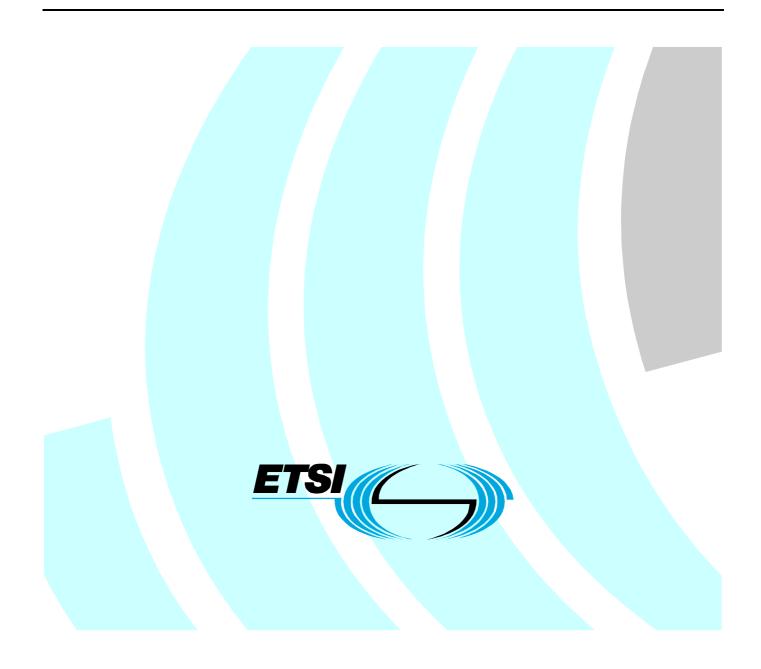# ETSI TS 101 811-3-2 V1.3.1 (2004-08)

Technical Specification

**Broadband Radio Access Networks (BRAN);
HIPERLAN Type 2;
Conformance testing for the packet based convergence layer;
Part 3: IEEE 1394 Service Specific Convergence Sublayer (SSCS);
Sub-part 2: Test Suite Structure and
Test Purposes (TSS&TP) specification**

ETSI

Reference

RTS/BRAN-0024TB4-3-2

Keywords

access, HIPERLAN, TSS&TP, testing

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:
http://www.etsi.org

The present document may be made available in more than one electronic version or in print. In any case of existing or
perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF).
In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive
within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, send your comment to:
editor@etsi.org

Copyright Notification

Contents

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Project Broadband Radio Access Networks (BRAN).

The present document is part 3, sub-part 2 of a multi-part deliverable. Full details of the entire series can be found in part 1, sub-part 1 (see bibliography).

1   Scope

The present document contains the Test Suite Structure (TSS) and Test Purposes (TP) to test the BRAN HIPERLAN type 2; Packet based Convergence Layer; Part 3: IEEE 1394 Service Specific Convergence Sublayer (SSCS).

The objective of the present document is to provide a basis for conformance tests for BRAN HIPERLAN type 2 equipment giving a high probability of air interface inter-operability between different manufacturer's BRAN HIPERLAN type 2 equipment.

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [3] and ISO/IEC 9646-2 [4]) as well as the ETSI rules for conformance testing (ETS 300 406 [2]) are used as a basis for the test methodology.

2   References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

[1]   ETSI TS 101 493-3 (V1.3.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Packet based Convergence Layer; Part 3: IEEE 1394 Service Specific Convergence Sublayer (SSCS)".

[2]   ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[3]   ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also ITU-T Recommendation X.290 (1995)).

[4]   ISO/IEC 9646-2 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification". (See also ITU-T Recommendation X.291 (1995)).

[5]   ISO/IEC 9646-6 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".

[6]   ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".

3   Definitions and abbreviations

3.1   Definitions

For the purposes of the present document, the terms and definitions given in ISO/IEC 9646-7 [6] and TS 101 493-3 [1] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ISO/IEC 9646-1 [3], ISO/IEC 9646-6 [5], ISO/IEC 9646-7 [6], TS 101 493-3 [1] and the following apply:

AP   Access Point
BI   Invalid Behaviour
BO   Inopportune Behaviour
BV   Valid Behaviour
CA   Capability tests
CC   Central Controller
CL   Convergence Layer
DLC   Data Link Control
DM   Direct Mode
HARP   HIPERLAN/2 Address Resolution Protocol
IUT   Implementation Under Test
LCH   Long CHannel
MAC   Medium Access Control
MT   Mobile Terminal
PBCL   Packet Based Convergence Layer
PDU   Protocol Data Unit
PICS   Protocol Implementation Conformance Statement
RLC   Radio Link Control
TP   Test Purposes
TSS   Test Suite Structure

4 Test suite structure

4.1 Structure

Figure 1 shows the IEEE 1394 Service Specific PBCL Test Suite Structure (TSS) including its subgroups defined for the conformance testing.

Test Suite	Protocol group	Protocol subgroup	Test group			
			CA	BV	BI	BO
IEE-AP/ IEE-MT/ IEE-HS	User plane procedures	Clock synchronization	x			
		Asynchronous transaction	x			
		Isochronous Stream	x			
		Asynchronous Stream	x			
	Control plane procedures	Association - Initialization	x			
		Bus reset	x			
		Clock information connection	x			
		CL responsibility handover	x			
		HL2 Address Resolution service	x			
		Asynchronous transaction	x			
		Isochronous stream	x			
		Asynchronous stream	x			

Figure 1: TSS for Hiperlan 2 IEEE 1394 Service Specific PBCL

The test suite is structured as a tree with a first level defined as IEE-AP, IEE-MT or IEE-HS representing the protocol group "IEEE 1394 Service Specific PBCL for AP", "IEEE 1394 Service Specific PBCL for MT" and "IEEE 1394 Service Specific PBCL for HL2 Bus system".

4.2   Test groups

The test groups are organized in three levels. The first level creates one protocol group representing the protocol services. The second level separates the protocol services in functional modules. The last level in each branch contains one or more of the standard ISO subgroups CA, BV, BI and BO.

4.2.1   Protocol groups

The protocol group identifies the User plane procedures and the Control plane procedures as defined in TS 101 493-3 [1].

4.2.1.1   User plane procedures

The User plane procedures group is divided in four functional modules. The first functional module distinguishes the Clock synchronization service. The second functional module distinguishes the Asynchronous transaction data transport service. The third functional module distinguishes the isochronous stream data transport service. The last functional module distinguishes the Asynchronous stream data transport service.

4.2.1.2   Control plane procedures

The Control plane procedures group is divided in eight functional modules. The first functional module distinguishes the Association - Initialization service. The second functional module distinguishes the Bus reset service. The third functional module distinguishes the Clock information connection control service. The fourth functional module identifies the CL responsibility handover service. The fifth functional module distinguishes the HL2 Address Resolution service (HARP). The sixth functional module distinguishes Asynchronous transaction connection control service. The seventh functional module distinguishes the isochronous stream connection control service. The last functional module distinguishes the Asynchronous streams connection control service.

