),
    confirmation           ( 4),
    dial                  ( 5),
    faxCNG                ( 6),
    hold                  ( 7),
    howler                 ( 8),
    intrusion               ( 9),
    modemCNG              (10),
    park                  (11),
    recordWarning          (12),
    reorder                (13),
    ringback               (14),
    silence                 (15),
    sitVC                  (16),
    sitIC                  (17),
    sitRO                  (18),
    sitNC                  (19),
    other                  (20) }
```

```
DcollCause ::= ENUMERATED
{
    flushCharReceived      ( 0),
    charCountReached        ( 1),
    timeout                  ( 2),
    sfTerminated            ( 3) }
```

```
END -- of CSTA-data-collected
```

23.1.2 Data Collection Resumed

```

CSTA-data-collection-resumed
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-collection-resumed( 344 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) data-collection( 138 ) };

dataCollectionResumed OPERATION ::=

{ ARGUMENT      DataCollectionResumedArgument
  RESULT        DataCollectionResumedResult
  ERRORS        {universalFailure }
  CODE          local: 344 }

DataCollectionResumedArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions           CSTACCommonArguments
                      OPTIONAL }

DataCollectionResumedResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-data-collection-resumed

```

23.1.3 Data Collection Suspended

```

CSTA-data-collection-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection-suspended( 345) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

dataCollectionSuspended OPERATION ::=
{ ARGUMENT      DataCollectionSuspendedArgument
  RESULT        DataCollectionSuspendedResult
  ERRORS        {universalFailure }
  CODE          local: 345 }

DataCollectionSuspendedArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions           CSTACCommonArguments
                      OPTIONAL }

DataCollectionSuspendedResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-data-collection-suspended

```

23.1.4 Resume Data Collection

```

CSTA-resume-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-data-collection( 346) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

resumeDataCollection OPERATION ::=
{ ARGUMENT      ResumeDataCollectionArgument
  RESULT        ResumeDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 346 }

ResumeDataCollectionArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions           CSTACCommonArguments
                      OPTIONAL }

ResumeDataCollectionResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-resume-data-collection

```

23.1.5 Start Data Collection

```

CSTA-start-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-data-collection( 347) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

startDataCollection OPERATION ::=
{ ARGUMENT      StartDataCollectionArgument
  RESULT        StartDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 347 }

StartDataCollectionArgument ::= SEQUENCE
{ object           CallObject,
  dataCollType     DataCollType             OPTIONAL,
  digitsReportingCriteria DigitsReportingCriteria   OPTIONAL,
  extensions       CSTACurrentArguments    OPTIONAL }

StartDataCollectionResult ::= SEQUENCE
{ dcollCrossRefID DcollCrossRefID,
  extensions      CSTACurrentArguments    OPTIONAL }

CallObject ::= CHOICE
{ device          DeviceID,
  call            ConnectionID }

DataCollType ::= ENUMERATED
{ digits          (0),
  telTones        (1) }

DigitsReportingCriteria ::= SEQUENCE
{ numChars         [0] IMPLICIT INTEGER           OPTIONAL,
  flushChar        IA5String (SIZE(1..1))        OPTIONAL,
  timeout          [1] IMPLICIT INTEGER           OPTIONAL }

END -- of CSTA-start-data-collection

```

23.1.6 Stop Data Collection

```

CSTA-stop-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-data-collection( 348) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

stopDataCollection OPERATION ::=
{ ARGUMENT      StopDataCollectionArgument
  RESULT        StopDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 348 }

StopDataCollectionArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions           CSTACCommonArguments
                      OPTIONAL }

StopDataCollectionResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-stop-data-collection

```

23.1.7 Suspend Data Collection

```

CSTA-suspend-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-data-collection( 349) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

suspendDataCollection OPERATION ::=

{ ARGUMENT      SuspendDataCollectionArgument
  RESULT        SuspendDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 349 }

SuspendDataCollectionArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions           CSTACCommonArguments
                      OPTIONAL }

SuspendDataCollectionResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-suspend-data-collection

```

24 Voice unit services and events

24.1 Services

24.1.1 Activate

```

CSTA-activate
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) activate( 512) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

activate OPERATION ::=

{   ARGUMENT      ActivateArgument
    RESULT        ActivateResult
    ERRORS        {universalFailure }
    CODE          local: 512 }

ActivateArgument ::= SEQUENCE
{   overConnection  ConnectionID,
    resource       [0] IMPLICIT ResourceID           OPTIONAL,
    ruleName       [1] IMPLICIT IA5String,
    grammarName    [2] IMPLICIT IA5String           OPTIONAL,
    extensions     CSTACurrentArguments           OPTIONAL }

ActivateResult ::= SEQUENCE
{   extensions     CSTACurrentArguments           OPTIONAL }

END -- of CSTA-activate

```

24.1.2 Clear

```

CSTA-clear
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear( 513) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clear OPERATION ::=
{ ARGUMENT      ClearArgument
  RESULT        ClearResult
  ERRORS        {universalFailure }
  CODE          local: 513 }

ClearArgument ::= SEQUENCE
{ overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID      OPTIONAL,
  extensions          CSTACurrentArguments    OPTIONAL }

ClearResult ::= SEQUENCE
{ extensions          CSTACurrentArguments    OPTIONAL }

END -- of CSTA-clear

```

24.1.3 Concatenate message

```

CSTA-concatenate-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) concatenate-message( 500) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

concatenateMessage OPERATION ::=

{ ARGUMENT      ConcatenateMessageArgument
  RESULT        ConcatenateMessageResult
  ERRORS        {universalFailure }
  CODE          local: 500 }

ConcatenateMessageArgument ::= SEQUENCE
{ messagesToConcatenate    SEQUENCE OF MessageID,
  extensions                CSTACurrentArguments           OPTIONAL }

ConcatenateMessageResult ::= SEQUENCE
{ concatenatedMessage     MessageID,
  extensions                CSTACurrentArguments           OPTIONAL }

END -- of CSTA-concatenate-message

```

24.1.4 Deactivate

```

CSTA-deactivate
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) deactivate( 514) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

deactivate OPERATION ::=
{   ARGUMENT      DeactivateArgument
    RESULT        DeactivateResult
    ERRORS        {universalFailure }
    CODE          local: 514 }

DeactivateArgument ::= SEQUENCE
{   overConnection      ConnectionID,
    resource            [0] IMPLICIT ResourceID           OPTIONAL,
    ruleName             IA5String,
    grammarName          [1] IMPLICIT IA5String           OPTIONAL,
    extensions           [2] IMPLICIT CSTACurrentArguments OPTIONAL }

DeactivateResult ::= SEQUENCE
{   extensions          CSTACurrentArguments           OPTIONAL }

END -- of CSTA-deactivate

```

24.1.5 Delete message

```

CSTA-delete-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delete-message( 501) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

deleteMessage OPERATION ::=
{ ARGUMENT      DeleteMessageArgument
  RESULT        DeleteMessageResult
  ERRORS        {universalFailure }
  CODE          local: 501 }

DeleteMessageArgument ::= SEQUENCE
{ messageToDelete    MessageID,
  extensions         CSTACurrentArguments
                      OPTIONAL }

DeleteMessageResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData           NULL }

END -- of CSTA-delete-message

```

24.1.6 Play message

```

CSTA-play-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) play-message( 502) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID, TerminatingConditions FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

playMessage OPERATION ::=
{ ARGUMENT      PlayMessageArgument
  RESULT        PlayMessageResult
  ERRORS        {universalFailure }
  CODE          local: 502 }

PlayMessageArgument ::= SEQUENCE
{ messageToBePlayed   MessageID,
  overConnection     ConnectionID,
  duration           INTEGER                               OPTIONAL,
  termination         TerminatingConditions           OPTIONAL,
  extensions          CSTACurrentArguments          OPTIONAL }

PlayMessageResult ::= CHOICE
{ extensions          CSTACurrentArguments,
  noData              NULL }

END -- of CSTA-play-message

```

24.1.7 Query voice attribute

```

CSTA-query-voice-attribute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) query-voice-attribute( 503) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

ResourceID, AttributeInfo, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

queryVoiceAttribute OPERATION ::=

{   ARGUMENT      QueryVoiceAttributeArgument
    RESULT        QueryVoiceAttributeResult
    ERRORS        {universalFailure }
    CODE          local: 503 }

QueryVoiceAttributeArgument ::= SEQUENCE
{   messageToQuery      MessageID,
   attributeToQuery     AttributeToQuery,
   resource             [0] IMPLICIT ResourceID           OPTIONAL,
   connection           ConnectionID                  OPTIONAL,
   extensions           CSTACurrentArguments        OPTIONAL }

QueryVoiceAttributeResult ::= SEQUENCE
{   attribute           AttributeInfo,
   extensions           CSTACurrentArguments        OPTIONAL }

AttributeToQuery ::= ENUMERATED
{   encodingAlgorithm    ( 0),
   samplingRate          ( 1),
   duration              ( 2),
   fileName              ( 3),
   currentPosition        ( 4),
   currentSpeed          ( 5),
   currentVolume          ( 6),
   currentLevel           ( 7),
   currentState           ( 8),
   grammars              ( 9),
   language               (10),
   mode                  (11),
   retainAudio            (12),
   silenceTimeout         (13),
}

```

```
maxTimeout          (14),  
babbleTimeout      (15),  
endSilence         (16),  
rejectionThreshold (17),  
autoInterruptible  (18),  
innerXml           (19),  
interDigitTimeout  (20),  
preflush           (21) }  
  
END -- of CSTA-query-voice-attribute
```

24.1.8 Queue

```

CSTA-queue
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queue( 515) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

queue OPERATION ::=

{   ARGUMENT      QueueArgument
    RESULT        QueueResult
    ERRORS        {universalFailure }
    CODE          local: 515 }

QueueArgument ::= SEQUENCE
{   overConnection      ConnectionID,
    message            MessageID,
    resource           [0] IMPLICIT ResourceID           OPTIONAL,
    text               [1] IMPLICIT IA5String           OPTIONAL,
    extensions         CSTACCommonArguments         OPTIONAL }

QueueResult ::= SEQUENCE
{   extensions         CSTACCommonArguments         OPTIONAL }

END -- of CSTA-queue

```

24.1.9 Record message

```

CSTA-record-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) record-message( 511) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID, EncodingAlgorithm, TerminatingConditions
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

recordMessage OPERATION ::=
{ ARGUMENT      RecordMessageArgument
  RESULT        RecordMessageResult
  ERRORS        {universalFailure }
  CODE          local: 511 }

