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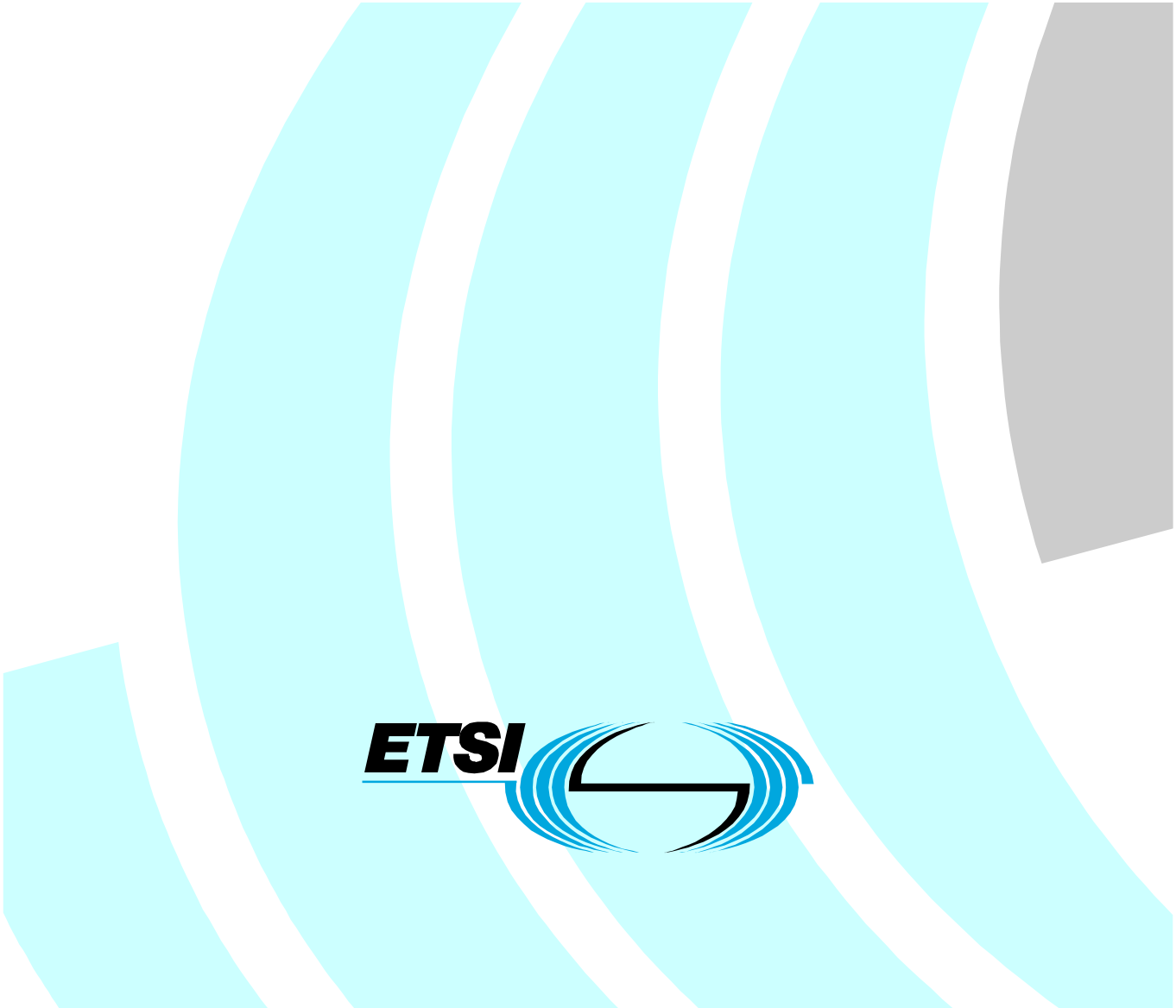
Technical Specification

Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); ISDN/PSTN Network Integration Testing for H.323 based trunking; Part 1: Test Suite Structure and Test Purposes (TSS&TP) specification



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Contents

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 1 of a multi-part deliverable covering the Network Integration Testing between H.323, ISDN and PSTN, as identified below:

Part 1: "Test Suite Structure and Test Purposes (TSS&TP) specification";

Part 2: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".

Introduction

The present document contains the Test Suite Structure and Test Purposes (TSS&TP) list developed by ETSI for testing the international European ISDN, covering Network Integration Testing (NIT) between ISDN-ISDN, ISDN-PSTN and PSTN-ISDN over H.323 trunking networks to verify the level of international end-to-end support of ISDN services. Both bearer services (and associated teleservices) and supplementary services are checked for interworking capability and compatibility, in the international European ISDN.

The European ISDN is made up by connecting the different national networks and End-to-end NIT covers all the testing activities necessary to assess the correct behaviour of the interconnected network from the point of view of access interfaces, network side.

1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for Network Integration Testing (NIT) to verify the overall compatibility of ITU-T Recommendation H.323 [2], ISDN and non-ISDN (PSTN) over the national or international H.323 trunking networks. The TSS&TP specification covers the procedures described in ITU-T Recommendation H.323 [2], ITU-T Recommendation H.225.0 [3] as specified in TS 101 883 [1] and ITU-T Recommendation Q.931 [4].

All test purposes are written with reference to ITU-T Recommendation H.246 Annex C [8] which implies the following test architecture:

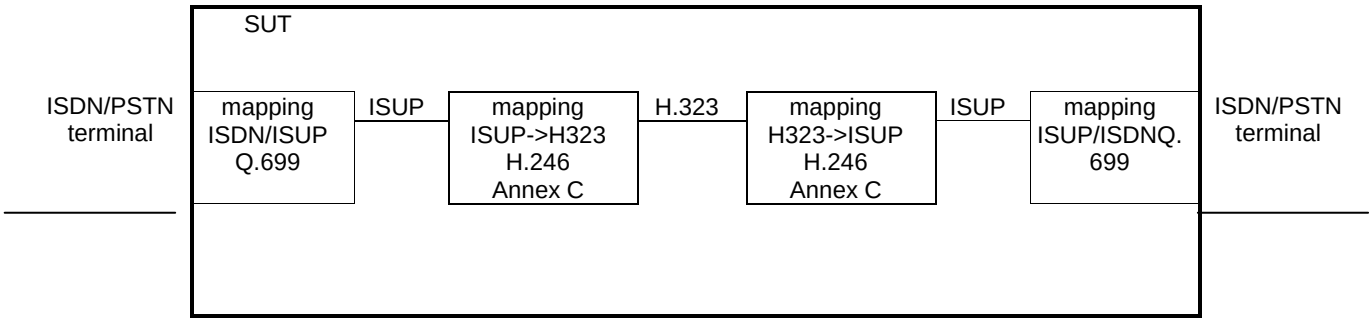


Figure 1: H.323-ISDN inter-working testing architecture via ISUP

Two mapping functions are involved. They are specified in ITU-T Recommendation H.246 Annex C [8] (H.323-ISUP) and ITU-T Recommendation Q.699 [14] (ISDN-ISUP).

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 101 883: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 4; Technology Mapping; Implementation of TIPHON architecture using H.323".

[2] ITU-T Recommendation H.323: "Packet-based multimedia communications systems".