4.2.2   Main test groups

The main test groups are the capability group, the valid behaviour group, the invalid behaviour group and the inopportune behaviour group.

4.2.2.1   Capability (CA) tests

This test sub group shall provide limited testing of the major IUT capabilities aiming to insure that the claimed capabilities are correctly supported, according to the PICS.

4.2.2.2   Valid Behaviour (BV) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt or exchange of valid Protocol Data Units *PDUs). Valid PDUs means that the exchange of messages and the content of the exchanged messages are considered as valid.

4.2.2.3   Invalid Behaviour (BI) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt of a syntactically invalid PDU.

4.2.2.4   Inopportune Behaviour (BO) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt of a syntactically correct PDU not expected in the actual message exchange.

5   Test Purposes (TP)

5.1   Introduction

5.1.1   TP definition conventions

The TPs are defined following particular rules as shown in table 1.

Table 1: TP definition rules

TP Id according to the TP naming conventions	Reference. Initial condition. Stimulus. Expected behaviour.
TP Id	The TP Id is a unique identifier it shall be specified according to the TP naming conventions defined in clause 5.1.2.
Reference	The reference should contain the references of the subject to be validated by the actual TP (specification reference, clause and paragraph).
Condition	The condition defines in which initial state the IUT has to be to apply the actual TP.
Stimulus	The stimulus defines the test event to which the TP is related.
Expected behaviour	Definition of the events that are expected from the IUT to conform to the base specification.

5.1.2   TP naming conventions

The identifier of the TP is built according to table 2.

Table 2: TP naming convention

Identifier:	TP/<st>/<pg>/<fm>/<x>-<nnn>		
<st>	= Side type	AP	Access Point
		MT	Mobile Terminal
		HS	HL2 Bus system
<pg>	= Protocol group	UPP	User plane procedures
		CPP	Control plane procedures
<fm>	= Functional module	CS	Clock synchronization
		AT	Asynchronous transaction
		IS	Isochronous Stream
		AS	Asynchronous Stream
		AI	Association - Initialization
		BR	Bus reset
		CI	Clock information connection
		RH	CL responsibility handover
		HA	HL2 Address Resolution service
x	= Type of testing	CA	Capability Tests
		BV	Valid Behaviour Tests
		BI	Invalid Behaviour Tests
		BO	Inopportune Behaviour Tests
<nnn>	= Sequential number	(000-999)	Test Purpose Number

EXAMPLE: TP/MT/CPP/RH/BV-010 is the tenth purpose for the valid behaviour testing the Control plane CL responsibility handover procedures of the IEEE 1394 Service Specific layer implemented at MT side.

5.1.3   Sources of TP definitions

All TPs are specified according to TS 101 493-3 [1].

5.2   Test purposes for AP

5.2.1   Association - Initialization

TP/AP/CPP/AI/CA-000	Reference: TS 101 493-3 [1], clause 6.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_INFO message containing the EUI_64 information element, the CC sends an RLC_INFO_ACK message.
TP/AP/CPP/AI/CA-001	Reference: TS 101 493-3 [1], clause 6.3.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_JOIN message for the main multicast group of the 1394 broadcast channel, the CC sends an RLC_GROUP_JOIN_ACK message.
TP/AP/CPP/AI/CA-002	Reference: TS 101 493-3 [1], clause 6.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing the EUI_64 information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received EUI_64 information element.
TP/AP/CPP/AI/CA-003	Reference: TS 101 493-3 [1], clause 6.3.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_JOIN_ACK message in answer to an RLC_GROUP_JOIN message for the main multicast group of the 1394 broadcast channel, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_JOIN_ACK message contains the received CHANNEL information element.

5.2.2   Bus reset service

TP/AP/CPP/BR/CA-000	Reference: TS 101 493-3 [1], clause 6.4.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. WT2 joins the clock multicast group. Only for IUT that supports 1394 SSCS. Check, that: the CC initiates a bus-reset procedure when a wireless node joins the HL2 Bus.
TP/AP/CPP/BR/CA-001	Reference: TS 101 493-3 [1], clause 6.4.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. WT2 leaves the clock multicast group and disassociates from CC. Only for IUT that supports 1394 SSCS. Check, that: the CC initiates a bus-reset procedure when a wireless node leaves the HL2 Bus.
TP/AP/CPP/BR/CA-002	Reference: TS 101 493-3 [1], clause 6.4.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 has sent a BUS_RESET. Only for IUT that supports 1394 SSCS. Check, that: when the CC receives an RLC_INFO message containing a BUS_RESET information element, it acknowledges the WT by sending an RLC_INFO_ACK message.
TP/AP/CPP/BR/CA-003	Reference: TS 101 493-3 [1], clause 6.4.2.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. Only for IUT that supports 1394 SSCS. Check, that: the CC starts the BUS_RESET procedure by sending an RLC_INFO message containing a BUS_SUSPEND information element in the <<CL-ATTRIBUTE>> field to all associated WTs
TP/AP/CPP/BR/CA-004	Reference: TS 101 493-3 [1], clause 6.4.2.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 and WT2 have sent a BUS_SUSPEND response. Only for IUT that supports 1394 SSCS. Check, that: after having received an RLC_INFO_ACK message containing the BUS_SUSPEND information element from all associated WTs, the CC sends an RLC_INFO message containing a BUS_RESUME information element in the <<CL-ATTRIBUTE>> field to all associated WTs
TP/AP/CPP/BR/CA-005	Reference: TS 101 493-3 [1], clause 6.4.2.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 and WT2 have not sent the BUS_RESUME response within the T_reset timer. Only for IUT that supports 1394 SSCS. Check, that: if the CC cannot complete the BUS_RESET procedure within the T_reset timer, it starts another BUS_RESET procedure.
TP/AP/CPP/BR/CA-006	Reference: TS 101 493-3 [1], clause 6.4.2.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 has sent the BUS_SUSPEND response and WT2 has not. Only for IUT that supports 1394 SSCS. Check, that: if the CC did not receive the RLC_INFO_ACK message containing the BUS_SUSPEND information element response from all associated WTs, it retransmits the RLC_INFO message containing the BUS_SUSPEND information element in the <<CL-ATTRIBUTE>> field to only those WTs that did not acknowledge it.
TP/AP/CPP/BR/CA-007	Reference: TS 101 493-3 [1], clause 6.4.2.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 has sent the BUS_RESUME response and WT2 has not. Only for IUT that supports 1394 SSCS. Check, that: if the CC did not receive the RLC_INFO_ACK message containing the BUS_RESUME information element response from all associated WTs, it retransmits the RLC_INFO message containing the BUS_RESUME information element in the <<CL-ATTRIBUTE>> field to only those WTs that did not acknowledge it.