RecordMessageArgument ::= SEQUENCE
{ callToBeRecorded    ConnectionID,
  resource           [2] IMPLICIT ResourceID      OPTIONAL,
  samplingRate        [0] IMPLICIT INTEGER       OPTIONAL,
  encodingAlgorithm   EncodingAlgorithm         OPTIONAL,
  maxDuration         [1] IMPLICIT INTEGER       OPTIONAL,
  termination         TerminatingConditions     OPTIONAL,
  extensions          CSTACurrentArguments    OPTIONAL }

RecordMessageResult ::= SEQUENCE
{ resultingMessage   MessageID,
  extensions         CSTACurrentArguments    OPTIONAL }

END -- of CSTA-record-message

```

24.1.10 Reposition

```

CSTA-reposition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) reposition( 504) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }

ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }

CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

reposition OPERATION ::=
{   ARGUMENT      RepositionArgument
    RESULT        RepositionResult
    ERRORS        {universalFailure }
    CODE          local: 504 }

RepositionArgument ::= SEQUENCE
{   connection           ConnectionID,
    periodOfReposition    Period,
    messageToReposition    MessageID
                           OPTIONAL, --corrected 06/2001
    resource              [0] IMPLICIT ResourceID
                           OPTIONAL,
    extensions            CSTACCommonArguments
                           OPTIONAL }

RepositionResult ::= CHOICE
{   extensions          CSTACCommonArguments,
    noData               NULL }

Period ::= CHOICE
{   absolutePosition     ENUMERATED
    { startOfMessage (0),
      endOfMessage   (1) },
    relativePosition    INTEGER }

END -- of CSTA-reposition

```

24.1.11 Resume

```

CSTA-resume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume( 505) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

resume OPERATION ::=
{ ARGUMENT      ResumeArgument
  RESULT        ResumeResult
  ERRORS        {universalFailure }
  CODE          local: 505 }

ResumeArgument ::= SEQUENCE
{ connection       ConnectionID,
  messageToResume  MessageID
                           OPTIONAL, --corrected 06/2001
  resource         [0] IMPLICIT ResourceID
                           OPTIONAL,
  duration         INTEGER
                           OPTIONAL,
  extensions       CSTACurrentArguments
                           OPTIONAL }

ResumeResult ::= CHOICE
{ extensions       CSTACurrentArguments,
  noData           NULL }

END -- of CSTA-resume

```

24.1.12 Review

```

CSTA-review
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) review( 506) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

review OPERATION ::=

{   ARGUMENT      ReviewArgument
    RESULT        ReviewResult
    ERRORS        {universalFailure }
    CODE          local: 506 }

ReviewArgument ::= SEQUENCE
{   connection           ConnectionID,
    periodToReview       PeriodToReview,
    messageToReview      MessageID
                           OPTIONAL, --corrected 06/2001
    resource             [0] IMPLICIT ResourceID
                           OPTIONAL,
    extensions           CSTACCommonArguments
                           OPTIONAL }

ReviewResult ::= CHOICE
{   extensions           CSTACCommonArguments,
    noData                NULL }

PeriodToReview ::= CHOICE
{   startOfMessage       NULL,
    lengthOfReview        INTEGER }

END -- of CSTA-review

```

24.1.13 Set voice attribute

```

CSTA-set-voice-attribute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-voice-attribute( 507) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setVoiceAttribute OPERATION ::=
{   ARGUMENT      SetVoiceAttributeArgument
    RESULT        SetVoiceAttributeResult
    ERRORS        {universalFailure}
    CODE          local: 507 }

SetVoiceAttributeArgument ::= SEQUENCE
{   connection           ConnectionID,
    attributeToSet        AttributeToSet,
    message               MessageID             OPTIONAL,
    resource              [0] IMPLICIT ResourceID    OPTIONAL,
    extensions            CSTACurrentArguments  OPTIONAL }

SetVoiceAttributeResult ::= CHOICE
{   extensions          CSTACurrentArguments,
    noData               NULL     }

AttributeToSet ::= CHOICE
{   currentSpeed         [ 0] IMPLICIT INTEGER,
    currentVolume        [ 1] Volume,
    currentGain          [ 2] IMPLICIT INTEGER (0 .. 100),
    grammars             [ 3] IMPLICIT IA5String,
    language              [ 4] IMPLICIT IA5String,
    mode                 [ 5] IMPLICIT ENUMERATED
                           {   automatic   (0),
                               single     (1),
                               multiple    (2) },
    retainAudio           [ 6] IMPLICIT BOOLEAN,
    silenceTimeout        [ 7] IMPLICIT INTEGER,
    maxTimeout            [ 8] IMPLICIT INTEGER,

```

```
babbleTimeout          [ 9] IMPLICIT INTEGER,  
endSilence            [10] IMPLICIT INTEGER,  
rejectionThreshold    [11] IMPLICIT INTEGER,  
autoInterruptible     [12] IMPLICIT BOOLEAN,  
innerXML              [13] IMPLICIT IA5String,  
interDigitTimeout     [14] IMPLICIT INTEGER,  
preflush               [15] IMPLICIT BOOLEAN }
```

END -- of CSTA-set-voice-attribute

24.1.14 Start

```

CSTA-start
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) start( 516) }
DEFINITIONS ::= BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  { joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
ResourceID, MessageID FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };
start OPERATION ::= { ARGUMENT StartArgument
  RESULT      StartResult
  ERRORS      {universalFailure }
  CODE        local: 516 }

StartArgument ::= SEQUENCE
{ overConnection ConnectionID,
  resource      [0] IMPLICIT ResourceID          OPTIONAL,
  text          [1] IMPLICIT IA5String           OPTIONAL,
  extensions    CSTACurrentArguments          OPTIONAL }

StartResult ::= SEQUENCE
{ extensions      CSTACurrentArguments          OPTIONAL }

END -- of CSTA-start

```

24.1.15 Stop

```

CSTA-stop
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop( 508) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

stop OPERATION ::=
{   ARGUMENT      StopArgument
    RESULT        StopResult
    ERRORS        {universalFailure }
    CODE          local: 508 }

StopArgument ::= SEQUENCE
{   connection           ConnectionID,
    messageToBeStopped  MessageID
                                OPTIONAL,
    resource             [0] IMPLICIT ResourceID
                                OPTIONAL,
    extensions          CSTACCommonArguments
                                OPTIONAL }

StopResult ::= CHOICE
{   extensions          CSTACCommonArguments,
    noData               NULL }

END -- of CSTA-stop

```

24.1.16 Suspend

```

CSTA-suspend
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend( 509) }

DEFINITIONS ::=

BEGIN
IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

suspend OPERATION ::=
{ ARGUMENT      SuspendArgument
  RESULT        SuspendResult
  ERRORS        {universalFailure }
  CODE          local: 509 }

SuspendArgument ::= SEQUENCE
{ connection      ConnectionID,
  message        MessageID
                           OPTIONAL, --corrected 06/2001
  resource       [0] IMPLICIT ResourceID
                           OPTIONAL,
  extensions     CSTACurrentArguments
                           OPTIONAL }

SuspendResult ::= CHOICE
{ extensions     CSTACurrentArguments,
  noData        NULL }

END -- of CSTA-suspend

```

24.1.17 Synthesize message

```

CSTA-synthesize-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) synthesize-message( 510) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ControlData, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

synthesizeMessage OPERATION ::=
{ ARGUMENT      SynthesizeMessageArgument
  RESULT        SynthesizeMessageResult
  ERRORS        {universalFailure }
  CODE          local: 510 }

SynthesizeMessageArgument ::= SEQUENCE
{ textToBeSynthesized    IA5String,
  control                ControlData           OPTIONAL,
  extensions             CSTACurrentArguments OPTIONAL }

SynthesizeMessageResult ::= SEQUENCE
{ synthesizedMessage     MessageID,
  extensions             CSTACurrentArguments OPTIONAL }

END -- of CSTA-synthesize-message

```

24.2 Events

24.2.1 Bookmark Reached

```
CSTA-bookmark-reached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) bookmark-reached-event( 517) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

BookmarkReachedEvent ::= SEQUENCE
{ overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID           OPTIONAL,
  bookmark             IA5String,
  cause                EventCause                  OPTIONAL,
  servicesPermitted    ServicesPermitted          OPTIONAL,
  extensions           CSTACurrentArguments     OPTIONAL }

END -- of CSTA-bookmark-reached-event
```

24.2.2 Completed

```

CSTA-completed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) completed-event( 518) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

CompletedEvent ::= SEQUENCE
{ overConnection           ConnectionID,
  resource                 [0] IMPLICIT ResourceID          OPTIONAL,
  cause                    EventCause                  OPTIONAL,
  servicesPermitted        ServicesPermitted        OPTIONAL,
  extensions               CSTACurrentArguments    OPTIONAL }

END -- of CSTA-completed-event

```

24.2.3 DTMF Detected

```

CSTA-dtmf-detected-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) dtmf-detected-event( 519) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

DtmfDetectedEvent ::= SEQUENCE
{   overConnection      ConnectionID,
    resource            [0] IMPLICIT ResourceID           OPTIONAL,
    dtmfChar             IA5String,
    cause                EventCause                      OPTIONAL,
    servicesPermitted    ServicesPermitted            OPTIONAL,
    extensions           CSTACurrentArguments        OPTIONAL }

END -- of CSTA-dtmf-detected-event

```

24.2.4 Emptied

```

CSTA-emptied-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) emptied-event( 520) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

EmptiedEvent ::= SEQUENCE
{ overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID          OPTIONAL,
  cause                EventCause                   OPTIONAL,
  servicesPermitted    ServicesPermitted           OPTIONAL,
  extensions           CSTACurrentArguments        OPTIONAL }

END -- of CSTA-emptied-event

```

24.2.5 Interruption Detected

```

CSTA-interruption-detected-event
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) interruption-detected-event( 521) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-control( 130) };

InterruptionDetectedEvent ::= SEQUENCE
{   overConnection      ConnectionID,
    resource            [0] IMPLICIT ResourceID          OPTIONAL,
    cause                EventCause                      OPTIONAL,
    servicesPermitted    ServicesPermitted           OPTIONAL,
    extensions           CSTACurrentArguments        OPTIONAL }

END -- of CSTA-interruption-detected-event

```

24.2.6 Not Recognized

```

CSTA-not-recognized-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) not-recognized-event( 522) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

NotRecognizedEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID           OPTIONAL,
  result              IA5String,
  cause               EventCause                  OPTIONAL,
  servicesPermitted   ServicesPermitted          OPTIONAL,
  extensions          CSTACCommonArguments    OPTIONAL
}

END -- of CSTA-not-recognized-event

```

24.2.7 Play

```

CSTA-play-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) play( 75) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

PlayEvent ::=SEQUENCE
{
  connection           ConnectionID,
  message              MessageID,
  resource             [3] IMPLICIT ResourceID      OPTIONAL,
  length               [0] IMPLICIT INTEGER        OPTIONAL,
  currentPosition       [1] IMPLICIT INTEGER        OPTIONAL,
  speed                [2] IMPLICIT INTEGER        OPTIONAL,
  cause                EventCause                 OPTIONAL,
  servicesPermitted    ServicesPermitted         OPTIONAL,
  extensions           CSTACurrentArguments   OPTIONAL
}

END -- of CSTA-play-event

```

24.2.8 Recognized

```

CSTA-recognized-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) recognized-event( 523) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

RecognizedEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID          OPTIONAL,
  result              IA5String,
  text                IA5String,
  cause               EventCause                      OPTIONAL,
  servicesPermitted   ServicesPermitted             OPTIONAL,
  extensions          CSTACurrentArguments        OPTIONAL }
}

END -- of CSTA-recognized-event

```

24.2.9 Record

```

CSTA-record-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) record( 76) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

RecordEvent ::= SEQUENCE
{ connection          ConnectionID,
  message            MessageID,
  resource           [2] IMPLICIT ResourceID      OPTIONAL,
  length             [0] IMPLICIT INTEGER        OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER        OPTIONAL,
  cause               EventCause                OPTIONAL,
  servicesPermitted  ServicesPermitted         OPTIONAL,
  extensions          CSTACommonArguments       OPTIONAL }

END -- of CSTA-record-event

```

24.2.10 Review

```

CSTA-review-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) review( 77) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

ReviewEvent ::= SEQUENCE
{ connection           ConnectionID,
  message              MessageID,
  resource             [2] IMPLICIT ResourceID    OPTIONAL,
  length               [0] IMPLICIT INTEGER   OPTIONAL,
  currentPosition       [1] IMPLICIT INTEGER   OPTIONAL,
  cause                EventCause            OPTIONAL,
  servicesPermitted    ServicesPermitted      OPTIONAL,
  extensions           CSTACurrentArguments OPTIONAL }

END -- of CSTA-review-event

```

24.2.11 Silence Timeout Expired

```

CSTA-silence-timeout-expired-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) silence-timeout-expired-event( 524) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SilenceTimeoutExpiredEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID          OPTIONAL,
  cause                EventCause                   OPTIONAL,
  servicesPermitted   ServicesPermitted           OPTIONAL,
  extensions          CSTACurrentArguments        OPTIONAL
}

END -- of CSTA-silence-timeout-expired-event

```

24.2.12 Speech Detected

```

CSTA-speech-detected-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) speech-detected-event( 525) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SpeechDetectedEvent ::=SEQUENCE
{ overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID      OPTIONAL,
  cause                EventCause                 OPTIONAL,
  servicesPermitted    ServicesPermitted        OPTIONAL,
  extensions           CSTACurrentArguments   OPTIONAL }

END -- of CSTA-speech-detected-event

```

24.2.13 Started

```

CSTA-started-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) started-event( 526) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

StartedEvent ::= SEQUENCE
{ overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID      OPTIONAL,
  cause               EventCause                  OPTIONAL,
  servicesPermitted   ServicesPermitted        OPTIONAL,
  extensions          CSTACurrentArguments    OPTIONAL }

END -- of CSTA-started-event

```

24.2.14 Stop

```

CSTA-stop-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop( 78) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

StopEvent ::= SEQUENCE
{ connection           ConnectionID,
  message              MessageID,
  resource             [2] IMPLICIT ResourceID    OPTIONAL,
  length               [0] IMPLICIT INTEGER   OPTIONAL,
  currentPosition       [1] IMPLICIT INTEGER   OPTIONAL,
  cause                EventCause            OPTIONAL,
  servicesPermitted    ServicesPermitted      OPTIONAL,
  extensions           CSTACurrentArguments OPTIONAL }

END -- of CSTA-stop-event

```

24.2.15 Suspend play

```

CSTA-suspend-play-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-play( 79) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SuspendPlayEvent ::= SEQUENCE
{ connection          ConnectionID,
  message             MessageID,
  resource            [2] IMPLICIT ResourceID      OPTIONAL,
  length              [0] IMPLICIT INTEGER        OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER        OPTIONAL,
  cause                EventCause                OPTIONAL,
  servicesPermitted   ServicesPermitted        OPTIONAL,
  extensions          CSTACurrentArguments    OPTIONAL }

END -- of CSTA-suspend-play-event

```

24.2.16 Suspend record

```

CSTA-suspend-record-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-record( 80) }
DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SuspendRecordEvent ::= SEQUENCE
{ connection          ConnectionID,
  message             MessageID,
  resource            [2] IMPLICIT ResourceID    OPTIONAL,
  length              [0] IMPLICIT INTEGER     OPTIONAL,
  currentPosition      [1] IMPLICIT INTEGER     OPTIONAL,
  cause                EventCause           OPTIONAL,
  servicesPermitted   ServicesPermitted     OPTIONAL,
  extensions          CSTACurrentArguments OPTIONAL }

END -- of CSTA-suspend-record-event

```

24.2.17 Voice attribute changed

```

CSTA-voice-attributes-change-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) voice-attributes-change-event( 74) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

VoiceAttributesChangeEvent ::= SEQUENCE
{ connection                  ConnectionID,
  message                     MessageID,
  resource                    [ 4] IMPLICIT ResourceID          OPTIONAL,
  playVolume                  [ 0] Volume                      OPTIONAL,
  recordingGain               [ 1] IMPLICIT INTEGER (0 .. 100) OPTIONAL,
  speed                       [ 2] IMPLICIT INTEGER          OPTIONAL,
  currentPosition              [ 3] IMPLICIT INTEGER          OPTIONAL,
  grammars                   [ 5] IMPLICIT IA5String        OPTIONAL,
  language                    [ 6] IMPLICIT IA5String        OPTIONAL,
  mode                        [ 7] IMPLICIT ENUMERATED
                            { automatic      (0),
                              single        (1),
                              multiple      (2) }           OPTIONAL,
  retainAudio                 [ 8] IMPLICIT BOOLEAN         OPTIONAL,
  silenceTimeout              [ 9] IMPLICIT INTEGER         OPTIONAL,
  maxTimeout                  [10] IMPLICIT INTEGER         OPTIONAL,
  babbleTimeout               [11] IMPLICIT INTEGER         OPTIONAL,
  endSilence                  [12] IMPLICIT INTEGER         OPTIONAL,
  rejectionThreshold          [13] IMPLICIT INTEGER         OPTIONAL,
  autoInterruptible           [14] IMPLICIT BOOLEAN         OPTIONAL,
  innerXML                    [15] IMPLICIT IA5String        OPTIONAL,
  interDigitTimeout           [16] IMPLICIT INTEGER         OPTIONAL,
  preflush                    [17] IMPLICIT BOOLEAN         OPTIONAL,
  cause                       EventCause                  OPTIONAL,
  servicesPermitted           ServicesPermitted          OPTIONAL,
}

```

```
extensions           CSTACCommonArguments          OPTIONAL }
```

END -- of CSTA-voice-attributes-change-event

24.2.18 VoiceErrorOccurred

```

CSTA-voice-error-occurred-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) voice-error-occurred-event( 527) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

VoiceErrorOccuredEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource            [0] IMPLICIT ResourceID      OPTIONAL,
  cause                EventCause                 OPTIONAL,
  servicesPermitted    ServicesPermitted        OPTIONAL,
  extensions           CSTACCommonArguments    OPTIONAL
}

END -- of CSTA-voice-error-occurred-event

```

25 Call detail record services

25.1 Services

25.1.1 Call detail records notification

```

CSTA-call-detail-records-notification
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-detail-records-notification( 360 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
CDRCrossRefID, CDRReason FROM CSTA-call-detail-record
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) call-detail-record( 132 ) };

CDRNotification OPERATION ::=

{ ARGUMENT      CDRNotificationArgument
  RESULT        CDRNotificationResult
  ERRORS        {universalFailure }
  CODE          local: 360
}

CDRNotificationArgument ::= SEQUENCE
{ cdrCrossRefID   CDRCrossRefID,
  cdrReason       CDRReason                               OPTIONAL,
  extensions      CSTACurrentArguments                OPTIONAL }

CDRNotificationResult ::= CHOICE
{ extensions     CSTACurrentArguments,
  noData         NULL }

END -- of CSTA-call-detail-records-notification

```

25.1.2 Call detail records report

```

CSTA-call-detail-records-report
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-records-report( 361) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRInfo FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

cDRReport OPERATION ::=
{ ARGUMENT      CDRReportArgument
  RESULT        CDRReportResult
  ERRORS        {universalFailure }
  CODE          local: 361 }

CDRReportArgument ::= SEQUENCE
{ cdrCrossRefID           CDRCrossRefID,      --corrected 06/2001
  numberofRecordsSent     INTEGER (1..128),
  cdrInfo                 CDRInfo,
  lastStoredCDRReportSent BOOLEAN                  OPTIONAL,
  extensions               CSTACurrentArguments   OPTIONAL }

CDRReportResult ::= CHOICE
{ extensions             CSTACurrentArguments,
  noData                 NULL }

END -- of CSTA-call-detail-records-report

```

25.1.3 Send stored call detail records

```

CSTA-send-stored-call-detail-records
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-stored-call-detail-records( 362) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTIMEPeriod FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

sendStoredCDR OPERATION ::=
{ ARGUMENT      SendStoredCDRArgument
  RESULT        SendStoredCDRResult
  ERRORS        {universalFailure }
  CODE          local: 362 }

SendStoredCDRArgument ::= SEQUENCE
{ cdrCrossRefID      CDRCrossRefID,                      --corrected 06/2001
  timePeriod        CDRTIMEPeriod,                     OPTIONAL,
  extensions        CSTACCommonArguments,             OPTIONAL }

SendStoredCDRResult ::= CHOICE
{ extensions        CSTACCommonArguments,
  noData            NULL }