[3] ITU-T Recommendation H.225.0: "Call signalling protocols and media stream packetization for packet-based multimedia communication systems".

[4] ITU-T Recommendation Q.931: "ISDN user-network interface layer 3 specification for basic call control".

[5] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[6] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".

[7] ISO/IEC 9646-3: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation (TTCN)".

[8] ITU-T Recommendation H.246 Annex C: "Annex C: ISDN User Part function - H.225.0 interworking".

[9] ETSI EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".

[10] ETSI EN 300 092-1: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[11] ETSI EN 300 093-1: "Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[12] ETSI EN 300 097-1: "Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[13] ETSI EN 300 098-1: "Integrated Services Digital Network (ISDN); Connected Line Identification Restriction (COLR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[14] ITU-T Recommendation Q.699: "Interworking between ISDN access and non-ISDN access over ISDN User Part of Signalling System No. 7".

[15] ETSI EN 300 899-3: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification".

[16] ETSI EN 300 207-1: "Integrated Services Digital Network (ISDN); Diversion supplementary services; Digital Subscriber Signalling System No. One (DSS1); Part 1: Protocol specification".

[17] ETSI EN 300 188-1: " Integrated Services Digital Network (ISDN); Three-Party (3PTY) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[18] ETSI EN 300 141-1: "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[19] ETSI EN 300 058-1: "Integrated Services Digital Network (ISDN); Call Waiting (CW) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[20] ETSI EN 300 138-1: "Integrated Services Digital Network (ISDN); Closed User Group (CUG) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[21] ITU-T Recommendation Q.764: "Signalling System No. 7 - ISDN User Part signalling procedures".

[22] ETSI EN 300 001: "Attachments to the Public Switched Telephone Network (PSTN); General technical requirements for equipment connected to an analogue subscriber interface in the PSTN".

[23] ETSI ETS 300 648: "Public Switched Telephone Network (PSTN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".

[24] ETSI EN 300 659 (all parts): "Access and Terminals (AT); Analogue access to the Public Switched Telephone Network (PSTN); Subscriber line protocol over the local loop for display (and related) services".

[25] ETSI EN 300 196-1: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ITU-T Recommendation H.323 [2], ITU-T Recommendation H.225.0 [3], ISO/IEC 9646 parts 1 [5] to 3 [7] and the following apply:

Basic Call Control (BCC): signalling protocol associated with the DSS1 - ISDN Basic Call control procedures of ITU-T Recommendation Q.931 (EN 300 403-1)

inopportune: specifies a test purpose covering a signalling procedure where an inopportune message (type of message not expected in the IUT current state) is sent to the IUT

syntactically invalid: specifies a test purpose covering a signalling procedure where a valid (expected in the current status of the IUT) but not correctly encoded (unknown or incorrect parameter values) message is sent to the IUT, which shall react correctly and eventually reject the message

test purpose: non-formal test description, mainly using text. This test description can be used as the basis for a formal test specification (e.g. Abstract Test Suite in TTCN). See ISO/IEC 9646.

valid: specifies a test purpose covering a signalling procedure where all the messages sent to or received from the IUT are valid (expected in the current status of the IUT) and correctly encoded

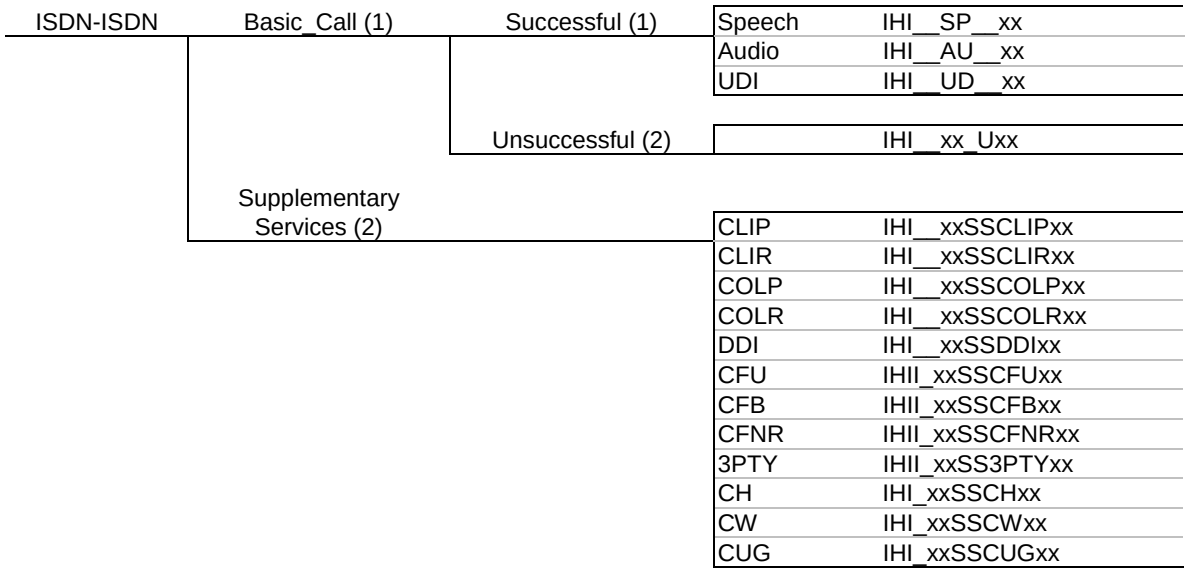
3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

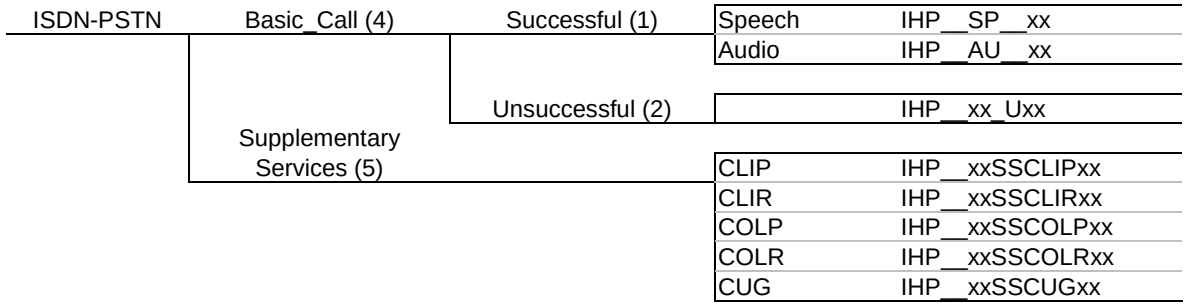
BCC	Basic Call Control
BI	network beyond interworking point
I	Inopportune
IUT	Implementation Under Test
LN	public network serving the local user
LPN	private network serving the local user
PIXIT	Protocol Implementation eXtra Information for Testing
RLN	public network serving the remote user
RPN	private network serving the remote user
S	Syntactically invalid
TP	Test Purpose
TSS	Test Suite Structure
V	Valid