TP/AP/CPP/BR/CA-008	Reference: TS 101 493-3 [1], clause 6.4.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. Only for IUT that supports 1394 SSCS. Check, that: the CC assigns the same physical_IDs to still associate WTs during a bus-reset procedure.
TP/AP/CPP/BR/CA-009	Reference: TS 101 493-3 [1], clause 6.4.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 has sent a BUS_RESET with *new_phy_ID* parameter set to one. Only for IUT that supports 1394 SSCS. Check, that: when the bus reset is WT-initiated, the CC assigns a new physical_ID if the *new_phy_ID* parameter in the received BUS_RESET information element is set to one.
TP/AP/CPP/BR/CA-010	Reference: TS 101 493-3 [1], clause 6.4.3 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. Only for IUT that supports 1394 SSCS. Check, that: when there is no new physical_ID available, the CC transmits the RLC_INFO message containing the BUS_RESUME information element with the *toggle* bit set, in the <<CL-ATTRIBUTE>> field.
TP/AP/CPP/BR/CA-011	Reference: TS 101 493-3 [1], clause 6.4.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. Only for IUT that supports 1394 SSCS. Check, that: the CC initiates a bus-reset procedure when a WT requests a bus reset of the HL2 Bus.
TP/AP/CPP/BR/CA-012	Reference: TS 101 493-3 [1], clause 6.4.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. Only for IUT that supports 1394 SSCS. Check, that: the CC initiates a bus-reset procedure when it upper layer requests a bus reset of the HL2 Bus.
TP/AP/CPP/BR/CA-013	Reference: TS 101 493-3 [1], clause 6.4.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 and WT2 have joined the clock multicast group. WT1 has sent a BUS_RESET. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing the BUS_RESET information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received BUS_RESET information element.

5.2.3 Clock information connection control

TP/AP/CPP/CI/CA-000	Reference: TS 101 493-3 [1], clause 6.5.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT2 is an unrestricted bridge. Only for IUT that supports 1394 SSCS. Check, that: when the CC as WCM detects that another WCM is operating on the HL2 Bus, the CC disables its cycle master function and release the multicast DLC connection for the 1394 clock multicast mac_ID.
TP/AP/CPP/CI/CA-001	Reference: TS 101 493-3 [1], clause 6.5.4 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. WT2 joins the forwarding multicast group. Only for IUT that supports 1394 SSCS. Check, that: when a WT needs to join the forwarding multicast group of the 1394 clock channel, the CC set ups a DLC connection for the forwarding multicast group of the 1394 clock channel.
TP/AP/CPP/CI/CA-002	Reference: TS 101 493-3 [1], clause 6.5.4 Initial condition: IUT is the AP/CC. LT is acting as WT1 and as WT2. WT1 has joined the clock multicast group. WT2 has joined the forwarding multicast group. WT2 leaves the forwarding multicast group. Only for IUT that supports 1394 SSCS. Check, that: the CC releases the forwarding multicast group of the 1394 clock channel, when it detects that the last WT has left the forwarding group.
TP/AP/CPP/CI/CA-003	Reference: TS 101 493-3 [1], clause 5.3.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: for each MAC frame, the CC as WCM sends an RLC_UNITDATA message in the main multicast group of the 1394 clock channel, containing it BUS_TIME register.
TP/AP/CPP/CI/CA-004	Reference: TS 101 493-3 [1], clause 6.5.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: if no other WCM is operating on the HL2 Bus, the CC as IRM enables its WCM function.
TP/AP/CPP/CI/CA-005	Reference: TS 101 493-3 [1], clause 6.5.2.1 Initial condition: IUT is the AP/CC and is a bridge. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when receiving a CL_CONTROL request primitive with the disable_cycle_master action from its upper HL2 1394 bridge layer entity, the CC disables its WCM function.
TP/AP/CPP/CI/CA-006	Reference: TS 101 493-3 [1], clause 6.5.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC as IRM has enabled its WCM function, it setups the multicast DLC connection for the 1394 clock multicast mac_ID using the fixed capacity agreement mode with one LCH slot every frame and non-acknowledged transport mode.
TP/AP/CPP/CI/CA-007	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_JOIN message for the main multicast group of the 1394 clock channel, the CC sends an RLC_GROUP_JOIN_ACK message.
TP/AP/CPP/CI/CA-008	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_JOIN message for the forwarding multicast group of the 1394 clock channel, the CC sends an RLC_GROUP_JOIN_ACK message.
TP/AP/CPP/CI/CA-009	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_LEAVE message for the forwarding multicast group of the 1394 clock channel, the CC sends an RLC_GROUP_LEAVE_ACK message.

TP/AP/CPP/CI/CA-010	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_JOIN_ACK message in answer to an RLC_GROUP_JOIN message for the main multicast group of the 1394 clock channel, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_JOIN_ACK message contains the received CHANNEL information element.
TP/AP/CPP/CI/CA-011	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_JOIN_ACK message in answer to an RLC_GROUP_JOIN message for the forwarding multicast group of the 1394 clock channel, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_JOIN_ACK message contains the received CHANNEL information element.
TP/AP/CPP/CI/CA-012	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_LEAVE_ACK message in answer to an RLC_GROUP_LEAVE message for the forwarding multicast group of the 1394 clock channel, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_LEAVE_ACK message contains the received CHANNEL information element.
TP/AP/CPP/CI/CA-013	Reference: TS 101 493-3 [1], clause 5.3.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: for each MAC frame, the CC as WCM sends an RLC_UNITDATA message in the main multicast group of the 1394 clock channel, containing it CYCLE_TIME, register.
TP/AP/CPP/CI/CA-014	Reference: TS 101 493-3 [1], clause 5.3.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: for each MAC frame, the CC as WCM sends an RLC_UNITDATA message in the main multicast group of the 1394 clock channel, containing it LOCAL_SECONDS register.
TP/AP/CPP/CI/CA-015	Reference: TS 101 493-3 [1], clause 5.3.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: for each MAC frame, the CC as WCM sends an RLC_UNITDATA message in the main multicast group of the 1394 clock channel, containing it LOCAL_CYCLES register.
TP/AP/CPP/CI/CA-016	Reference: TS 101 493-3 [1], clause 5.3.3.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: for each MAC frame, the CC as WCM sends an RLC_UNITDATA message in the main multicast group of the 1394 clock channel, containing the *frame_counter*.

5.2.4   CL responsibility handover

TP/AP/CPP/RH/CA-000	Reference: TS 101 493-3 [1], clause 6.6 Initial condition: IUT is the old AP/CC. LT is acting as WT1 and as new AP/CC. Only for IUT that supports 1394 SSCS. Check, that: during the CL responsibility handover, the old CC sends a BUS_SUSPEND message to all the devices (WTs and new CC) to inform them that the new CC is the IRM.
TP/AP/CPP/RH/CA-001	Reference: TS 101 493-3 [1], clause 6.6 Initial condition: IUT is the old AP/CC. LT is acting as WT1 and as new AP/CC. Only for IUT that supports 1394 SSCS. Check, that: during the CL responsibility handover, the old CC performs a bus-reset procedure to inform other devices about the ongoing CC handover.
TP/AP/CPP/RH/CA-002	Reference: TS 101 493-3 [1], clause 6.6 Initial condition: IUT is the old AP/CC. LT is acting as WT1 and as new AP/CC. Only for IUT that supports 1394 SSCS. Check, that: to terminate the CL responsibility handover, the old CC sends a RLC_START_CC message to the new CC.