END -- of CSTA-send-stored-call-detail-records

```

25.1.4 Start call detail records transmission

```

CSTA-start-call-detail-records-transmission
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-call-detail-records-transmission( 363) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTransferMode FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

startCDRTransmission OPERATION ::=
{ ARGUMENT      StartCDRTransmissionArgument
  RESULT        StartCDRTransmissionResult
  ERRORS        {universalFailure }
  CODE          local: 363 }

StartCDRTransmissionArgument ::= SEQUENCE
{ transferMode      CDRTransferMode,
  extensions       CSTACCommonArguments           OPTIONAL }

StartCDRTransmissionResult ::= SEQUENCE
{ cdrCrossRefID    CDRCrossRefID,                  --corrected 06/2001
  extensions       CSTACCommonArguments           OPTIONAL }

END -- of CSTA-start-call-detail-records-transmission

```

25.1.5 Stop call detail records transmission

```

CSTA-stop-call-detail-records
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-call-detail-records( 364) }
DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTermReason FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

stopCDRTransmission OPERATION ::=
{   ARGUMENT      StopCDRTransmissionArgument
    RESULT        StopCDRTransmissionResult
    ERRORS        {universalFailure }
    CODE          local: 364 }

StopCDRTransmissionArgument ::= SEQUENCE
{   cdrCrossRefID      CDRCrossRefID,           --corrected 06/2001
    cdrTermReason       CDRTermReason           OPTIONAL,
    extensions         CSTACCommonArguments     OPTIONAL }

StopCDRTransmissionResult ::= CHOICE
{   extensions        CSTACCommonArguments,
    noData            NULL  }

END -- of CSTA-stop-call-detail-records

```

26 Location Services

26.1 Services

26.1.1 Get Location Information

```
CSTA-get-location-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-information( 530) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationInfo FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

getLocationInformation OPERATION ::=
{ ARGUMENT      GetLocationInformationArgument
  RESULT        GetLocationInformationResult
  ERRORS        {universalFailure }
  CODE          local: 530 }

GetLocationInformationArgument ::= SEQUENCE
{ device         DeviceID,
  extensions     CSTACurrentArguments      OPTIONAL }

GetLocationInformationResult ::= SEQUENCE
{ locationInfo   LocationInfo,
  extensions     CSTACurrentArguments      OPTIONAL }

END -- of CSTA-get-location-information
```

26.1.2 Set Location Information

```

CSTA-set-location-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-location-information( 531) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationInfo FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

setLocationInformation OPERATION ::=
{   ARGUMENT      SetLocationInformationArgument
    RESULT        SetLocationInformationResult
    ERRORS        {universalFailure }
    CODE          local: 531 }

SetLocationInformationArgument ::= SEQUENCE
{   device          DeviceID,
    locationInfo     LocationInfo           OPTIONAL,
    replaceMode       ReplaceMode            OPTIONAL,
    extensions        CSTACCommonArguments OPTIONAL }

SetLocationInformationResult ::= SEQUENCE
{   extensions      CSTACCommonArguments OPTIONAL }

ReplaceMode ::= ENUMERATED
{   replaceAll      (0),
    replacePortion  (1) }

END -- of CSTA-set-location-information

```

26.1.3 Location tracking session resumed

```

CSTA-location-tracking-session-resumed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-tracking-session-resumed( 532) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID, LocReason FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

locationTrackingSessionResumed OPERATION ::=
{ ARGUMENT      LocationTrackingSessionResumedArgument
  RESULT        LocationTrackingSessionResumedResult
  ERRORS        {universalFailure }
  CODE          local: 532 }

LocationTrackingSessionResumedArgument ::= SEQUENCE
{ locCrossRefID   LocCrossRefID,
  locReason       LocReason           OPTIONAL,
  extensions      CSTACCommonArguments    OPTIONAL }

LocationTrackingSessionResumedResult ::= SEQUENCE
{ extensions      CSTACCommonArguments    OPTIONAL }

END -- of CSTA-location-tracking-session-resumed

```

26.1.4 Location tracking session suspended

```

CSTA-location-tracking-session-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-tracking-session-suspended( 533) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID, LocReason FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

locationTrackingSessionSuspended OPERATION ::=
{   ARGUMENT      LocationTrackingSessionSuspendedArgument
   RESULT        LocationTrackingSessionSuspendedResult
   ERRORS        {universalFailure }
   CODE          local: 533 }

LocationTrackingSessionSuspendedArgument ::= SEQUENCE
{   locCrossRefID      LocCrossRefID,
   locReason           LocReason                               OPTIONAL,
   locationInfoList    LocationInfoList                      OPTIONAL,
   extensions          CSTACCommonArguments                OPTIONAL }

LocationTrackingSessionSuspendedResult ::= SEQUENCE
{   extensions         CSTACCommonArguments              OPTIONAL }

END -- of CSTA-location-tracking-session-suspended

```

26.1.5 Resume Location tracking session

```

CSTA-resume-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-location-tracking-session( 534) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

resumeLocationTrackingSession OPERATION ::=
{ ARGUMENT      ResumeLocationTrackingSessionArgument
  RESULT        ResumeLocationTrackingSessionResult
  ERRORS        {universalFailure }
  CODE          local: 534 }

ResumeLocationTrackingSessionArgument ::= SEQUENCE
{ locCrossRefID      LocCrossRefID,
  extensions       CSTACCommonArguments      OPTIONAL }

ResumeLocationTrackingSessionResult ::= SEQUENCE
{ extensions       CSTACCommonArguments      OPTIONAL }

END -- of CSTA-resume-location-tracking-session

```

26.1.6 Location Information Report

```

CSTA-location-information-report
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-information-report( 535) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

locationInformationReport OPERATION ::=
{   ARGUMENT      LocationInformationReportArgument
    RESULT        LocationInformationReportResult
    ERRORS        {universalFailure}
    CODE          local: 535 }

LocationInformationReportArgument ::= SEQUENCE
{   locCrossRefID      LocCrossRefID,
    device            DeviceID,
    locationInfoList  LocationInfoList           OPTIONAL,
    extensions        CSTACCommonArguments      OPTIONAL }

LocationInformationReportResult ::= SEQUENCE
{   extensions        CSTACCommonArguments      OPTIONAL }

END -- of CSTA-location-information-report

```

26.1.7 Start Location Tracking Session

```

CSTA-start-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-location-tracking-session( 536) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

startLocationTrackingSession OPERATION ::=
{   ARGUMENT      StartLocationTrackingSessionArgument
    RESULT        StartLocationTrackingSessionResult
    ERRORS        {universalFailure }
    CODE          local: 536 }

StartLocationTrackingSessionArgument ::= SEQUENCE
{   locDevice           DeviceID,
    collectionType       [0] IMPLICIT CollectionType      OPTIONAL,
    collectionInterval   [1] IMPLICIT INTEGER           OPTIONAL,
    maxCollections      [2] IMPLICIT INTEGER           OPTIONAL,
    collectionFilter     [3] IMPLICIT CollectionFilter  OPTIONAL,
    reportingType       [4] IMPLICIT ReportingType    OPTIONAL,
    reportingInterval   [5] IMPLICIT INTEGER           OPTIONAL,
    reportingCount      [6] IMPLICIT INTEGER           OPTIONAL,
    extensions          CSTACCommonArguments        OPTIONAL }

StartLocationTrackingSessionResult ::= SEQUENCE
{   locCrossRefID       LocCrossRefID,
    pidProfile          PIDProfile                  OPTIONAL,
    extensions          CSTACCommonArguments        OPTIONAL }

CollectionType ::= ENUMERATED
{   periodic            (0),
    periodicWithUpdates (1),
    updatesOnly         (2) }

CollectionFilter ::= SEQUENCE
{   horizontalMovement [0] IMPLICIT INTEGER           OPTIONAL,
    verticalMovement   [1] IMPLICIT INTEGER           OPTIONAL,
    civicAdressChange  [2] IMPLICIT INTEGER           OPTIONAL }

ReportingType ::= ENUMERATED

```

```
{    immediate      (0),
    periodic       (1),
    count          (2) }

PIDProfile ::= ENUMERATED
{    pidProfileOption1   (0),
    pidProfileOption2   (1) }

END -- of CSTA-start-location-tracking-session
```

26.1.8 Stop Location Tracking Session

```

CSTA-stop-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-location-tracking-session( 537) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) };

stopLocationTrackingSession OPERATION ::=

{ ARGUMENT      StopLocationTrackingSessionArgument
  RESULT        StopLocationTrackingSessionResult
  ERRORS        {universalFailure }
  CODE          local: 537 }

StopLocationTrackingSessionArgument ::= SEQUENCE
{ locCrossRefID    LocCrossRefID,
  reason           EventCause                               OPTIONAL,
  extensions       CSTACCommonArguments                 OPTIONAL }

StopLocationTrackingSessionResult ::= SEQUENCE
{ extensions       CSTACCommonArguments                 OPTIONAL }

END -- of CSTA-stop-location-tracking-session

```

26.1.9 Suspend Location Tracking Session

```

CSTA-suspend-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-location-tracking-session( 538) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

suspendLocationTrackingSession OPERATION ::=
{   ARGUMENT      SuspendLocationTrackingSessionArgument
   RESULT        SuspendLocationTrackingSessionResult
   ERRORS        {universalFailure }
   CODE          local: 538 }

SuspendLocationTrackingSessionArgument ::= SEQUENCE
{   locCrossRefID    LocCrossRefID,
   extensions       CSTACCommonArguments
                     OPTIONAL }

SuspendLocationTrackingSessionResult ::= SEQUENCE
{   extensions       CSTACCommonArguments
                     OPTIONAL }

END -- of CSTA-suspend-location-tracking-session

```

26.1.10 Get Location Tracking Capabilities

```

CSTA-get-location-tracking-capabilities
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-tracking-capabilities( 539) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

getLocationTrackingCapabilities OPERATION ::=
{ ARGUMENT      GetLocationTrackingCapabilitiesArgument
  RESULT        GetLocationTrackingCapabilitiesResult
  ERRORS        {universalFailure }
  CODE          local: 539 }

GetLocationTrackingCapabilitiesArgument ::= SEQUENCE
{ device           DeviceID,
  extensions       CSTACurrentArguments
                    OPTIONAL }