4 Test Suite Structure (TSS)

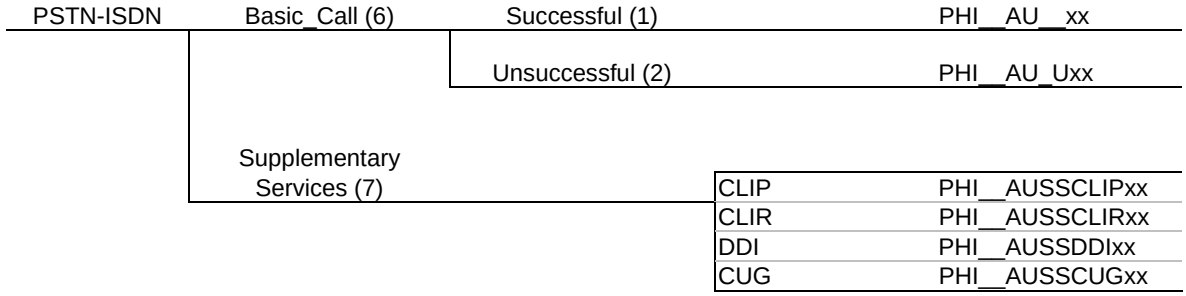
4.1 ISDN-H.323-ISDN



4.2 ISDN- H.323-PSTN



4.3 PSTN-H.323-ISDN



5 Numbering Scheme

Pos 1: Network of the A-Subscriber

Pos. 2: Network of the B-Subscriber

Pos. 3: Network of the C-Subscriber

Pos. 4: Network of the D-Subscriber

Pos. 5: Network of the E-Subscriber

The following Network Codes apply:

_:No such network used (used e.g. for C-Subscriber in successful A to B Calls)

(underscore makes it easier to read the name)

P: PSTN

I: ISDN

H: H.323

Pos. 6 and 7: Bearer- or Teleservice involved

xx: defined per PIXIT value

SP:Speech

AU: 3,1 kHz Audio

UD: UDI

Pos. 8&9:

__: No Supplementary Services Involved/Successful

_U: No Supplementary Services Involved/Unsuccessful

SS: Supplementary Services Involved

SI: Supplementary Services interaction

SN: Nonsymmetrical Supplementary Services Involved

ST: Supplementary Services transparent

Speech	IHI__SP__xx

1	2	3	4	5	6	7	8	9	10	11
I	H	I	_	_	S	P	_	_	x	x

Supplementary Services

CLIP	IHI__xxSSCLIP xx

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	H	I_	_	_	X	X	S	S	C	L	I	P	x	x

6 Test Purposes

6.1 Test purposes for ISDN-ISDN, Basic call

6.1.1 Successful - Speech

Successful
Speech

IHI__SP__01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.1	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8, and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly. The first backward message after the CALL PROCEEEDING shall include the PI # 1. The ALERTING message shall include the PI # 8. Ensure that during call establishment a Progress indicator information element shall be included in the SETUP message to the called user with progress description value # 1 "Call is not end-to-end ISDN" and optional # 3 origination address is "non-ISDN". Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = speech, no HLC	
Comments:	A: ! BC = speech, no HLC A: ? CALL PROCEEDING: A: ? ALERTING progress indicator #1 Call is not end-to-end ISDN B: ? SETUP BC = speech, progress indicator #1 Call is not end-to-end ISDN	

IHI__SP__02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.2	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. The first backward message after the SETUP ACKNOWLEDGE shall include the PI # 1. The ALERTING message shall include the PI # 8. Ensure that during call establishment a Progress indicator information element shall be included in the SETUP message to the called user with progress description value # 1 "Call is not end-to-end ISDN" and optional # 3 origination a. Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! BC = speech, no HLC A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A: ? ALERTING: progress indicator #8 B: ? SETUP BC = speech, progress indicator #1 Call is not end-to-end ISDN	
Comments:		

IHI__SP__03	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the calling user clears after answer. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! BC = speech, no HLC A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A: ? ALERTING: progress indicator #8 B: ? SETUP BC = speech, progress indicator #1 Call is not end-to-end ISDN A: ! DISCONNECT	
Comments:		

IHI__SP__04	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the called user clears after answer. The network transports the cause value and the location user to the calling user. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! BC = speech, no HLC A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A: ? ALERTING: progress indicator #8 B: ? SETUP BC = speech, B: ! DISCONNECT	
Comments:		

IHI__SP__05	ISDN ref. to: EN 300 403-1 [9] clause 4.5.16	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:	Telephony 3,1 kHz teleservice	
Test purpose:	Support of telephony 3,1 kHz teleservice: Ensure that the BC= speech but without the HLC information is transported transparently through the network and correctly delivered to the called user. Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! BC = speech, HLC = telephony A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A: ? ALERTING: progress indicator #8 B: ? SETUP BC = speech,	
Comments:		

IHI__SP__06	ISDN ref. to: EN 300 403-1 [9] clauses 3.1.10 and 5.2	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:	ISDN - Point–to-Point	
Test purpose:	Verify that the progress indicator information with the progress description #2 "destination address is non-ISDN" in the ALERT message can be transported correctly to the calling user.	
Parameter values:	A:! SETUP: BC = speech A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A:? ALERT: progress indicator #2 "destination address is non-ISDN" and PI #8. B:? SETUP: BC = speech, B:! CALL PROCEEDING B:! ALERT: progress indicator #2 "destination address is non-ISDN".	
Comments:	If the network does not support the transport of two PI, the second PI will be sent in a separate PROGRESS message.	

IHI__SP__07	ISDN ref. to: EN 300 403-1 [9] clauses 3.1.10 and 5.2	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Speech	
Selection criteria:	Telephony 3,1 kHz teleservice; ISDN - Point–to-Point	
Test purpose:	Verify that the progress indicator information with the progress description #2 "destination address is non-ISDN" in the ISDN-CONNECT message can be transported correctly to the calling user.	
Parameter values:	A:! SETUP: BC = speech, HLC = telephony A:? CONNECT: progress indicator #1 Call is not end-to-end ISDN progress indicator #2 "destination address is non-ISDN" B:? SETUP: BC = speech, B:! CONNECT: progress indicator #2 "destination address is non-ISDN".	
Comments:	If the network does not support the transport of two PI, the second PI will be sent in a separate PROGRESS message.	