5.2.5 HL2 Address Resolution service (HARP)

TP/AP/CPP/HA/CA-000	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: the CC initiates a HARP request by sending an RLC_INFO message containing the HARP_REQUEST information element in the <<CL-ATTRIBUTE>> field.
TP/AP/CPP/HA/CA-001	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_INFO message containing the HARP_RESPONSE information element, the CC sends an RLC_INFO_ACK message.
TP/AP/CPP/HA/CA-002	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_INFO message containing the HARP_REQUEST information element, the CC sends an RLC_INFO_ACK message.
TP/AP/CPP/HA/CA-003	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: to answer to a HARP request received, the CC sends an RLC_INFO message containing the HARP_RESPONSE information element in the <<CL-ATTRIBUTE>> field.
TP/AP/CPP/HA/CA-004	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing the HARP_RESPONSE information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received HARP_RESPONSE information element.
TP/AP/CPP/HA/CA-005	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing the HARP_REQUEST information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received HARP_REQUEST information element.

5.2.6   Asynchronous Stream

TP/AP/CPP/AS/CA-000	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when a WT needs to join the forwarding channel of an asynchronous stream, the CC set ups a DLC connection for the forwarding channel of the asynchronous stream.
TP/AP/CPP/AS/CA-001	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT1. WT1 has joined the forwarding channel of an asynchronous stream. WT1 leaves the forwarding channel of an asynchronous stream. Only for IUT that supports 1394 SSCS. Check, that: the CC releases the forwarding channel of an asynchronous stream, when it detects that the last WT has left the forwarding channel.
TP/AP/CPP/AS/CA-002	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_JOIN message for the forwarding channel of an asynchronous stream, the CC sends an RLC_GROUP_JOIN_ACK message.
TP/AP/CPP/AS/CA-003	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_GROUP_LEAVE message for the forwarding channel of an asynchronous stream, the CC sends an RLC_GROUP_LEAVE_ACK message.
TP/AP/CPP/AS/CA-004	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_JOIN_ACK message in answer to an RLC_GROUP_JOIN message for the forwarding channel of an asynchronous stream, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_JOIN_ACK message contains the received CHANNEL information element.
TP/AP/CPP/AS/CA-005	Reference: TS 101 493-3 [1], clause 6.10.2.2.2 Initial condition: IUT is the AP/CC. LT is acting as WT. Only for IUT that supports 1394 SSCS. Check, that: when the CC sends an RLC_GROUP_LEAVE_ACK message in answer to an RLC_GROUP_LEAVE message for the forwarding channel of an asynchronous stream, the <<CL-ATTRIBUTE>> field of the RLC_GROUP_LEAVE_ACK message contains the received CHANNEL information element.
TP/AP/CPP/AS/CA-006	Reference: TS 101 493-3 [1], clause 6.8.1.2 Initial condition: IUT is the AP/CC. LT is acting as WT1 and WT2. Only for IUT that supports 1394 SSCS. Check, that: when the IUT receives an RLC_DM_SETUP message containing a TRANSACTION_INDICATOR information element, it sends an RLC_DM_SETUP message containing the same TRANSACTION_INDICATOR information element in the <<CL-ATTRIBUTE>> field to the peer WT.

5.3   Test purposes for MT

5.3.1   Association - Initialization

TP/MT/CPP/AI/CA-000	Reference: TS 101 493-3 [1], clause 6.3.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: the WT completes the association phase by sending an RLC_INFO message containing the EUI_64 information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/AI/CA-001	Reference: TS 101 493-3 [1], clause 6.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: after the association phase is complete, the WT joins the main multicast group of the 1394 broadcast channel by sending an RLC_GROUP_JOIN message containing a CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/AI/CA-002	Reference: TS 101 493-3 [1], clause 6.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the main multicast group of the 1394 broadcast channel, the WT sets the channel number of the CHANNEL information element to global broadcast.
TP/MT/CPP/AI/CA-003	Reference: TS 101 493-3 [1], clause 6.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the main multicast group of the 1394 broadcast channel, the WT sets the relay bit of the CHANNEL information element to 0.

5.3.2   Bus reset service

TP/MT/CPP/BR/CA-000	Reference: TS 101 493-3 [1], clause 6.4.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT needs to initiate a bus-reset procedure, the WT sends an RLC_INFO message containing a BUS_RESET information element in the <<CL-ATTRIBUTE>> field to the CC.
TP/MT/CPP/BR/CA-001	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent a BUS_SUSPEND information element. Only for IUT that supports 1394 SSCS. Check, that: when the WT receives an RLC_INFO message containing a BUS_SUSPEND information element from the CC, the WT acknowledges it by sending an RLC_INFO_ACK message.
TP/MT/CPP/BR/CA-002	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent a BUS_RESUME information element. Only for IUT that supports 1394 SSCS. Check, that: when the WT receives an RLC_INFO message containing a BUS_RESUME information element from the CC, the WT acknowledges it by sending an RLC_INFO_ACK message.
TP/MT/CPP/BR/CA-003	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent three BUS_SUSPEND information elements. Only for IUT that supports 1394 SSCS. Check, that: when the WT receives more than one BUS_SUSPEND information element from the CC, the WT acknowledges only the first one received by sending the same BUS_SUSPEND information element.
TP/MT/CPP/BR/CA-004	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent three BUS_RESUME information elements. Only for IUT that supports 1394 SSCS. Check, that: when the WT receives more than one BUS_RESUME information element with no reception of a BUS_SUSPEND information element from the CC, the WT acknowledges only the first one received by sending the same BUS_RESUME information element.
TP/MT/CPP/BR/CA-005	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent a BUS_SUSPEND information element. Only for IUT that supports 1394 SSCS. Check, that: when the WT sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing a BUS_SUSPEND information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received BUS_SUSPEND information element.
TP/MT/CPP/BR/CA-006	Reference: TS 101 493-3 [1], clause 6.4.2.4 Initial condition: IUT is the WT. LT is acting as AP/CC. AP/CC has sent a BUS_RESUME information element. Only for IUT that supports 1394 SSCS. Check, that: when the WT sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing a BUS_RESUME information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received BUS_RESUME information element.