GetLocationTrackingCapabilitiesResult ::= SEQUENCE
{ collectionTypeDefault      ENUMERATED
  { periodic            (0),
    updatesOnly         (1),
    periodicWithUpdates (2) },
  collectionTypePeriodic     BOOLEAN,
  collectionTypeUpdatesOnly  BOOLEAN,
  collectionTypePeriodicWithUpdates  BOOLEAN,
  collectionIntervalDefault  INTEGER,
  collectionIntervalMin     INTEGER,
  collectionIntervalMax     INTEGER,
  maxCollectionsDefault    INTEGER,
  maxCollectionsMin        INTEGER,
  maxCollectionsMax        INTEGER,
  collectionFilterDefault   ENUMERATED
  { horizontalMovement    (0),
    verticalMovement     (1),
    civicAddressChange   (2),
    none                 (3) },
  collectionFilterHorizontal BOOLEAN,
  collectionFilterVertical  BOOLEAN,
  collectionFilterCivicAddress BOOLEAN,
  reportingTypeDefault    ENUMERATED
}

```

```
{   immediate      (0),
    periodic       (1),
    count          (2) },
reportingTypeImmediate      BOOLEAN,
reportingTypePeriodic       BOOLEAN,
reportingTypeCount          INTEGER,
reportingIntervalDefault    INTEGER,
reportingIntervalMin        INTEGER,
reportingIntervalMax        INTEGER,
reportingCountDefault       INTEGER,
reportingCountMin           INTEGER,
reportingCountMax           INTEGER,
supportsSuspendingTracking BOOLEAN,
supportsResumingTracking   BOOLEAN,
extensions                  CSTACurrentArguments
                                         OPTIONAL }
```

END -- of CSTA-get-location-tracking-capabilities

26.1.11 Get Location Tracking Sessions

```

CSTA-get-location-tracking-sessions
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-tracking-sessions( 540) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationSessionInfoList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

getLocationTrackingSessions OPERATION ::=

{ ARGUMENT      GetLocationTrackingSessionsArgument
  RESULT        GetLocationTrackingSessionsResult
  ERRORS        {universalFailure }
  CODE          local: 540 }

GetLocationTrackingSessionsArgument ::= SEQUENCE
{   extensions           CSTACCommonArguments
                                         OPTIONAL }

GetLocationTrackingSessionsResult ::= SEQUENCE
{   crossRefIDorRegistrationData CHOICE
    {   serviceCrossRefID          ServiceCrossRefID,
        locationSessionInfoList     LocationSessionInfoList },
  extensions           CSTACCommonArguments
                                         OPTIONAL }

END -- of CSTA-get-location-tracking-sessions

```

26.1.12 Location Session Info

```

CSTA-location-session-info
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) location-session-info( 541) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
CSTACurrentArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
LocationSessionInfoList FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) };

locationSessionInfoReport OPERATION ::=

{   ARGUMENT      LocationSessionInfoArgument
   ERRORS        {universalFailure }
   CODE          local: 541 }

LocationSessionInfoArgument ::= SEQUENCE
{   serviceCrossRefID      ServiceCrossRefID           OPTIONAL,
   segmentID                INTEGER                  OPTIONAL,
   lastSegment              BOOLEAN                 ,
   locationSessionInfoList  LocationSessionInfoList,
   extensions               CSTACurrentArguments     OPTIONAL  }

END -- of CSTA-location-session-info

```

27 Vendor specific extensions services and events

27.1 Registration services

27.1.1 Escape register

```

CSTA-escape-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register( 365) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACurrentArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escapeRegister OPERATION ::=
{ ARGUMENT      EscapeRegisterArgument
  RESULT        EscapeRegisterResult
  ERRORS        {universalFailure }
  CODE          local: 365 }

EscapeRegisterArgument ::= CHOICE
{ extensions           CSTACurrentArguments,
  noData               NULL }

EscapeRegisterResult ::= SEQUENCE
{ escapeRegisterID    EscapeRegisterID,
  extensions          CSTACurrentArguments           OPTIONAL }

END -- of CSTA-escape-register

```

27.1.2 Escape register abort

```

CSTA-escape-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register-abort( 366) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escapeRegisterAbort OPERATION ::=
{ ARGUMENT          EscapeRegisterAbortArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 366 }

EscapeRegisterAbortArgument ::= SEQUENCE
{ escapeRegisterID      EscapeRegisterID,
  extensions           CSTACCommonArguments      OPTIONAL }

END -- of CSTA-escape-register-abort

```

27.1.3 Escape register cancel

```

CSTA-escape-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register-cancel( 367) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escapeRegisterCancel OPERATION ::=
{ ARGUMENT      EscapeRegisterCancelArgument
  RESULT        EscapeRegisterCancelResult
  ERRORS        {universalFailure }
  CODE          local: 367 }

EscapeRegisterCancelArgument ::= SEQUENCE
{ escapeRegisterID      EscapeRegisterID,
  extensions           CSTACCommonArguments           OPTIONAL }

EscapeRegisterCancelResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData                NULL }

END -- of CSTA-escape-register-cancel

```

27.2 Services

27.2.1 Escape

```
CSTA-escape-service
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) escape-service( 91 ) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) error-definition( 120 ) }
CSTASecurityData FROM CSTA-security
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) security( 128 ) }
CSTACurrentArguments, CSTAPrivateData FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) escape-types( 135 ) };

escape OPERATION ::=

{   ARGUMENT      EscapeArgument
    RESULT        EscapeResult
    ERRORS        {universalFailure }
    CODE          local: 51 }

EscapeArgument ::= SEQUENCE
{   escapeRegisterID      EscapeRegisterID           OPTIONAL,
    security              CSTASecurityData         OPTIONAL,
    privateData           CSTAPrivateData          }

EscapeResult  ::= CHOICE
{   extensions            CSTACurrentArguments,
    noData                NULL }

END -- of CSTA-escape-service
```

27.2.2 Private data version selection

```

CSTA-private-data-version-selection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) private-data-version-selection( 368) }

DEFINITIONS ::=

BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

privateDataVersionSelection OPERATION ::=
{
  ARGUMENT      PrivateDataVersionSelectionArgument
  RESULT        PrivateDataVersionSelectionResult
  ERRORS        {universalFailure }
  CODE          local: 368 }

PrivateDataVersionSelectionArgument ::= INTEGER

PrivateDataVersionSelectionResult ::= CHOICE
{
  extensions      CSTACCommonArguments,
  noData         NULL
}

END -- of CSTA-private-data-version-selection

```

27.3 Events

27.3.1 Private event

```
CSTA-private-event
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) private-event( 71 ) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
CSTASecurityData FROM CSTA-security
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) security( 128 ) }
CSTAPrivateData FROM CSTA-extension-types
{ iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
  standard( 0 ) csta3( 285 ) extension-types( 129 ) };

PrivateEvent ::= SEQUENCE
{ security           CSTASecurityData           OPTIONAL,
  privateData        CSTAPrivateData }