6.1.2 Successful - Audio

Successful
3,1 kHz audio

IHI__AU__01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.1	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly. The first backward message after the CALL PROCEEEDING shall include the PI # 1. The ALERTING message shall include the PI # 8. Ensure that during call establishment a Progress indicator information element shall be included in the SETUP message to the called user with progress description value # 1 "Call is not end-to-end ISDN" and optional # 3 origination address is "non-ISDN". Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHI__AU__02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.2	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. The first backward message after the SETUP ACKNOWLEDGE shall include the PI # 1. The ALERTING message shall include the PI # 8. Ensure that during call establishment a Progress indicator information element shall be included in the SETUP message to the called user with progress description value # 1 "Call is not end-to-end ISDN" and optional # 3 origination address is "non-ISDN". Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHI__AU__03	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the calling user clears after answer. The network transports the cause value #16 and the location user to the called user.	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHI__AU__04	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the called user clears after answer. The network transports the cause value #16 and the location user to the calling user.	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHI__AU__05	ISDN ref. to: EN 300 403-1 [9] clause 4.5.16	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	Telefax G2/G3 terminals	
Test purpose:	Support of Telefax G2/G3: Ensure that the BC = 3,1 kHz audio but without the HLC information is transported transparently through the network and correctly delivered to the called user. Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! BC = 3,1 kHz audio, HLC = facsimile group 2/3 B: ! BC = 3,1 kHz audio,	
Comments:		

IHI__AU__06	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	point-to-point	
Test purpose:	Verify that the progress indicator information with the progress description #2 "destination address is non-ISDN" in the CALL PROCEEDING message can be transported correctly to the calling user. Ensure that in the call delivered state (N4) the transfer of tone or announcement on the B- channel is performed correctly. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A:! SETUP: BC = 3,1 kHz audio A: ? CALL PROCEEDING: progress indicator #2 "destination address is non-ISDN" & progress indicator #1 Call is not end-to-end ISDN A:? ALERT B:? SETUP: BC = 3,1 kHz audio, B: ! CALL PROCEEDING: progress indicator #2 "destination address is non-ISDN". B:! ALERT	
Comments:	If the network does not support the transport of two PI, the second PI will be sent in a separate PROGRESS message.	

IHI__AU__07	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	point-to-point	
Test purpose:	Verify that the progress indicator information with the progress description #2 "destination address is non-ISDN" in the ALERT message can be transported correctly to the calling user.	
Parameter values:	A:! SETUP: BC = 3,1 kHz audio A: ? CALL PROCEEDING: progress indicator #1 Call is not end-to-end ISDN A:? ALERT: progress indicator #2 "destination address is non-ISDN". B:? SETUP: BC = 3,1 kHz audio, B: ! CALL PROCEEDING B:! ALERT: progress indicator #2 "destination address is non-ISDN".	
Comments:		

IHI__AU__08	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	Point – to – point	
Test purpose:	Verify that the progress indicator information with the progress description #2 "destination address is non-ISDN" in the CONNECT message can be transported correctly to the calling user.	
Parameter values:	A:! SETUP: BC = 3,1 kHz audio A:? CONNECT: progress indicator #2 "destination address is non-ISDN" & PI #1. B:? SETUP: BC = 3,1 kHz audio, B:! CONNECT: progress indicator #2 "destination address is non-ISDN".	
Comments:	If the network does not support the transport of two PI, the second PI will be sent in a separate PROGRESS message.	

IHI__AU__09	ISDN ref. to: EN 300 403-1 [9] clause 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	Bearer service 3,1 kHz audio	
Test purpose:	Ensure that the ISDN SETUP with the BC parameter value information transfer capability 3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped to the BC=3,1 kHz audio and delivered to the called user. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP: BC=3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode: MODE user rate: USER_RATE B: ? SETUP: BC=3,1 kHz audio	
Comments:		

IHI__AU__10	ISDN ref. to: EN 300 403-1 [9] clause 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	Bearer service 3,1 kHz audio	
Test purpose:	Ensure that the ISDN SETUP with the BC parameter value information transfer capability 3,1 kHz audio and the LLC Parameter values: 3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped to BC=3,1 kHz audio and correctly delivered to the called user. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A:! SETUP: BC=3,1 kHz audio, LLC=3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode: MODE user rate: USER_RATE B: ? SETUP: BC=3,1 kHz audio	
Comments:		

IHI__AU__11	ISDN ref. to: EN 300 403-1 [9] clause 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8, and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/Audio	
Selection criteria:	Bearer service 3,1 kHz audio	
Test purpose:	Ensure that the ISDN SETUP with the BC parameter value information transfer capability 3,1 kHz audio voice band data via modem, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE and the LLC Parameter values: 3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped to BC=3,1 kHz audio and correctly delivered to the to the called user. In the active call state (N10) ensure that the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP: BC = LLC = 3,1 kHz audio, voice band data via modem, synchronous/asynchronous mode: MODE user rate: USER_RATE B: ? SETUP: BC=3,1 kHz audio	
Comments:		

Values for test purposes IHI__AU__09 to IHI__AU__11	
VA_01	MODE: synchronous USER_RATE: 1,2 kbit/s
VA_02	MODE: synchronous USER_RATE: 2,4 kbit/s
VA_03	MODE: synchronous USER_RATE: 3,6 kbit/s
VA_04	MODE: synchronous USER_RATE: 4,8 kbit/s
VA_05	MODE: synchronous USER_RATE: 7,2 kbit/s
VA_06	MODE: synchronous USER_RATE: 8 kbit/s
VA_07	MODE: synchronous USER_RATE: 9,6 kbit/s
VA_08	MODE: synchronous USER_RATE: 14,4 kbit/s
VA_09	MODE: synchronous USER_RATE: 16 kbit/s
VA_10	MODE: synchronous USER_RATE: 19,2 kbit/s
VA_11	MODE: synchronous USER_RATE: 32 kbit/s
VA_12	MODE: synchronous USER_RATE: 48 kbit/s
VA_13	MODE: synchronous USER_RATE: 56,0 kbit/s
VA_14	MODE: synchronous USER_RATE: 64 kbit/s
VA_15	MODE: asynchronous USER_RATE: 1,2 kbit/s
VA_16	MODE: asynchronous USER_RATE: 2,4 kbit/s
VA_17	MODE: asynchronous USER_RATE: 3,6 kbit/s
VA_18	MODE: asynchronous USER_RATE: 4,8 kbit/s
VA_19	MODE: asynchronous USER_RATE: 7,2 kbit/s
VA_20	MODE: asynchronous USER_RATE: 8 kbit/s
VA_21	MODE: asynchronous USER_RATE: 9,6 kbit/s
VA_22	MODE: asynchronous USER_RATE: 14,4 kbit/s
VA_23	MODE: asynchronous USER_RATE: 16 kbit/s
VA_24	MODE: asynchronous USER_RATE: 19,2 kbit/s
VA_25	MODE: asynchronous USER_RATE: 32 kbit/s
VA_26	MODE: asynchronous USER_RATE: 48 kbit/s
VA_27	MODE: asynchronous USER_RATE: 56 kbit/s
VA_28	MODE: asynchronous USER_RATE: 64 kbit/s

6.1.3 Successful - UDI

Successful
UDI

IHI__UD__01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.1	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = UDI, no HLC	
Comments:		

IHI__UD__02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.2	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10, and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = UDI, no HLC	
Comments:		

IHI__UD__03	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the calling user clears after answer. The network transports the cause value #16 and the location user to the called user.	
Parameter values:	BC = UDI, no HLC	
Comments:		

IHI__UD__04	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that the call clearing procedure is performed correctly when the called user clears after answer. The network transports the cause value #16 and the location user to the calling user.	
Parameter values:	BC = UDI, no HLC	
Comments:		

IHI__UD__05	ISDN ref. to: EN 300 403-1 [9] clause 4.5.16	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:	Telefax G4 teleservice	
Test purpose:	Support of Telefax G4 teleservice (no LLC): Ensure that the BC= UDI but without the HLC information is transported transparently through the network and correctly delivered to the called user. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP BC = UDI, HLC = facsimile group 4, no LLC B: ? SETUP BC = UDI,	
Comments:		