5.3.3   Clock information connection control

TP/MT/CPP/CI/CA-000	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: during the initialization phase, the WT joins the main multicast group of the 1394 clock channel by sending, to the CC, an RLC_GROUP_JOIN message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/CI/CA-001	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: if the main multicast group of the clock channel is not well received, the WT joins the forwarding multicast group of the 1394 clock channel by sending an RLC_GROUP_JOIN message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/CI/CA-002	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. After the WT has joined the forwarding clock multicast group, the main clock multicast group is active. Only for IUT that supports 1394 SSCS. Check, that: after having joined the forwarding multicast group, if it gets clock information from the main channel, the WT leaves the forwarding multicast group of the 1394 clock channel by sending, to the CC, an RLC_GROUP_LEAVE message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/CI/CA-003	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the main multicast group of the 1394 clock channel and if the *frame_counter field* matches with it previously stored snap-shot, the WT as WCS updates it BUS_TIME internal register.
TP/MT/CPP/CI/CA-004	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the forwarding group of the 1394 clock channel and if the *frame_counter field* matches with one of the two previously stored snap-shots, the WT as WCS updates its BUS_TIME internal register.
TP/MT/CPP/CI/CA-005	Reference: TS 101 493-3 [1], clause 6.5.2.1 Initial condition: IUT is the WT and is a bridge. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving a CL_CONTROL request primitive with the enable_cycle_master action from its upper HL2 1394 bridge layer entity, the WT enables its WCM function.
TP/MT/CPP/CI/CA-006	Reference: TS 101 493-3 [1], clause 6.5.2.1 Initial condition: IUT is the WT and is a bridge. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving a CL_CONTROL request primitive with the disable_cycle_master action from its upper HL2 1394 bridge layer entity, the WT disables its WCM function.
TP/MT/CPP/CI/CA-007	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the main multicast group of the 1394 clock channel and if the *frame_counter field* matches with it previously stored snap-shot, the WT as WCS updates it CYCLE_TIME internal register.
TP/MT/CPP/CI/CA-008	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the forwarding group of the 1394 clock channel and if the *frame_counter field* matches with one of the two previously stored snap-shots, the WT as WCS updates it CYCLE_TIME internal register.
TP/MT/CPP/CI/CA-009	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the main multicast group of the 1394 clock channel and if the *frame_counter field* matches with it previously stored snap-shot, the WT as WCS updates it LOCAL_SECONDS internal register.

TP/MT/CPP/CI/CA-010	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the forwarding group of the 1394 clock channel and if the *frame_counter field* matches with one of the two previously stored snap-shots, the WT as WCS updates it LOCAL_SECONDS internal register.
TP/MT/CPP/CI/CA-011	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the main multicast group of the 1394 clock channel and if the *frame_counter field* matches with it previously stored snap-shot, the WT as WCS updates it LOCAL_CYCLES internal register.
TP/MT/CPP/CI/CA-012	Reference: TS 101 493-3 [1], clause 5.3.3.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when receiving an RLC_UNITDATA message in the forwarding group of the 1394 clock channel and if the *frame_counter field* matches with one of the two previously stored snap-shots, the WT as WCS updates it LOCAL_CYCLES internal register.
TP/MT/CPP/CI/CA-013	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the main multicast group of the 1394 clock channel, the WT sets the channel number of the CHANNEL information element to clock.
TP/MT/CPP/CI/CA-014	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the main multicast group of the 1394 clock channel, the WT sets the relay bit of the CHANNEL information element to 0.
TP/MT/CPP/CI/CA-015	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the forwarding multicast group of the 1394 clock channel, the WT sets the channel number of the CHANNEL information element to clock.
TP/MT/CPP/CI/CA-016	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the forwarding multicast group of the 1394 clock channel, the WT sets the relay bit of the CHANNEL information element to 1.
TP/MT/CPP/CI/CA-017	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. After the WT has joined the forwarding clock multicast group, the main clock multicast group is active. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_LEAVE message to leave the forwarding multicast group of the 1394 clock channel, the WT sets the channel number of the CHANNEL information element to clock.
TP/MT/CPP/CI/CA-018	Reference: TS 101 493-3 [1], clause 6.5.3 Initial condition: IUT is the WT. LT is acting as AP/CC. After the WT has joined the forwarding clock multicast group, the main clock multicast group is active. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_LEAVE message to leave the forwarding multicast group of the 1394 clock channel, the WT sets the relay bit of the CHANNEL information element to 1.

5.3.4 HL2 Address Resolution service (HARP)

TP/MT/CPP/HA/CA-000	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: the WT initiates a HARP request by sending an RLC_INFO message containing the HARP_REQUEST information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/HA/CA-001	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_INFO message containing the HARP_RESPONSE information element, the WT sends an RLC_INFO_ACK message.
TP/MT/CPP/HA/CA-002	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: after receiving an RLC_INFO message containing the HARP_REQUEST information element, the WT sends an RLC_INFO_ACK message.
TP/MT/CPP/HA/CA-003	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: to answer to a HARP request received, the WT sends an RLC_INFO message containing the HARP_RESPONSE information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/HA/CA-004	Reference: TS 101 493-3 [1], clause 6.7.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing a HARP_RESPONSE information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received HARP_RESPONSE information element.
TP/MT/CPP/HA/CA-005	Reference: TS 101 493-3 [1], clause 6.7.2.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT sends an RLC_INFO_ACK message in answer to an RLC_INFO message containing a HARP_REQUEST information element, the <<CL-ATTRIBUTE>> field of the RLC_INFO_ACK message contains the received HARP_REQUEST information element.

5.3.5   Asynchronous Stream

TP/MT/CPP/AS/CA-000	Reference: TS 101 493-3 [1], clause 6.10.2.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when it fails in receiving data from one sender on the main multicast channel carrying an asynchronous stream (a 1394 channel with no bandwidth), the WT joins the forwarding channel by sending to the CC, an RLC_GROUP_JOIN message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/AS/CA-001	Reference: TS 101 493-3 [1], clause 6.10.2.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. After the WT has joined the forwarding channel of an asynchronous stream, the main multicast group is active. Only for IUT that supports 1394 SSCS. Check, that: after having joined the forwarding multicast group, if it gets information from the main channel, the WT leaves the forwarding multicast group by sending, to the CC, an RLC_GROUP_LEAVE message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/MT/CPP/AS/CA-002	Reference: TS 101 493-3 [1], clause 6.10.2.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_JOIN message to join the forwarding channel of an asynchronous stream, the WT sets the relay bit of the CHANNEL information element to 1.
TP/MT/CPP/AS/CA-003	Reference: TS 101 493-3 [1], clause 6.10.2.2.1 Initial condition: IUT is the WT. LT is acting as AP/CC. After the WT has joined the forwarding channel of an asynchronous stream, the main multicast group is active. Only for IUT that supports 1394 SSCS. Check, that: when sending the RLC_GROUP_LEAVE message to leave the forwarding channel of an asynchronous stream, the WT sets the relay bit of the CHANNEL information element to 1.
TP/MT/CPP/AS/CA-004	Reference: TS 101 493-3 [1], clause 6.8.1.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT needs to initiate an asynchronous transaction, the WT sends an RLC_DM_SETUP message containing a TRANSACTION_INDICATOR information element in the <<CL-ATTRIBUTE>> field to the CC.
TP/MT/CPP/AS/CA-005	Reference: TS 101 493-3 [1], clause 6.8.1.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT needs to initiate an asynchronous transaction as transaction requester, the WT sends an RLC_DM_SETUP message containing a TRANSACTION_INDICATOR information element in the <<CL-ATTRIBUTE>> field indicating that it is the requester to the CC.
TP/MT/CPP/AS/CA-006	Reference: TS 101 493-3 [1], clause 6.8.1.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the WT needs to initiate an asynchronous transaction as transaction responder, the WT sends an RLC_DM_SETUP message containing a TRANSACTION_INDICATOR information element in the <<CL-ATTRIBUTE>> field indicating that it is the responder to the CC.
TP/MT/CPP/AS/CA-007	Reference: TS 101 493-3 [1], clause 6.8.1.2 Initial condition: IUT is the WT. LT is acting as AP/CC. Only for IUT that supports 1394 SSCS. Check, that: when the IUT having received an RLC_DM_SETUP message containing a TRANSACTION_INDICATOR information element in the <<CL-ATTRIBUTE>> field from the CC and having accepted the transaction, it sends an RLC_DM_CONNECT message with no specific information element to the CC.