END -- of CSTA-private-event
```

Annex A

Protocol Implementation Conformance Statement (PICS) Proforma

A.1 Introduction

The Protocol Implementation Conformance Statement (PICS) is a statement of which capabilities and options of the protocol have been implemented. The PICS can have a number of uses, including use:

- by the protocol implementor, as a check-list to reduce the risk of failure to conform to the standard through oversight;
- by the supplier and acquirer (or potential acquirer) of the implementation, as a detailed indication of the capabilities of the implementation, stated relative to the common basis for understanding provided by the standard PICS proforma;
- by the user (or potential user) of the implementation, as a basis for initially checking the possibility of interworking with another implementation (note that, while interworking cannot be guaranteed, failure to interwork can often be predicted from incompatible PICS);
- by a protocol tester, as the basis for selecting appropriate tests against which to assess the claim for conformance of the implementation.

A.2 Conformance

The supplier of a protocol implementation which is claimed to conform to this Standard shall complete a copy of the Protocol Implementation Conformance Statement (PICS) proforma in A.5, PICS proforma

A.3 Instructions for completing the PICS proforma

The first part of the PICS proforma, the Implementation Identification (Implementation identification), is to be completed as indicated with the information necessary to identify fully both the supplier and the implementation. The main part of the PICS proforma, PICS proforma

is a fixed format questionnaire divided into subclauses each containing a group of individual items. These items represent options specified in ECMA-269 (mandatory items are not represented). Answers to the questionnaire items are to be provided in the appropriate columns by marking an answer to indicate a restricted choice (Yes or No), and optionally clarifying this response with a comment.

Where a service or event is not supported, as indicated by entering No for the first entry in a table, any parameters or dependent service components in the rest of that table are not applicable, it is then not necessary to complete items in any subsidiary entries in the table.

Note that ECMA-269 should be used as a reference when completing the PICS proforma.

A.4 Implementation identification

Supplier	
Protocol Version	ASN.1 Protocol for CSTA Phase III, 3rd Edition
Date of Statement	
Contact point for queries about the PICS	
Implementation Name(s) and Version(s)	
Other information necessary for full identification - e.g. Name(s) and Version(s) for machines and/or operating systems; system name(s)	

The first five items are required for all implementations; other information may be completed as appropriate in meeting the requirement for full identification.

The terms Name and Version should be interpreted appropriately to correspond with a supplier's terminology (e.g. Type ,Series ,Model).

A.5 PICS proforma

A.5.1 CSTA Profiles

CSTA Profiles group together services and events, where each profile specifies a set of services and events that are supported by the implementation. Switching Function implementors shall indicate support for one or more profiles in the table below. Specifying support for a profile shall be accompanied by specifying support for the services and events encompassed by the profile, as well as any other services and events that the implementation supports.

Refer to ECMA-269 for a description of the CSTA Services and Events that must be supported for a specific CSTA profile.

Description: Profile(s) Supported	Supported ?		Comments
	Yes	No	
Basic Telephony Profile			
Routeing Profile			
Level 1a Voice Browser Profile			
Level 1b Voice Browser Profile			
Level 2 Voice Browser Profile			
Minimal uaCSTA Call Control Profile			
Basic uaCSTA Call Control Profile			
Advanced uaCSTA Call Control Profile			
Conferencing uaCSTA Call Control Profile			
Basic uaCSTA Device Feature Profile			
Speaker uaCSTA Device Feature Profile			
Basic Speech Service Profile			
Advanced Speech Service Profile			

A.5.2 Capability Exchange Services

A.5.2.1 Get CSTA Features

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get CSTA Features			
Service Request optional parameters			
security			
privateData			
Service Request optional parameters			
security			
privateData			

A.5.2.2 Get Logical Device Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Logical Device Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
groupDeviceAttributes			

namedDeviceTypes			
shortFormDeviceID			
agentLogOnModels			
appearanceList			
otherPhysicalDeviceList			
miscMonitorCaps			
associatedGroupList			
maxCallbacks			
maxAutoAnswerRings			
maxActiveCalls			
maxHeldCalls			
maxFwdSettings			
maxDevicesInConf			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
mediaClassSupport			
mediaServiceCapsList			

connectionRateList			
delayToleranceList			
numberOfChannels			
maxChannelBind			
routeingServList			
logDevServList			
logDevEvtsList			
deviceMaintEvtsList			
security			
privateData			

A.5.2.3 Get Physical Device Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Physical Device Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
groupDeviceAttributes			
namedDeviceTypes			

otherLogicalDeviceList			
deviceModelName			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
maxDisplays			
maxButtons			
maxLamps			
maxRingPatterns			
physDevServList			
physDevEvtsList			
security			
privateData			

A.5.2.4 Get Switching Function Capabilities

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Switching Function Capabilities			
Service Request optional parameters			
security			

privateData			
Service Response optional parameters			
callCharacteristicsSupported			
mediaClassSupport			
numberOfChannels			
maxChannelBind			
miscMediaCallCharacteristics			
connectionRateList			
delayToleranceRateList			
pauseTime			
currentTime			
messageSeqNumbers			
timeStampMode			
securityMode			
securityFormat			
privateDataFormat			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			

callOnConnectionMonitorFilter			
miscMonitorCaps			
correlatorDataSupported			
dynamicFeatureSupported			
callLinkageOptionsSupported			
acdModels			
agentLogonModels			
agentStateModels			
maxLengthParametersContinued			
routeingServList			
logDevServList			
logDevEvtsList			
physDevServList			
physDevEvtsList			
deviceMaintEvtsList			
statusReportingServList			
capExchangeServList			
cdrServList			
vendorSpecificServList			
vendorSpecificEvtsList			

privateDataVersionList			
systemStatusTimer			
simpleThreshold			
filterThreshold			
mediaServiceCapsList			
maxDeviceHistoryEntries			
maxDestinationDevicesForDeflect			
security			
privateData			

A.5.2.5 Get Switching Function Devices

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Switching Function Devices			
Service Request optional parameters			
requestedDeviceID			
requestedDeviceCategory			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.2.6 Switching Function Devices

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Devices			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.3 System Services

A.5.3.1 Change System Status Filter

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Change System Status Filter			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.2 System Register

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register			
Service Request optional parameters			
requestedStatusFilter			
security			
privateData			
Service Response optional parameters			
actualStatusFilter			
security			
privateData			

A.5.3.3 System Register Abort

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.3.4 System Register Cancel

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.5 Request System Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Request System Status			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.6 System Status

The System Status service shall be supported as part of the Application Association Initialisation as specified in Clause 7 of ECMA-269.

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Status			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.7 Switching Function Capabilities Changed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Capabilities Changed			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.8 Switching Function Devices Changed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Devices Changed			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.9 Get Registrations

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Registrations			
Service Request optional parameters			
requestedRegTypes			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.10 Registration Info

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Registration Info			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.4 Monitoring Services

A.5.4.1 Change Monitor Filter

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Change Monitor Filter			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
actualFilterList			
security			
privateData			

A.5.4.2 Monitor Start

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Start			
Service Request optional parameters			
requestedMonitorFilter			
monitorType			
requestedMonitorMediaClass			
security			
privateData			
Service Response optional parameters			
actualMonitorFilter			
actualMonitorMediaClass			
monitorExistingCalls			
security			

privateData				
-------------	--	--	--	--

A.5.4.3 Monitor Stop

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Stop			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.4.4 Get Monitors

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Monitors			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.4.5 Monitor Info

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Info			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.5 Snapshot Services

A.5.5.1 Snapshot Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot Call			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
serviceCrossRefID			
snapshotData			
mediaCallCharacteristics			
callCharacteristics			
callingDevice			
calledDevice			
associatedCallingDevice			
associatedCalledDevice			
correlatorData			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.5.2 Snapshot Device

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot Device			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
serviceCrossRefID			
snapshotData			
security			
privateData			

A.5.5.3 Snapshot CallData

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot CallData			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.5.4 Snapshot DeviceData

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot DeviceData			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.6 Call Control Services

A.5.6.1 Accept Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Accept Call			
Service Request optional parameters			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.2 Alternate Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Alternate Call			
Service Request optional parameters			
connectionReservation			
consultOptions			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.3 Answer Call

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Answer Call			
Service Request optional parameters			
correlatorData			
userData			
security			

privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.4 Call Back Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Call-Related			
Service Request optional parameters			
callCharacteristics			
security			
subjectOfCall			
languagePreferences			
privateData			
Service Response optional parameters			
targetDevice			
security			
privateData			

A.5.6.5 Call Back Message Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Message Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
targetDevice			
security			
privateData			

A.5.6.6 Camp On Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Camp On Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.7 Clear Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Clear Call			
Service Request optional parameters			
userData			
reason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.8 Clear Connection

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Clear Connection			
Service Request optional parameters			
correlatorData			
userData			

reason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.9 Conference Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Conference Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
connections			
conferenceCallInfo			
security			
privateData			

A.5.6.10 Consultation Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Consultation Call			
Service Request optional parameters			
connectionReservation			
accountCode			
authCode			
correlatorData			
userData			
callCharacteristics			
mediaCallCharacteristics			
callingConnectionInfo			
consultOptions			
subjectOfCall			
languagePreferences			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			

security			
privateData			

A.5.6.11 Deflect Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Deflect Call			
Service Request optional parameters			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
reason			
callCharacteristics			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.12 Dial Digits

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Dial Digits			
Service Request optional parameters			
correlatorData			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.13 Directed Pickup Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Directed Pickup Call			
Service Request optional parameters			
correlatorData			
userData			
security			
privateData			

Service Response optional parameters			
pickedCall			
pickedCallInfo			
security			
privateData			

A.5.6.14 Group Pickup Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Group Pickup Call			
Service Request optional parameters			
pickGroup			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
pickedCall			
pickedCallInfo			
security			
privateData			

A.5.6.15 Hold Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Hold Call			
Service Request optional parameters			
connectionReservation			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.16 Intrude Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Intrude Call			
Service Request optional parameters			
participationType			
userData			
security			
privateData			

Service Response optional parameters			
conferencedCall			
conferencedCallInfo			
security			
privateData			

A.5.6.17 Join Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Join Call			
Service Request optional parameters			
autoOriginate			
participationType			
accountCode			
authCode			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
conferencedCallInfo			

security			
privateData			

A.5.6.18 Make Call

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Call			
Service Request optional parameters			
accountCode			
authCode			
autoOriginate			
correlatorData			
userData			
callCharacteristics			
medaCallCharacteristics			
callingConnectionInfo			
subjectOfCall			
languagePreferences			
reason			
security			

privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
security			
privateData			

A.5.6.19 Make Connection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Connection			
Service Request optional parameters			
accountCode			
authCode			
autoOriginate			
correlatorData			
callCharacteristics			
mediaCallCharacteristics			
connectionInfo			
subjectOfCall			
languagePreferences			

reason			
maxDevices			
startTime			
duration			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
security			
privateData			

A.5.6.20 Make Predictive Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Predictive Call			
Service Request optional parameters			
signallingDectection			
destinationDetection			
defaultAction			
accountCode			

authCode			
autoOriginate			
alertTime			
correlatorData			
callCharacteristics			
subjectOfCall			
languagePreferences			
userData			
security			
privateData			
Service Response optional parameters			
initiatedCallInfo			
security			
privateData			

A.5.6.21 Park Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Park Call			
Service Request optional parameters			
correlatorData			

subjectOfCall			
languagePreferences			
security			
privateData			
Service Response optional parameters			
parkedTo			
security			
privateData			

A.5.6.22 Reconnect Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Reconnect Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.23 Retrieve Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Retrieve Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.24 Send Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Message			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
callCharacteristics			
mediaCallCharacteristics			

subjectOfCall			
languagePreferences			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.25 Single Step Conference Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Single Step Conference Call			
Service Request optional parameters			
participationType			
accountCode			
authCode			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
security			

privateData			
Service Response optional parameters			
conferencedCallInfo			
security			
privateData			

A.5.6.26 Single Step Transfer Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Single Step Transfer Call			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
reason			
callCharacteristics			
security			
privateData			

Service Response optional parameters			
connections			
transferredCallInfo			
security			
privateData			

A.5.6.27 Transfer Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Transfer Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
connections			
transferredCallInfo			
security			
privateData			

A.5.7 Call Control Events

A.5.7.1 Bridged

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Bridged			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
bridgedConnectionInfo			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.2 Call Cleared

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Call Cleared			
correlatorData			
userData			
mediaCallCharacteristics			
callCharacteristics			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.3 Conferenced

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Conferenced			
secondaryOldCall			
localConnectionInfo			
correlatorData			
userData			

servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.4 Connection Cleared

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Connection Cleared			
localConnectionInfo			
correlatorData			
userData			
chargingInfo			
servicesPermitted			
mediaCallCharateristics			
callCharacteristics			

droppedConnectionInfo			
callLinkageData			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.5 Delivered

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Delivered			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			

associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
connectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.6 Digits Dialed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Digits Dialed			
localConnectionInfo			
correlatorData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			

associatedCallingDevice			
associatedCalledDevice			
diallingConnectionInfo			
callCharacteristics			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.7 Diverted

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Diverted			
callingDevice			
calledDevice			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			

connectionInfo			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.8 Established

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Established			
originatingNIDConnection			
localConnectionInfo			
correlatorData			

userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
establishConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.9 Failed

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Failed			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
failedConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			

locationInfoList			
security			
privateData			

A.5.7.10 Held

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Held			
localConnectionInfo			
correlatorData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
heldConnectionInfo			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.11 Network Capabilities Changed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Network Capabilities Changed			
localConnectionInfo			
correlatorData			
userData			
networkCapability			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
outboundConnectionInfo			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.12 Network Reached

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Network Reached			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
networkCapability			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
outboundConnectionInfo			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
languagePreferences			
deviceHistory			
locationInfoList			
security			

privateData			
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A.5.7.13 Offered

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Offered			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
offeredConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			

deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.14 Originated

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Originated			
originatingDevice			
localConnectionInfo			
correlatorData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
originatedConnectionInfo			

subjectOfCall			
messageInfo			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.15 Queued

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Queued			
numberQueued			
callsInFront			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			

mediaCallCharacteristics			
callCharacteristics			
queuedConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.16 Retrieved

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Retrieved			
localConnectionInfo			
correlatorData			
servicePermitted			
mediaCallCharacteristics			
callCharacteristics			
retrievedConnectionInfo			

callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.17 Service Initiated

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Service Initiated			
localConnectionInfo			
correlatorData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
initiatedConnectionInfo			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
subjectOfCall			

messageInfo			
languagePreferences			
calledDevice			
locationInfoList			
security			
privateData			

A.5.7.18 Transferred

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Transferred			
secondaryOldCall			
localConnectionInfo			
correlatorData			
userData			
chargingInfo			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
languagePreferences			
deviceHistory			

locationInfoList			
security			
privateData			

A.5.8 Call Associated Feature Services

A.5.8.1 Associate Data

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Associate Data			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
callQualifyingData			
callCharacteristics			
subjectOfCall			
languagePreferences			
deviceInfo			
security			
privateData			
Service Response optional parameters			
security			

privateData				
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A.5.8.2 Cancel Telephony Tones

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Cancel Telephony Tones			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.8.3 Change Connection Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Change Connection Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			

privateData			
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A.5.8.4 Generate Digits

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Generate Digits			
Service Request optional parameters			
digitMode			
toneDuration			
pulseRate			
pauseDuration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.8.5 Generate Telephony Tones

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Generate Telephony Tones			
Service Request optional parameters			
toneDuration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.8.6 Send User Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send User Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.9 Call Associated Feature Events

A.5.9.1 Call Information

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Call Information			
callingDevice			
accountInfo			
authorisationCode			
correlatorData			
servicesPermitted			
userData			
callQualifyingData			
connectionInfo			
callCharacteristics			
subjectOfCall			
languagePreferences			
deviceInfo			
security			
privateData			

A.5.9.2 Charging

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Charging			
cause			
security			
privateData			

A.5.9.3 Digits Generated

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Digits Generated			
digitDurationList			
pauseDurationList			
connectionInfo			
security			
privateData			

A.5.9.4 Telephony Tones Generated

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Telephony Tones Generated			
toneGenerated			
toneFrequency			
toneDuration			
pauseDuration			
connectionInfo			
security			
privateData			

A.5.9.5 Service Completion Failure

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Service Completion Failure			
secondaryCall			
otherDevicesPrimaryCallList			
otherDevicesSecondaryCallList			
mediaCallCharacteristics			
security			
privateData			

A.5.10 Media Attachment Services

A.5.10.1 Attach Media Service

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Attach Media Service			
Service Request optional parameters			
mediaServiceVersion			
mediaServiceInstanceID			
requestedConnectionState			
security			
privateData			
Service Response optional parameters			
mediaConnection			
mediaDevice			
mediaServiceInstanceID			
mediaConnectionInfo			
security			
privateData			

A.5.10.2 Detach Media Service

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Detach Media Service			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.11 Media Attachment Events

A.5.11.1 Media Attached

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Media Attached			
mediaServiceVersion			
mediaServiceInstanceId			
mediaStreamID			
mediaCallCharacteristics			
callCharacteristics			
localConnectionInfo			

mediaConnectionInfo			
security			
privateData			

A.5.11.2 Media Detached

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Media Detached			
mediaServiceVersion			
mediaServiceInstanceID			
mediaStreamID			
mediaCallCharacteristics			
callCharacteristics			
localConnectionInfo			
mediaConnectionInfo			
security			
privateData			

A.5.12 Routing Services

A.5.12.1 Route Register

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Register			
Service Request optional parameters			
routeingDevice			
requestedRouteingMediaClass			
security			
privateData			
Service Response optional parameters			
actualRouteingMediaClass			
security			
privateData			

A.5.12.2 Route Register Abort

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.12.3 Route Register Cancel

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.12.4 Re-Route

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Re-Route			
Service Request optional parameters			
routeRegisterReqID			
replyTimeout			
correlatorData			
security			
privateData			

A.5.12.5 Route End

This service must be supported if the Routing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route End			
Service Request optional parameters			
routeRegisterReqID			
errorValue			
correlatorData			
security			
privateData			

A.5.12.6 Route Reject

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Reject			
Service Request optional parameters			
routeRegisterReqID			
rejectCause			
correlatorData			
security			
privateData			

A.5.12.7 Route Request

This service must be supported if the Routing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Request			
Service Request optional parameters			
routeRegisterReqID			
callingDevice			
routeingDevice			
routedCall			
routeSelAlgorithm			
associatedCallingDevice			
associatedCalledDevice			
priority			
replyTimeout			
correlatorData			
mediaCallCharacteristics			
callCharacteristics			
routedCallInfo			
subjectOfCall			

messageInfo			
languagePreferences			
deviceHistory			
security			
privateData			

A.5.12.8 Route Select

This service must be supported if the Routing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Select			
Service Request optional parameters			
routeRegisterReqID			
alternateRoutes			
remainRetries			
routeUsedReq			
correlatorData			
security			
privateData			

A.5.12.9 Route Used

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Route Used			
Service Request optional parameters			
routeRegisterReqID			
callingDevice			
domain			
correlatorData			
security			
privateData			

A.5.13 Physical Device Services

A.5.13.1 Button Press

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Button Press			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			

privateData			
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A.5.13.2 Get Auditory Apparatus Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Auditory Apparatus Information			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.3 Get Button Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Button Information			
Service Request optional parameters			
button			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.13.4 Get Display

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Display			
Service Request optional parameters			
displayID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.5 Get HookSwitch Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get HookSwitch Status			
Service Request optional parameters			
hookswitch			

security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.6 Get Lamp Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Lamp Information			
Service Request optional parameters			
lamp			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.7 Get Lamp Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Lamp Mode			
Service Request optional parameters			
lamp			
security			
privateData			
Service Response optional parameters			
lamp			
security			
privateData			

A.5.13.8 Get Message Waiting Indicator

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Message Waiting Indicator			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
deviceForMessage			
lampIsPresent			
security			
privateData			

A.5.13.9 Get Microphone Gain

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Microphone Gain			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.10 Get Microphone Mute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Microphone Mute			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.11 Get Ringer Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Ringer Status			
Service Request optional parameters			
ringer			
security			
privateData			
Service Response optional parameters			
security			

privateData			
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A.5.13.12 Get Speaker Mute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Speaker Mute			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.13 Get Speaker Volume

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Speaker Volume			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.13.14 Set Button Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Button Information			
Service Request optional parameters			
buttonLabel			
buttonAssociatedNumber			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.15 Set Display

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Display			
Service Request optional parameters			
displayID			
physicalBaseRowNumber			
physicalBaseColumnNumber			
offset			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.16 Set HookSwitch Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set HookSwitch Status			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.13.17 Set Lamp Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Lamp Mode			
Service Request optional parameters			
lampBrightness			
lampColor			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.18 Set Message Waiting Indicator

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Message Waiting Indicator			

Service Request optional parameters			
deviceForMessage			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.19 Set Microphone Gain

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Microphone Gain			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.20 Set Microphone Mute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Microphone Mute			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.21 Set Ringer Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Ringer Status			
Service Request optional parameters			
ringMode			
ringPattern			
ringVolume			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.13.22 Set Speaker Mute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Speaker Mute			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.23 Set Speaker Volume

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Speaker Volume			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.14 Physical Device Events

A.5.14.1 Button Information

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Button Information			
buttonLabel			
buttonAssociatedNumber			
buttonPressIndicator			
security			
privateData			

A.5.14.2 Button Press

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Button Press			
buttonLabel			
buttonAssociatedNumber			
security			

privateData			
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A.5.14.3 Display Updated

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Display Updated			
displayID			
physicalRows			
physicalColumns			
physicalBaseRowNumber			
physicalBaseColumnNumber			
characterSet			
security			
privateData			

A.5.14.4 Hookswitch

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Hookswitch			
security			
privateData			

A.5.14.5 Lamp Mode

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Lamp Mode			
lampLabel			
lampBrightness			
lampColor			
security			
privateData			

A.5.14.6 Message Waiting

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Message Waiting			
deviceForMessage			
security			
privateData			

A.5.14.7 Microphone Gain

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Microphone Gain			
security			
privateData			

A.5.14.8 Microphone Mute

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Microphone Mute			
security			
privateData			

A.5.14.9 Ringer Status

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Ringer Status			
ringMode			
ringCount			
ringDuration			
ringPattern			

ringVolume			
security			
privateData			

A.5.14.10 Speaker Mute

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Speaker Mute			
security			
privateData			

A.5.14.11 Speaker Volume

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Speaker Volume			
timeStamp			
security			
privateData			

A.5.15 Logical Device Services

A.5.15.1 Call Back Non-Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	

Call Back Non-Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.2 Call Back Message Non-Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Message Non-Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.3 Cancel Call Back

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	

Cancel Call Back			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.4 Cancel Call Back Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Cancel Call Back Message			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.5 Get Agent State

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	

Get Agent State			
Service Request optional parameters			
acdGroup			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.6 Get Auto Answer

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Auto Answer			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
numberOfRings			
security			
privateData			

A.5.15.7 Get Auto Work Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Auto Work Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
autoWorkInterval			
security			
privateData			

A.5.15.8 Get CallBack

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get CallBack			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.9 Get Caller ID Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Caller ID Status			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.10 Get Do Not Disturb

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Do Not Disturb			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
callOrigination			
callingDeviceList			

security			
privateData			

A.5.15.11 Get Forwarding

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Forwarding			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.12 Get Last Number Dialled

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Last Number Dialled			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.15.13 Get Routeing Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Routeing Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.14 Set Agent State

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Agent State			
Service Request optional parameters			
agentID			
password			

group			
security			
privateData			
Service Response optional parameters			
pendingAgentState			
security			
privateData			

A.5.15.15 Set Auto Answer

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Auto Answer			
Service Request optional parameters			
numberOfRings			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.16 Set Auto Work Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Auto Work Mode			
Service Request optional parameters			
autoWorkInterval			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.17 Set Caller ID Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Caller ID Status			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.18 Set Do Not Disturb

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Do Not Disturb			
Service Request optional parameters			