IHI__UD__06	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:	Telefax G4 teleservice	
Test purpose:	Support of telefax G4 teleservice: Ensure that the BC= UDI but without the LLC and HLC information is transported transparently through the network and correctly delivered to the called user. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP: BC = UDI, HLC = facsimile group 4, LLC = telematic_term B: ? SETUP: BC = UDI	
Comments:		

IHI__UD__07	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:	Telefax G4 teleservice	
Test purpose:	Support of telefax G4 teleservice: Ensure that the BC= UDI but without the LLC and HLC information is transported transparently through the network and correctly delivered to the called user. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP: BC = UDI, HLC = facsimile group 4, LLC = telematic_term B: ? SETUP: BC = UDI	
Comments:		

IHI__UD__08	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that the ISDN SETUP with the BC parameter value information transfer capability UDI, voice band data via modem, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped to the BC = UDI. Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A:! SETUP: BC = UDI, synchronous/asynchronous mode: MODE user rate: USER_RATE B:? SETUP: BC = UDI	
Comments:		

IHI__UD__09	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that the ISDN SETUP with the BC parameter value information transfer capability UDI and the LLC Parameter values: UDI, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped and correctly delivered to the BC = UDI Ensure that in the active call state (N10) the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A: ! SETUP: BC = UDI, LLC= UDI, synchronous/asynchronous mode: MODE user rate: USER_RATE B: ! SETUP: BC = UDI,	
Comments:		

IHI__UD__10	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 4.5.18	**PBN ref. to:** H.225.0 [3] clauses 7.2.2.1, 7.3.10 and 7.3.2 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.2 H.246 Annex C [8] clauses C.7.1 and C.6.1
TSS reference:	ISDN-H.323-ISDN/Basic_call/Successful/UDI	
Selection criteria:		
Test purpose:	Ensure that the SETUP with the BC parameter value information transfer capability UDI, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE and the LLC **Parameter values:** UDI, synchronous/asynchronous mode is set to MODE, user rate set to USER_RATE is correctly mapped and correctly delivered to the BC = UDI. In the active call state (N10) ensure that the data transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	A:! SETUP: BC = LLC = UDI, synchronous/asynchronous mode: MODE user rate: USER_RATE B: ! SETUP: BC = UDI,	
Comments:		

Values for test purposes IHI__UD__08 to IHI__UD__10	
VA_01	MODE: synchronous USER_RATE: 1,2 kbit/s
VA_02	MODE: synchronous USER_RATE: 2,4 kbit/s
VA_03	MODE: synchronous USER_RATE: 3,6 kbit/s
VA_04	MODE: synchronous USER_RATE: 4,8 kbit/s
VA_05	MODE: synchronous USER_RATE: 7,2 kbit/s
VA_06	MODE: synchronous USER_RATE: 8 kbit/s
VA_07	MODE: synchronous USER_RATE: 9,6 kbit/s
VA_08	MODE: synchronous USER_RATE: 14,4 kbit/s
VA_09	MODE: synchronous USER_RATE: 16 kbit/s
VA_10	MODE: synchronous USER_RATE: 19,2 kbit/s
VA_11	MODE: synchronous USER_RATE: 32 kbit/s
VA_12	MODE: synchronous USER_RATE: 48 kbit/s
VA_13	MODE: synchronous USER_RATE: 56,0 kbit/s
VA_14	MODE: synchronous USER_RATE: 64 kbit/s
VA_15	MODE: asynchronous USER_RATE: 1,2 kbit/s
VA_16	MODE: asynchronous USER_RATE: 2,4 kbit/s
VA_17	MODE: asynchronous USER_RATE: 3,6 kbit/s
VA_18	MODE: asynchronous USER_RATE: 4,8 kbit/s
VA_19	MODE: asynchronous USER_RATE: 7,2 kbit/s
VA_20	MODE: asynchronous USER_RATE: 8 kbit/s
VA_21	MODE: asynchronous USER_RATE: 9,6 kbit/s
VA_22	MODE: asynchronous USER_RATE: 14,4 kbit/s
VA_23	MODE: asynchronous USER_RATE: 16 kbit/s
VA_24	MODE: asynchronous USER_RATE: 19,2 kbit/s
VA_25	MODE: asynchronous USER_RATE: 32 kbit/s
VA_26	MODE: asynchronous USER_RATE: 48 kbit/s
VA_27	MODE: asynchronous USER_RATE: 56 kbit/s
VA_28	MODE: asynchronous USER_RATE: 64 kbit/s

6.1.4 Unsuccessful

Unsuccessful

IHI__xx_U01	ISDN ref. to: EN 300 403-1 [9] clauses 5.1.4 and G.1.1	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that, when calling to unallocated number, the network initiate call clearing to the calling user with cause value #1 "unassigned number", location U, RPN,RLN,TN or INTL	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio in the case when the calling user is calling to an unallocated number the tones or announcement can only by generated in the destination exchange (or intermediate exchange) during call establishment (see ITU-T Recommendation Q.764 [21] clause 2.2). The originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U02	ISDN ref. to: EN 300 403-1 [9] clauses 5.2.5.1 and G.1.7	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that, when the called user is busy and responds with a RELEASE COMPLETE message indicating cause value #17 "user busy", the network transport the cause value and the location to the calling user. Possible locations are U, RPN or RLN.	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U03	ISDN ref. to: EN 300 403-1 [9] clauses 5.2.5.4 and G.1.8	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called user is not responding, the network initiate call clearing to the calling user with cause value #18 "no user responding" location RLN.	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U04	ISDN ref. to: EN 300 403-1 [9] clauses 5.2.5.4 and G.1.9	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when no answer from the called user (but user alerted), the network initiate call clearing to the calling user with cause value #19 "no user responding (user alerted)" location RLN, TN or INTL and called user with cause value # 102 "recovery on timer expiry".	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U05	ISDN ref. to: EN 300 403-1 [9] clauses 5.1.9, 5.3.2 and G.1.10	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called user rejects the call and responds with a RELEASE COMPLETE message indicating cause value #21 "call rejected", the network transports the cause value and the location to the calling user. Possible locations are U, RPN or RLN.	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U06	ISDN ref. to: EN 300 403-1 [9] clause G.1.13	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called user terminal is not connected, the network initiate call clearing to the calling user with cause value #27 "destination out of order"	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U07	ISDN ref. to: EN 300 403-1 [9] clauses 5.2.2 and G.5.7	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called user is not compatible and responds with a RELEASE COMPLETE message indicating cause value #88 "called user not compatible", the network transports the cause value and the location to the calling user. Possible locations are U and RPN.	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHI__xx_U08	ISDN ref. to: EN 300 403-1 [9] clause G.1.6	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Multipoint configuration for the called side	
Test purpose:	Ensure that when the calling user clears with cause value #16 "normal call clearing" before answer from called user, the network transport the cause value and the location user to the called user	
Parameter values:	BC = PIXIT	
Comments:		

IHI__xx_U09	ISDN ref. to: EN 300 403-1 [9] clause G.1.6	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Point-to-point configuration for the called side	
Test purpose:	Ensure that when the calling user clears with cause value #16 "normal call clearing" before answer from called user, the network transport the cause value and the location user to the called user	
Parameter values:	BC = PIXIT	
Comments:		