5.4 Test purposes for HL2 Bus system

5.4.1 AP/CC-IRM

5.4.1.1 Resources allocation

TP/HS/UPP/IS/CA-000	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an ALLOCATE_SOME request while being processing a bus reset, it sends an ALLOCATE_SOME response.
TP/HS/UPP/IS/CA-001	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an ALLOCATE_SOME request, it sends an ALLOCATE_SOME response.
TP/HS/UPP/IS/CA-002	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an ALLOCATE_SOME request and if there are not enough available resources, it sends an ALLOCATE_SOME response with the status field set to an appropriate failure code.
TP/HS/UPP/IS/CA-003	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an ALLOCATE_SOME request and having completed the multicast join procedure for both the talker and the listener, it starts a multicast setup procedure between the talker and the listener by sending a RLC_DM_MC_SETUP message to the WTs in the group.
TP/HS/UPP/IS/CA-004	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an RLC_GROUP_JOIN message for an isochronous multicast group, it sends an RLC_GROUP_JOIN_ACK message to the requester.
TP/HS/UPP/IS/CA-005	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller and the new 1394 listener. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received an RLC_GROUP_JOIN message for an isochronous multicast group from a new listener and having completed the multicast join procedure for this new listener, it starts a multicast setup procedure by sending a RLC_DM_MC_SETUP message to the new listener.
TP/HS/UPP/IS/CA-006	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: If the multicast setup fails, the IUT waits for the 1394 controller to free allocate resources via appropriate lock command.

TP/HS/UPP/IS/CA-007	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending the ALLOCATE_SOME response while being processing a bus reset, the WT sets the status field to RESET code.
TP/HS/UPP/IS/CA-008	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending the ALLOCATE_SOME response and if there are enough available resources, the IUTset the status field to DONE code.
TP/HS/UPP/IS/CA-009	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending the ALLOCATE_SOME response and if there are enough available resources, the IUTset the handle field to the allocated multicast mac_ID.

5.4.1.2   Resources modification

TP/HS/UPP/IS/CA-010	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a MODIFY_BANDWIDTH request while being processing a bus reset, it sends a MODIFY_BANDWIDTH response.
TP/HS/UPP/IS/CA-011	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a MODIFY_BANDWIDTH request and if the modification of the bandwidth is correctly done, it sends a MODIFY_BANDWIDTH response.
TP/HS/UPP/IS/CA-012	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a MODIFY_BANDWIDTH request and if the modification of the bandwidth is not correctly done, it sends a MODIFY_BANDWIDTH response with the status field set to an appropriate failure code.
TP/HS/UPP/IS/CA-013	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a MODIFY_BANDWIDTH request and if the modification of the bandwidth is correctly done, it sends a MODIFY_BANDWIDTH response with the handle field containing the allocated multicast mac_ID.
TP/HS/UPP/IS/CA-014	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a MODIFY_BANDWIDTH response while being processing a bus reset, the IUTset the status field to RESET code.
TP/HS/UPP/IS/CA-015	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a MODIFY_BANDWIDTH response and if the modification of the bandwidth is correctly done, the IUTset the status field to DONE code.

5.4.1.3 Resources reclaim

TP/HS/UPP/IS/CA-016	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Bus-reset procedure has started. Only for SUT that supports 1394 SSCS. Check, that: when the bus-reset procedure has finished and the IUT having received a RECLAIM_THIS request during the bus -reset procedure and if the re-allocation of the resources is correctly done, it sends a RECLAIM_THIS response.
TP/HS/UPP/IS/CA-017	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Bus-reset procedure has started and finished. Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RECLAIM_THIS request and if the re-allocation of the resources is correctly done, it sends a RECLAIM_THIS response.
TP/HS/UPP/IS/CA-018	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RECLAIM_THIS request and if the re-allocation of the resources is not correctly done, it sends a RECLAIM_THIS response, with the *status* field set to the appropriate failure code.
TP/HS/UPP/IS/CA-019	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Bus-reset procedure has started and an isochronous multicast group is active. Only for SUT that supports 1394 SSCS. Check, that: if timer T_reset + T_reestablish expires, the IUT initiates a multicast release procedure toward the concerned talker and each concerned listener.
TP/HS/UPP/IS/CA-020	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Bus-reset procedure has started. Only for SUT that supports 1394 SSCS. Check, that: when sending a RECLAIM_THIS response during a bus -reset procedure and if the re-allocation of the resources is correctly done, the IUTset the status field to DONE code.
TP/HS/UPP/IS/CA-021	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Bus-reset procedure has started and finished. Only for SUT that supports 1394 SSCS. Check, that: when sending a RECLAIM_THIS response outside of a bus -reset procedure and if the re-allocation of the resources is correctly done, the IUTset the status field to DONE code.

5.4.1.4   Resources release

TP/HS/UPP/IS/CA-022	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RELEASE_THIS request while being processing a bus reset, it sends a RELEASE_THIS response.
TP/HS/UPP/IS/CA-023	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller and the 1394 talker. SUT is composed with a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RELEASE_THIS request, it starts the multicast release procedure for the corresponding multicast mac_ID by sending an RLC_DM_MC_RELEASE message.
TP/HS/UPP/IS/CA-024	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RELEASE_THIS request and if the multicast release procedure succeeds, it sends a RELEASE_THIS response to the 1394 controller.
TP/HS/UPP/IS/CA-025	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller and the 1394 talker. SUT is composed with a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a RELEASE_THIS request and if the multicast release procedure fails, it sends a RELEASE_THIS response with the status field set to an appropriate failure code.
TP/HS/UPP/IS/CA-026	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller, the 1394 talker and the 1394 listener. SUT is composed with an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a RELEASE_THIS response while being processing a bus-reset, the IUTset the status field to RESET code.
TP/HS/UPP/IS/CA-027	Reference: TS 101 493-3 [1], clause 6.9.2.4 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The AP/CC-IRM part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a RELEASE_THIS response to the 1394 controller after that a multicast release procedure succeeds, the IUTset the status field to DONE code.