callOrigination			
callingDeviceList			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.19 Set Forwarding

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Forwarding			
Service Request optional parameters			
forwardingType			
forwardDN			
ringCount			

ringDuration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.20 Set Routeing Mode

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Routeing Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.16 Logical Device Events

A.5.16.1 Agent Busy

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Busy			
agentID			
acdGroup			
pendingAgentState			
cause			
security			
privateData			

A.5.16.2 Agent Logged Off

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Logged Off			
agentID			
acdGroup			
agentPassword			
cause			
security			
privateData			

A.5.16.3 Agent Logged On

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Logged On			
agentID			
acdGroup			
agentPassword			
cause			
security			
privateData			

A.5.16.4 Agent Not Ready

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Not Ready			
agentID			
acdGroup			
cause			
security			
privateData			

A.5.16.5 Agent Ready

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Ready			
agentID			
acdGroup			
cause			
security			
privateData			

A.5.16.6 Agent Working After Call

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Agent Working After Call			
agentID			
acdGroup			
pendingAgentState			
cause			
security			
privateData			

A.5.16.7 Auto Answer

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Auto Answer			
numberOfRings			
security			
privateData			

A.5.16.8 Auto Work Mode

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Auto Work Mode			
security			
privateData			

A.5.16.9 Call Back

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Call Back			
security			
privateData			

A.5.16.10 Call Back Message

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Message			
security			
privateData			

A.5.16.11 Caller ID Status

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Caller ID Status			
security			
privateData			

A.5.16.12 Do Not Disturb

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Do Not Disturb			
callOrigination			
callingDeviceList			
security			
privateData			

A.5.16.13 Forwarding

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Forwarding			
forwardingType			
forwardTo			
forwardDefault			
ringCount			
ringDuration			
security			
privateData			

A.5.16.14 Routing Mode

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Routing Mode			
security			
privateData			

A.5.17 Device Maintenance Events

A.5.17.1 Back In Service

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Back In Service			
cause			
security			
privateData			

A.5.17.2 Device Capabilities Changed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Device Capabilities Changed			
cause			
security			
privateData			

A.5.17.3 Out of Service

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Out of Service			
cause			
security			

privateData			
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A.5.17.4 Partially In Service

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Partially In Service			
cause			
security			
privateData			

A.5.18 I/O Services

A.5.18.1 I/O Register

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
I/O Register			
Service Request optional parameters			
ioDevice			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.2 I/O Register Abort

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
I/O Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.18.3 I/O Register Cancel

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
I/O Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.4 Data Path Resumed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Data Path Resumed			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.5 Data Path Suspended

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Data Path Suspended			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.18.6 Fast Data

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Fast Data			
Service Request optional parameters			
ioRegisterReqID			
dataPathType			
displayAttributes			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.7 Resume Data Path

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Resume Data Path			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.8 Send Broadcast Data

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Broadcast Data			
Service Request optional parameters			
dataPathType			
displayAttributes			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.18.9 Send Data

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Data			
Service Request optional parameters			
ioRegisterReqID			
displayAttributes			
ioCause			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.10 Send Multicast Data

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Multicast Data			
Service Request optional parameters			
ioData			
displayAttributes			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.11 Start Data Path

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Start Data Path			
Service Request optional parameters			
ioRegisterReqID			
dataPathDirection			
dataPathType			
displayID			

numberOfCharsToCollect			
terminationCharacter			
timeout			
security			
privateData			
Service Response optional parameters			
numberOfCharsToCollect			
terminationCharacter			
timeout			
security			
privateData			

A.5.18.12 Stop Data Path

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Stop Data Path			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.18.13 Suspend Data Path

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Suspend Data Path			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19 Data Collection Services

A.5.19.1 Data Collected

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Data Collected			
Service Request optional parameters			
digitsData			
telTonesData			
connectionInfo			
dcollCause			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.2 Data Collection Resumed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Data Collection Resumed			
Service Request optional parameters			
security			

privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.3 Data Collection Suspended

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Data Collection Suspended			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.4 Resume Data Collection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Resume Data Collection			
Service Request optional parameters			
security			

privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.5 Start Data Collection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Start Data Collection			
Service Request optional parameters			
dataCollType			
digitsReportingCriteria			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.6 Stop Data Collection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Stop Data Collection			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.7 Suspend Data Collection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Suspend Data Collection			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20 Voice Services

A.5.20.1 Activate

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Activate			
Service Request optional parameters			
resource			
grammarName			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.2 Clear

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Clear Message			
Service Request optional parameters			
resource			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.20.3 Concatenate Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Concatenate Message			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.4 Deactivate

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Deactivate			
Service Request optional parameters			
resource			
grammarName			

security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.5 Delete Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Delete Message			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.6 Play Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Play Message			
Service Request optional parameters			
duration			
termination			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.7 Query Voice Attribute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Query Voice Attribute			
Service Request optional parameters			
messageToQuery			
resource			
connection			
security			

privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.8 Queue

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Queue Service			
Service Request optional parameters			
message			
resource			
text			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.9 Record Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Record Message			
Service Request optional parameters			
resource			
samplingRate			
encodingAlgorithm			
maxDuration			
termination			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.10 Reposition

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Reposition			
Service Request optional parameters			
messageToReposition			

resource			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.11 Resume

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Resume			
Service Request optional parameters			
messageToResume			
resource			
duration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.12 Review

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Review			
Service Request optional parameters			
messageToReview			
resource			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.13 Set Voice Attribute

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Voice Attribute			
Service Request optional parameters			
message			
resource			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.20.14 Start

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Start			
Service Request optional parameters			
resource			
text			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.15 Stop

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Stop			
Service Request optional parameters			
messageToBeStopped			
resource			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.16 Suspend

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Suspend			
Service Request optional parameters			
message			
resource			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.20.17 Synthesize Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Synthesize Message			
Service Request optional parameters			
control			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.21 Voice Events

A.5.21.1 Bookmark Reached

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Bookmark Reached			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.2 Completed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Completed			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.3 DTMF Detected

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
DTMF Detected			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.4 Emptied

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Emptied			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.5 Interruption Detected

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Interruption Detected			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.6 Not Recognized

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Not Recognized			
resource			
result			
cause			
servicesPermitted			
security			
privateData			

A.5.21.7 Play

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Play			
message			
resource			
length			
currentPosition			
speed			
cause			
servicesPermitted			
security			
privateData			

A.5.21.8 Recognized

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Recognized			
resource			
cause			
servicesPermitted			
security			

privateData			
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A.5.21.9 Record

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Record			
message			
resource			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.10 Review

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Review			
message			
resource			
length			

currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.11 Silence Timeout Expired

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Silence Timeout Expired			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.12 Speech Detected

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Speech Detected			
resource			
cause			

servicesPermitted			
security			
privateData			

A.5.21.13 Started

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Started			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.21.14 Stop

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Stop			
message			
resource			
length			
currentPosition			

cause			
servicesPermitted			
security			
privateData			

A.5.21.15 Suspend Play

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Suspend Play			
message			
resource			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.16 Suspend Record

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Suspend Record			
message			
resource			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.17 Voice Attribute Changed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Voice Attribute Changed			
message			
resource			
playVolume			
recordingGain			
speed			

currentPosition			
grammars			
language			
mode			
retainAudio			
silenceTimeout			
maxTimeout			
babbleTimeout			
endSilence			
rejectionThreshold			
autoInterruptable			
innerXML			
interdigitTimeout			
preflush			
cause			
security			
privateData			

A.5.21.18 Voice Error Occurred

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Voice Error Occurred			
resource			
cause			
servicesPermitted			
security			
privateData			

A.5.22 Call Detail Record (CDR) Services
A.5.22.1 Call Detail Records Notification

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Detail Records Notification			
Service Request optional parameters			
cdrReason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.2 Call Detail Records Report

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Detail Records Report			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.3 Send Stored Call Detail Records

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Stored Call Detail Records			
Service Request optional parameters			
timePeriod			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.22.4 Start Call Detail Records Transmission

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Start Call Detail Records Transmission			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.5 Stop Call Detail Records Transmission

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Stop Call Detail Records Transmission			
Service Request optional parameters			
cdrTermReason			
security			

privateData			
Service Response optional parameters			
security			
privateData			

A.5.23 Location Services

A.5.23.1 Get Location Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Location Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
locationInfo			
security			
privateData			

A.5.23.2 Set Location Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Set Location Information			
Service Request optional parameters			
locationInfo			
replaceMode			
security			
privateData			
Service Response optional parameters			
locationInfo			
security			
privateData			

A.5.23.3 Location Tracking Session Resumed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Location Tracking Session Resumed			
Service Request optional parameters			
locReason			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.23.4 Location Tracking Session Suspended

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Location Tracking Session Suspended			
Service Request optional parameters			
locReason			
locationInfoList			
security			
privateData			
Service Response optional parameters			
locationInfo			
security			
privateData			

A.5.23.5 Resume Location Tracking Session

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Resume Location Tracking Session			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.6 Location Information Report

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Location Information Report			
Service Request optional parameters			
locationInfoList			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.7 Start Location Tracking Session

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Start Location Tracking Session			
Service Request optional parameters			
collectionType			
collectionInterval			
maxCollections			
collectionFilter			
reportingType			
reportingInterval			
reportingCount			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.8 Stop Location Tracking Session

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Stop Location Tracking Session			
Service Request optional parameters			
reason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.9 Suspend Location Tracking Session

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Suspend Location Tracking Session			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.10 Get Location Tracking Capabilities

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Location Tracking Capabilities			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.11 Get Location Tracking Sessions

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Location Tracking Sessions			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.12 Location Session Info

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Location Session Info			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.24 Vendor Specific Extension Services

A.5.24.1 Escape Register

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Escape Register			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.24.2 Escape Register Abort

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Escape Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.24.3 Escape Register Cancel

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Escape Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.24.4 Escape

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Escape			
Service Request optional parameters			
escapeRegisterID			
security			
Service Response optional parameters			
security			
privateData			

A.5.24.5 Private Data Version Selection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Private Data Version Selection			
Service Response optional parameters			
security			
privateData			

A.5.25 Vendor Specific Extension Events

A.5.25.1 Private Event

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Private Event			
security			

A.5.26 XML Tag Options

Refer to 2.4, “XML Tag Options”, on page 1 for information on the XML Tag options

Description: XML Tag option(s) Supported	Supported ?		Comments
	Yes	No	
ECMA-323 Specified Tags			
Short Tags			
Dynamic Tags			

A.5.27 CSTA Over SIP (uaCSTA) Transport Mechanism Option

Refer to 2.5, “CSTA Over SIP (uaCSTA) Transport Mechanism Option”, on page 2 for information on the CSTA Over SIP (uaCSTA) Transport Mechanism option.

Description: Transport Option	Supported ?		Comments
	Yes	No	
CSTA Over SIP (uaCSTA) Transport			