IHI__xx_U10	ISDN ref. to: EN 300 403-1 [9] clause G.1.6; EN 300 899-3 [15] Annex A	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Point-to-point configuration for the called side	
Test purpose:	Ensure that the SUT after receiving a call from the calling user, sends out a SETUP message, receives a CALL PROCEEDING message on receipt of a DISCONNECT message with the **Cause value** CV_ISDN; sends a DISCONNECT message with the **Cause value** CV_ISDN to the calling user.	
Parameter values:	BC = PIXIT	
Comments:		

Values for test purposes IHI__xx_U10		
	Cause	
	CV_ISDN	
VA_01	17	User busy
VA_02	18	No user responding
VA_03	21	Call rejected
VA_04	22	Number changed
VA_05	27	Destination out of order
VA_06	28	Invalid number format (address incomplete)
VA_07	29	Facility rejected
VA_08	31	Normal, unspecified
VA_09	38	Network out of order
VA_10	41	Temporary failure
VA_11	63	Service or option not available, unspecified
VA_12	88	Incompatible destination
VA_13	95	Invalid message, unspecified
VA_14	111	Protocol error, unspecified

IHI__xx_U11	ISDN ref. to: EN 300 403-1 [9] clause G.1.6	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Point-to-point configuration for the called side	
Test purpose:	Ensure that the SUT after receiving a call from the calling user, sends out a SETUP message, receives a CALL PROCEEDING message and an ALERTING message on receipt of a DISCONNECT message with the **Cause value** CV_ISDN; sends a DISCONNECT message with the **Cause value** CV_ISUP to the calling user.	
Parameter values:	BC = PIXIT	
Comments:		

Values for test purposes IHI__xx_U11		
	Cause	
	CV_ISDN	
VA_01	21	Call rejected
VA_02	27	Destination out of order
VA_03	31	Normal, unspecified
VA_04	38	Network out of order
VA_05	41	Temporary failure
VA_06	111	Protocol error, unspecified

IHI__xx_U12	ISDN ref. to: EN 300 403-1 [9] clause G.1.6	**PBN ref. to:** H.225.0 [3] clause 7.2.2.8 TS 101 883 [1] clauses 5.1, B.1.3.8 and B.1.3.7 H.246 Annex C [8] clause C.7.1.8
TSS reference:	ISDN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Point-to-point configuration for the called side	
Test purpose:	Ensure that the SUT sends out a SETUP message, receives a CONNECT message and on receipt of a DISCONNECT message with the **Cause value** CV_ISDN; sends a DISCONNECT message with the **Cause value** CV_ISDN to the calling user.	
Parameter values:	BC = PIXIT	
Comments:		

Values for test purposes IHI__xx_U12		
VA	CAUSE Value	
VA_01	16	Normal call clearing
VA_02	27	Destination out of order
VA_03	31	Normal, unspecified
VA_04	38	Network out of order
VA_05	41	Temporary failure
VA_06	111	Protocol error, unspecified

6.2 Test purposes for ISDN-ISDN, Supplementary services

6.2.1 CLIP

IHI__xxSSCLIP01	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP	
Test purpose:	Ensure that when the Calling party number is provided by the calling user, when the Type of number is defined as : TYPE_NUMBER, the Calling party number information element is correctly delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIP02	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP	
Test purpose:	Ensure that when the Calling party number is provided by the calling user, where the Type of number is defined as: TYPE_NUMBER, with Calling party subaddress, the Calling party number information elements is correctly delivered to the called (served)	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIP 03	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP	
Test purpose:	Ensure that when no Calling party number information element is provided by the calling user, (and no Calling party subaddress) the Calling party number information element is correctly delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

Values for the test purpose IHI__SSCLIP 01 to IHI__SSCLIP 02	
	TON
VA_01	subscriber number
VA_02	national number
VA_03	International number
VA_04	Unknown

IHI__SSCLIP 04	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and a Calling party number information element with a valid calling number is provided by the calling user; the Calling party number information element with the calling number, presentation is allowed and the screening indicator is set to "user-provided, not screened" immediately followed by a second Calling party number information element with the default number of the access of the calling user, the screening indicator is set to "network-provided" are delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIP 05	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and a Calling party subaddress information element is provided by the calling user; the Calling party number information element with the default number of the access of the calling user, the screening indicator is set to "network-provided", with the Calling party subaddress information element are delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIP 06	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and no Calling party number information element is provided by the calling user; the Calling party number information element the with the default number of the access of the calling user, the screening indicator is set to "network-provided" is delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIP 07	ISDN ref. to: EN 300 092-1 [10] clause 9.3 EN 300 403-1 [9] clauses 4.5.10 and 4.5.11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP and the two delivery option does not apply; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and a Calling party number information element and a valid calling number is provided by the calling user; the Calling party number information element with the calling number, presentation is allowed and the screening indicator is set to "user-provided, not screened" is delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

6.2.2 CLIR

IHI__SSCLIR 01	ISDN ref. To: EN 300 093-1 [11] clause 9.4.1 EN 300 092-1 [10] clause A.2 figure 2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIR	
Selection criteria:	The calling user is provided with CLIR permanent mode subscription, the called user with CLIP	
Test purpose:	Ensure that when the Calling party number is provided by the calling user, without Calling party subaddress, the Calling party number information element is delivered to the called user without any digit information.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIR 02	ISDN ref. To: EN 300 093-1 [11] clause 9.4.1 EN 300 092-1 [10] clause A.2 figure 2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIR	
Selection criteria:	The calling user is provided with CLIR permanent mode subscription, the called user with CLIP	
Test purpose:	Ensure that when the Calling party number is provided by the calling user, with Calling party subaddress, the Calling party number information element is delivered to the called user without any digit information. The Calling party subaddress shall not be present	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIR 03	ISDN ref. To: EN 300 093-1 [11] clause 9.4.1 EN 300 092-1 [10] clause A.2 figure 2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIR	
Selection criteria:	The calling user is provided with CLIR permanent mode subscription, the called user with CLIP	
Test purpose:	Ensure that when no Calling party number is provided by the calling user (and no Calling party subaddress), the Calling party number information element is network provided and delivered to the called user without any digit information.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCLIR 04	ISDN ref. To: EN 300 093-1 [11] clause 9.4.1 EN 300 092-1 [10] clause A.2 figure 2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CLIR	
Selection criteria:	The calling user is provided with CLIR temporary mode subscription; The called user is provided with CLIP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and a Calling party number information element and a valid calling number with presentation in restricted is provided by the calling user; the Calling party number information element with the presentation indicator set to "presentation restricted" is delivered to the called user.	
Parameter values:	BC = PIXIT	
Comments:		