5.4.2 1394 controller

5.4.2.1 Resources allocation

TP/HS/UPP/IS/CA-028	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: to initiate an isochronous connection, the IUT sends a lock request to the AP/CC/IRM containing the bandwidth, the talker identifier and one listener identifier to allocate the channel and the bandwidth.
TP/HS/UPP/IS/CA-029	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if lock command to the AP/CC/IRM to initiate an isochronous connection succeeds, the IUT sends a lock request to the talker and listener at iPCR and oPCR.
TP/HS/UPP/IS/CA-030	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the new 1394 listener. SUT is composed with a 1394 controller and the 1394 listener. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if a new listener has to join an existing isochronous connection, the IUT sends a lock request to the talker to set the oPCR to increment the point-to-point connection counter.
TP/HS/UPP/IS/CA-031	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the new 1394 listener. SUT is composed with a 1394 controller and the 1394 listener. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if a new listener has to join an existing isochronous connection and the IUT has sent a lock request to the talker to set the oPCR to increment the point-to-point connection counter, the IUT sends a lock request to the new listener to set the iPCR with the channel.

5.4.2.2 Resources reclaim

TP/HS/UPP/IS/CA-032	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: during a bus-reset + T_reestablish duration, the IUT re-allocates all of its isochronous connections.
TP/HS/UPP/IS/CA-033	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: during a bus-reset + T_reestablish duration, the IUT waits to allocate new isochronous resources.

5.4.2.3 Resources release

TP/HS/UPP/IS/CA-034	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: to release an isochronous connection, the IUT sends a lock request to the AP/CC/IRM to release the reserved channel and bandwidth.
TP/HS/UPP/IS/CA-035	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if lock command to the AP/CC/IRM to release an isochronous connection succeeds, the IUT sends a lock request to the talker at iPCR to set the point-to-point connection counter to 0.
TP/HS/UPP/IS/CA-036	Reference: TS 101 493-3 [1], clause 6.9.2.1.2 Initial condition: LT is the AP/CC-IRM, the 1394 talker and the 1394 listener. SUT is composed with a 1394 controller. The 1394 controller part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if lock command to the AP/CC/IRM to release an isochronous connection succeeds, the IUT sends a lock request to the listeners at oPCR to set the point-to-point connection counter to 0.

5.4.3   1394 talker

5.4.3.1   Resources allocation

TP/HS/UPP/IS/CA-037	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a lock request on its oPCR, and if the result of the compare and swap transaction is negative, it sends a negative lock response.
TP/HS/UPP/IS/CA-038	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a lock request on its oPCR, and if the result of the compare and swap transaction is positive, it sends, to the AP/CC-IRM, a RLC_GROUP_JOIN message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/HS/UPP/IS/CA-039	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received, from the AP/CC-IRM, a RLC_DM_MC_CONNECT_ACK message containing the multicast mac_ID, it sends a positive lock response.
TP/HS/UPP/IS/CA-040	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the talker side resource allocation, the multicast join procedure fails due to timeout, the IUT returns a lock response.
TP/HS/UPP/IS/CA-041	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the talker side resource allocation, the multicast set-up procedure fails due to timeout, the IUT returns a lock response.
TP/HS/UPP/IS/CA-042	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the talker side resource allocation, the multicast join procedure fails due to bandwidth limitations, the IUT returns a lock response.
TP/HS/UPP/IS/CA-043	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the talker side resource allocation, the multicast setup procedure fails due to bandwidth limitations, the IUT returns a lock response.
TP/HS/UPP/IS/CA-044	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast join procedure fails due to timeout during the talker side resource allocation, the IUTset the channel field to TRANSIENT_ERROR error code.

TP/HS/UPP/IS/CA-045	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast set-up procedure fails due to timeout during the talker side resource allocation, the IUTset the channel field to TRANSIENT_ERROR error code.
TP/HS/UPP/IS/CA-046	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast join procedure fails due to bandwidth limitations during the talker side resource allocation, the IUTset the channel field to PERMANENT_ERROR error code.
TP/HS/UPP/IS/CA-047	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast set-up procedure fails due to bandwidth limitations during the talker side resource allocation, the IUTset the channel field to PERMANENT_ERROR error code.

5.4.3.2   Resources reclaim

TP/HS/UPP/IS/CA-048	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Bus-reset procedure has finished. Only for SUT that supports 1394 SSCS. Check, that: if channel bits are not written before the T_reset + T_reestablish timeout, the IUT initiates a multicast leave procedure towards the AP/CC to leave the multicast group of the corresponding multicast mac_ID by sending an RLC_GROUP_LEAVE message.

5.4.3.3   Resources release

TP/HS/UPP/IS/CA-049	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a request to set to zero the *point-to-point connection counter* field or the *broadcast connection counter* field of the oPCR, it releases the multicast connection corresponding to that channel by sending an RLC_DM_MC_RELEASE message to the AP/CC.
TP/HS/UPP/IS/CA-050	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a request to set to zero the *point-to-point connection counter* field or the *broadcast connection counter* field of the oPCR and having received an RLC_DM_MC_RELEASE_ACK message from the AP/CC, it leaves the corresponding multicast group by sending an RLC_GROUP_LEAVE message to the AP/CC.
TP/HS/UPP/IS/CA-051	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the multicast connection is released by other reason that a 1394 controller action, the IUT leaves the corresponding multicast group sending an RLC_GROUP_LEAVE message to the AP/CC.
TP/HS/UPP/IS/CA-052	Reference: TS 101 493-3 [1], clause 6.9.2.2 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The talker part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the multicast connection is released by other reason that a 1394 controller action and when the IUT having received an RLC_GROUP_LEAVE_ACK message from the AP/CC, it sends a write request to the EVENT_INDICATION CSR of the 1394 controller to set the disconnected_pcr bit.

## 5.4.4	1394 listener

### 5.4.4.1	Resources allocation

TP/HS/UPP/IS/CA-053	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a lock request on its iPCR, and if the result of the compare and swap transaction is negative, it sends a negative lock response.
TP/HS/UPP/IS/CA-054	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a lock request on its iPCR, and if the result of the compare and swap transaction is positive, it sends, to the AP/CC-IRM, a RLC_MC_GROUP_JOIN message containing the CHANNEL information element in the <<CL-ATTRIBUTE>> field.
TP/HS/UPP/IS/CA-055	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received, from the AP/CC-IRM, a RLC_DM_MC_CONNECT_ACK message containing the multicast mac_ID, it sends a positive lock response.
TP/HS/UPP/IS/CA-056	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the listener side resource allocation, the multicast join procedure fails due to timeout, the IUT returns a lock response.
TP/HS/UPP/IS/CA-057	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the listener side resource allocation, the multicast set-up procedure fails due to timeout, the IUT returns a lock response.
TP/HS/UPP/IS/CA-058	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the listener side resource allocation, the multicast join procedure fails due to bandwidth limitations, the IUT returns a lock response.
TP/HS/UPP/IS/CA-059	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: if during the listener side resource allocation, the multicast setup procedure fails due to bandwidth limitations, the IUT returns a lock response.
TP/HS/UPP/IS/CA-060	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast join procedure fails due to timeout during the listener side resource allocation, the IUTset the channel field to TRANSIENT_ERROR error code.