6.2.3 COLP

IHI__SSCOLP 01	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	The calling user is provided with COLP	
Test purpose:	Ensure that when the Connected number is provided by the called user, Type of number "subscriber number", with Connected subaddress, the Connected number and Connected subaddress information elements are correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 02	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	The calling user is provided with COLP	
Test purpose:	Ensure that when the Connected number is provided by the called user, Type of number "national number", with Connected subaddress, the Connected number and Connected subaddress information elements are correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 03	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	The calling user is provided with COLP	
Test purpose:	Ensure that when the Connected number is provided by the called user, Type of number "international number", with Connected subaddress, the Connected number and Connected subaddress information elements are correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 04	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP/IHI__SSCOLP 04	
Selection criteria:	The calling user is provided with COLP	
Test purpose:	Ensure that when the Connected number is provided by the called user, Type of number "unknown", with Connected subaddress, the Connected number information element with the with the Screening indicator value "user provided" and Connected subaddress information element correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 05	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP	
Test purpose:	Ensure that when no Connected number is provided by the called user (and no Connected subaddress), the Connected number information element is network provided and correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 06	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP	
Test purpose:	Ensure that when an **incorrect** Connected number is provided by the called user (and no Connected subaddress), the Connected number information element is network provided and correctly delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 07	ISDN ref. To: EN 300 097-1 [12]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and when a Connected number with a Screening indicator value is provided by the called user in the CONNECT message, (the Network shall discard the Screening indicator value); the Connected number information element with the Screening indicator value "user-provided, not screened" is delivered to the calling user.	
Parameter values:		
Comments:		

IHI__SSCOLP 08	ISDN ref. To: EN 300 097-1 [12]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and when a Connected number with the Type of number coded **other** than "national number" or "international number" is provided by the called user in the CONNECT message, (the Network shall discard the Connected number information element); the Connected number information element with the Screening indicator value "network provided" is delivered to the calling (served) user.	
Parameter values:		
Comments:		

IHI__SSCOLP 09	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and when no Connected number is provided by the called user in the CONNECT message; the Connected number information element with the Screening indicator value "network provided" is delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLP 10	ISDN ref. To: EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLP	
Selection criteria:	Calling user is provided with COLP; special arrangement applies.	
Test purpose:	Ensure that when a **special arrangement applies** and when a Connected number information element and a Connected subaddress information element is provided by the called user in the CONNECT message; the Connected number information element with the Screening indicator value "user-provided, not screened" and a Connected subaddress information element is delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

6.2.4 COLR

IHI__SSCOLR01	ISDN ref. To: EN 300 098-1 [13], clauses 9.3.1 and 9.4.1 EN 300 097-1 [12], clause 1, figure 4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLR	
Selection criteria:	The called (served) user is provided with COLR permanent mode subscription, the calling user with COLP	
Test purpose:	Ensure that when the Connected number is provided by the called user, with Connected subaddress, the Connected number information element is delivered to the calling user without any digit information. The Connected subaddress shall not be present	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLR02	ISDN ref. To: EN 300 098-1 [13], clauses 9.3.1 and 9.4.1 EN 300 097-1 [12], clause 1, figure 4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLR	
Selection criteria:	The called (served) user is provided with COLR permanent mode subscription, the calling user with COLP	
Test purpose:	Ensure that when no Connected number is provided by the called user (and no Connected subaddress), the Connected number information element is network provided and delivered to the calling user without any digit information.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLR03	ISDN ref. To: EN 300 098-1 [13], clauses 9.3.1 and 9.4.1 EN 300 097-1 [12], clause 1, figure 4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLR	
Selection criteria:	The called (served) user is provided with COLR permanent mode subscription, the calling user with COLP	
Test purpose:	Ensure that when no Connected number is provided by the called user, with Connected subaddress, the Connected number and Connected subaddress information elements are correctly delivered to the calling user without any digit information.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLR04	ISDN ref. To: EN 300 098-1 [13], clauses 9.3.1 and 9.4.1 EN 300 097-1 [12], clause 1, figure 4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLR	
Selection criteria:	The called (served) user is provided with COLR permanent mode subscription, the calling user with COLP	
Test purpose:	Ensure that when a **special arrangement applies** and when no Connected number is provided by the called user in the CONNECT message; the Connected number information element with Presentation indicator value "presentation restricted" and without connected party number is delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSCOLR05	ISDN ref. To: EN 300 098-1 [13], clauses 9.3.1 and 9.4.1 EN 300 097-1 [12], clause 1, figure 4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/COLR	
Selection criteria:	The called (served) user is provided with COLR temporary mode subscription, the calling user with COLP	
Test purpose:	Ensure that when a **special arrangement applies** and when the Connected number with the Presentation indicator "presentation restricted" is provided by the called user in the CONNECT message; the Connected number information element with Presentation indicator value "presentation restricted" and without connected party number is delivered to the calling (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

6.2.5 DDI

IHI__SSDDI01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-ISDN/Supplementary_services/DDI	
Selection criteria:	en-bloc sending at user A DDI at user B	
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly when user B supports DDI.	
Parameter values:	BC = PIXIT	
Comments:		

IHI__SSDDII02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-ISDN/Supplementary_services/DDI	
Selection criteria:	overlap sending at user A DDI at user B	
Test purpose:	Ensure that call establishment using overlap sending is performed correctly when user B supports DDI.	
Parameter values:	BC = PIXIT	
Comments:		

6.2.6 CFU

IHII_SSCFU01	ISDN ref. to: EN 300 207-1 [16] clauses 6.1, 9.2.2 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFU	
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFU	
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = PIXIT CF active	
Comments:		

IHII_SSCFU02	ISDN ref. to: EN 300 207-1 [16] clauses 9.2.2 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFU	
ISDN selection criteria:	The user B is in network N2 and is provided with CFU	
Test purpose:	To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is user determined user busy. User A is optionally notified of call diversion and user C is optionally informed of the forwarding number (user B has presentation allowed).	
ISDN parameter values:	CFU active	
Comments:		

IHII_SSCFU03	ISDN ref. to: EN 300 207-1 [16] clause 10.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFU	
Selection criteria:	The user B is in network N2. Partial rerouting provided in PTNX in case of CFU	
Test purpose:	User A calls user B. The public network acts on the call rerouting invocation request from the private network (NT2) and performs rerouting towards the indicated address (user C). Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
ISDN parameter values:	CFU – partial rerouting	
Comments:		

6.2.7 CFB

IHII_SSCFB01	ISDN ref. to: EN 300 207-1 [16] clauses 9.2.2, 9.2.4.3 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFB	
Selection criteria:	The user B is in network N2 and is provided with CFB-UDUB	
Test purpose:	Ensure that when user A calls busy user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	CF active	
Comments:		

IHII_SSCFB02	ISDN ref. to: EN 300 207-1 [16] clauses 9.2.2, 9.2.4.3 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFB	
Selection criteria:	The user B is in network N2 and is provided with CFB-NDUB	
Test purpose:	Ensure that when user A calls busy user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	CF active	
Comments:		

IHII_SSCFB03	ISDN ref. to: EN 300 207-1 [16] clauses 9.2.2, 9.2.4.3 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFB	
Selection criteria:	The user B is in network N2. Partial rerouting provided in PTNX in case of CFB	
Test purpose:	User A calls user B. The public network acts on the call rerouting invocation request from the private network (NT2) and performs rerouting towards the indicated address (user C). Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	CFB – partial rerouting	
Comments:		