TP/HS/UPP/IS/CA-061	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast set-up procedure fails due to timeout during the listener side resource allocation, the IUTset the channel field to TRANSIENT_ERROR error code.
TP/HS/UPP/IS/CA-062	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast join procedure fails due to bandwidth limitations during the listener side resource allocation, the IUTset the channel field to PERMANENT_ERROR error code.
TP/HS/UPP/IS/CA-063	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a lock response when a multicast setup procedure fails due to bandwidth limitations during the listener side resource allocation, the IUTset the channel field to PERMANENT_ERROR error code.

5.4.4.2   Resources reclaim

TP/HS/UPP/IS/CA-064	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Bus-reset procedure has finished. Only for SUT that supports 1394 SSCS. Check, that: if channel bits are not written before the T_reset + T_reestablish timeout, the IUT initiates a multicast leave procedure towards the AP/CC to leave the multicast group of the corresponding multicast mac_ID by sending an RLC_GROUP_LEAVE message.

5.4.4.3   Resources release

TP/HS/UPP/IS/CA-065	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a request to set to zero the point-to-point connection counter field or the broadcast connection counter field of the iPCR, it releases the multicast connection corresponding to that channel by sending an RLC_DM_MC_RELEASE message to the AP/CC.
TP/HS/UPP/IS/CA-066	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller and the AP/CC-IRM. SUT is composed with a 1394 talker and a 1394 listener. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a request to set to zero the *point-to-point connection counter* field or the *broadcast connection counter* field of the iPCR and having received an RLC_DM_MC_RELEASE_ACK message from the AP/CC, it leaves the corresponding multicast group by sending an RLC_GROUP_LEAVE message to the AP/CC.
TP/HS/UPP/IS/CA-067	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the multicast connection is released by other reason that a 1394 controller action, the IUT leaves the corresponding multicast group sending an RLC_GROUP_LEAVE message to the AP/CC.
TP/HS/UPP/IS/CA-068	Reference: TS 101 493-3 [1], clause 6.9.2.3 Initial condition: LT is the 1394 controller. SUT is composed with a 1394 talker, a 1394 listener and an AP/CC-IRM. The listener part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the multicast connection is released by other reason that a 1394 controller action and when the IUT having received an RLC_GROUP_LEAVE_ACK message from the AP/CC, it sends a write request to the EVENT_INDICATION CSR of the 1394 controller to set the disconnected_pcr bit.

5.4.5   Asynchronous transaction connection control service

TP/HS/UPP/AS/CA-000	Reference: TS 101 493-3 [1], clause 6.8.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the IUT receives a CL_CONTROL *asynchronous_path_reset* from its upper layer, it sends a clean closing request to close all open DLC user connection.
TP/HS/UPP/AS/CA-001	Reference: TS 101 493-3 [1], clause 6.8.2.3.1 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when the IUT wants to close a DLC user connection, it sends a clean closing request to the receiver.
TP/HS/UPP/AS/CA-002	Reference: TS 101 493-3 [1], clause 6.8.2.3.1 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: after to have sent a clean closing request to the receiver, the IUT stops sending user data to the corresponding DLC user connection.
TP/HS/UPP/AS/CA-003	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT sets the *Format* field of the clean closing request to the value 2.
TP/HS/UPP/AS/CA-004	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT sets the *Seconds* field of the clean closing request to the value 0.
TP/HS/UPP/AS/CA-005	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT sets the *cycles* field of the clean closing request to the value 0.
TP/HS/UPP/AS/CA-006	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT sets the *type* field of the clean closing request to the CLOSE_REQUEST code.
TP/HS/UPP/AS/CA-007	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *destination_ID* field in the clean closing request.
TP/HS/UPP/AS/CA-008	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *tlabel* field in the clean closing request.
TP/HS/UPP/AS/CA-009	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *rt* field in the clean closing request.

TP/HS/UPP/AS/CA-010	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *tcode* field in the clean closing request.
TP/HS/UPP/AS/CA-011	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *pri* field in the clean closing request.
TP/HS/UPP/AS/CA-012	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *header_quadlets* field in the clean closing request.
TP/HS/UPP/AS/CA-013	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *header_CRC* field in the clean closing request.
TP/HS/UPP/AS/CA-014	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *data_quadlets* field in the clean closing request.
TP/HS/UPP/AS/CA-015	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing request to a receiver, the IUT does not include the *data_CRC* field in the clean closing request.
TP/HS/UPP/AS/CA-016	Reference: TS 101 493-3 [1], clause 6.8.2.3.1 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having received a clean closing response confirming the close of a DLC user connection, it sends an RLC_RELEASE message.
TP/HS/UPP/AS/CA-017	Reference: TS 101 493-3 [1], clause 6.8.2.3.1 Initial condition: LT is the receiver. SUT is composed with a 1394 sender, a 1394 controller and an AP/CC-IRM. The sender part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: the IUT having sent a clean closing request and if the split timeout expires, it sends an RLC_RELEASE message.
TP/HS/UPP/AS/CA-018	Reference: TS 101 493-3 [1], clause 6.8.2.3.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when receiving a clean closing request from the sender, the IUT sends a clean closing response to the sender.
TP/HS/UPP/AS/CA-019	Reference: TS 101 493-3 [1], clause 6.8.2.3.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when having sent a clean closing response to the sender, the IUT considers the DLC connection as closed.

TP/HS/UPP/AS/CA-020	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT sets the *Format* field of the clean closing response to the value 2.
TP/HS/UPP/AS/CA-021	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender the IUT sets the *Seconds* field of the clean closing r response to the value 0.
TP/HS/UPP/AS/CA-022	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT sets the *cycles* field of the clean closing response to the value 0.
TP/HS/UPP/AS/CA-023	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT sets the *type* field of the clean closing response to the CLOSE_RESPONSE code.
TP/HS/UPP/AS/CA-024	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *destination_ID* field in the clean closing response.
TP/HS/UPP/AS/CA-025	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *tlabel* field in the clean closing response.
TP/HS/UPP/AS/CA-026	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *rt* field in the clean closing response.
TP/HS/UPP/AS/CA-027	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *tcode* field in the clean closing response.
TP/HS/UPP/AS/CA-028	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *pri* field in the clean closing response.

TP/HS/UPP/AS/CA-029	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *header_quadlets* field in the clean closing response.
TP/HS/UPP/AS/CA-030	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *header_CRC* field in the clean closing response.
TP/HS/UPP/AS/CA-031	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *data_quadlets* field in the clean closing response.
TP/HS/UPP/AS/CA-032	Reference: TS 101 493-3 [1], clause 6.8.2.2 Initial condition: LT is the sender. SUT is composed with a 1394 receiver, a 1394 controller and an AP/CC-IRM. The receiver part of the SUT is tested in this TP (the IUT). Only for SUT that supports 1394 SSCS. Check, that: when sending a clean closing response to the sender, the IUT does not include the *data_CRC* field in the clean closing response.

Annex A (informative):
Bibliography

- ETSI TS 101 811-1-1: "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Conformance testing for the packet based convergence layer; Part 1: Common part; Sub-part 1: Protocol Implementation Conformance Statement (PICS) proforma".

History

Document history		
V1.2.1	July 2003	Publication
V1.3.1	August 2004	Publication