6.2.8 CFNR

IHII_SSCFNR01	ISDN ref. to: EN 300 403-1 [9] clauses 9.2.2, 9.2.4.4 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFNR	
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR (option A, late release)	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	CF active	
Comments:		

IHII_SSCFNR02	ISDN ref. to: EN 300 403-1 [9] clauses 9.2.2, 9.2.4.4 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFNR	
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR (option B, immediate release)	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	CFNR active	
Comments:		

IHII_SSCFNR03	ISDN ref. to: EN 300 403-1 [9] clauses 9.2.2 and 10.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFNR	
Selection criteria:	The user B is in network N2. Partial rerouting provided in PTNX in case of CFNR (option A, late release)	
Test purpose:	User A calls user B. The public network acts on the call rerouting invocation request from the private network (NT2) and performs rerouting towards the indicated address (user C). Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
ISDN parameter values:	CFNR - partial rerouting	
Comments:		

IHII_SSCFNR04	ISDN ref. to: EN 300 403-1 [9] clauses 9.2.2, 9.2.4.4 and 9.2.5	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CFNR	
Selection criteria:	The user B is in network N2. Partial rerouting provided in PTNX in case of CFNR (option B, immediate release).	
Test purpose:	User A calls user B. The public network acts on the call rerouting invocation request from the private network (NT2) and performs rerouting towards the indicated address (user C). Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
ISDN parameter values:	CFNR - partial rerouting	
Comments:		

6.2.9 3PTY

IHII__SS3PTY01	ISDN ref. to: EN 300 188-1 [17], clause 9.2	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and release the Active-Idle connection (A-C). After the completion of the Retrieve function, the call clearing procedure is performed from user A.	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY02	ISDN ref. to: EN 300 188-1 [17], clause 9.2, figure A.2	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY.The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and release the Active-Held connection (A-B). The call clearing procedure is performed from user A.	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY03	ISDN ref. to: EN 300 188-1 [17], clause 9.2	Other relevant ref.: Figure 2-8/Q.734.2 - User B disconnects
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and user B sends disconnect during the Three-Party communication.	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY04	ISDN ref. to: EN 300 188-1 [17], clause 9.2	Other relevant ref.: Figure 2-9/Q.734.2 - User C disconnects
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and user C sends disconnect during the Three-Party communication.	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY05	ISDN ref. to: EN 300 188-1 [17] clause 9.2	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and release of both remote users, user C is released first.	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY06	ISDN ref. to: EN 300 188-1 [17], clause 9.2	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user B. The call clearing procedure is performed from user A	
Parameter values:	BC = speech	
Comments:		

IHII__SS3PTY07	ISDN ref. to: EN 300 188-1 [17], clause 9.2	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/3PTY	
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are in the network N2.	
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user C. The call clearing procedure is performed from user A	
Parameter values:	BC = speech	
Comments:		

6.2.10 HOLD

IHI__SSHOLD01	ISDN ref. to: EN 300 141-1 [18], clause 7	Other relevant ref.: EN 300 196-1 [25], clause 7.1
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/HOLD	
Selection criteria:	The calling user is provided with HOLD	
Test purpose:	Ensure that the calling user can activate the call hold and retrieval procedure. Ensure that in the active call state (N10) the voice transfer on the B-channels is performed correctly (e.g. testing QoS parameters).	
Parameter values:	BC = speech	
Comments:		

IHI__SSHOLD02	ISDN ref. to: EN 300 141-1 [18], clause 7	Other relevant ref.: EN 300 196-1 [25], clause 7.1
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/HOLD	
Selection criteria:	The calling user is provided with HOLD	
Test purpose:	Ensure that the calling user can initiate Call Hold and that the call can be released from the calling user during the held state.	
Parameter values:	BC = speech	
Comments:		

IHI__SSHOLD03	ISDN ref. to: EN 300 141-1 [18], clause 7	Other relevant ref.: EN 300 196-1 [25], clause 7.1
TSS reference:	ISDN-H323-ISDN/Supplementary_services/HOLD	
Selection criteria:	The calling user is provided with HOLD	
Test purpose:	Ensure that the calling user can initiate Call Hold and that the call can be released from the called user in the held state.	
Parameter values:	BC = speech	
Comments:		

6.2.11 CW

IHII__SSCW01	ISDN ref. to: EN 300 058-1 [19] clause 7	Other relevant ref.: EN 300 403-1 [9] clause 4.5.2.1
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CW	
Selection criteria:	The called user is provided with CW, notification allowed	
Test purpose:	Ensure that the Waiting call is released at the terminating exchange after timer expired	
Parameter values:	BC = PIXIT	
Comments:		

6.2.12 CUG

IHI__SSCUG01	ISDN ref. to: EN 300 138-1 [20] clauses 9.2.2 and 9.2.4	Other relevant ref.:
TSS reference:	ISDN-H.323-ISDN/Supplementary_services/CUG	
Selection criteria:	Orign.: The calling user belongs to a CUG with the following CUG supplementary options: not OA; not ocb; not Pref. CUG	
Test purpose:	Ensure that when the calling user belongs to a CUG with outgoing access is not allowed, not outgoing calls barred within the CUG and not preferential CUG and the called user belongs not to a CUG, after the receipt of a SETUP message with a Facility IE containing a cUGCall invoke component with OARequested set to TRUE, CUG Index included; call establishment is not possible and the network initiate call clearing to the calling user with cause value 87 "User Not Member Of CUG".	
Parameter values:	BC = PIXIT; Facility IE with cUGCall invoke component: OARequested set to TRUE CUG Index included	
Comments:		

6.3 Test purposes for ISDN-PSTN, Basic call

6.3.1 Successful-Speech

Successful
Speech

IHP__SP__01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the call establishment using en-bloc sending is performed correctly. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN". and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = speech, no HLC	
Comments:		

IHP__SP__02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the call establishment using overlap sending is performed correctly. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = speech, no HLC	
Comments:		

IHP__SP__03	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the calling user clears after answer.	
Parameter values:	BC = speech, no HLC	
Comments:		

IHP__SP__04	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the called user clears after answer	
Parameter values:	BC = speech, no HLC	
Comments:		

IHP__SP__05	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech	
Selection criteria:		
Test purpose:	Ensure that the reanswer procedure is performed correctly when the called user clears and reanswers	
Parameter values:	BC = speech, no HLC	
Comments:		

IHP__SP__06	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Speech/IHP__SP__06	
Selection criteria:		
Test purpose:	Support of telephony 3,1 kHz teleservice: Ensure that call establishment can be done with HLC. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = speech, HLC = telephony	
Comments:		

6.3.2 Successful-Audio

Successful
3,1 kHz audio

IHP__AU__01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the call establishment using en-bloc sending is performed correctly. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHP__AU__02	ISDN ref. to: EN 300 403-1 [9] clause 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the call establishment using overlap sending is performed correctly. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHP__AU__03	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the calling user clears after answer	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHP__AU__04	ISDN ref. to: EN 300 403-1 [9] clause 5.3.3	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the called user clears after answer	
Parameter values:	BC = 3,1 kHz audio, no HLC	
Comments:		

IHP__AU__05	ISDN ref. to: EN 300 403-1 [9] clauses 4.5.16 and 5.1.6	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Support of Telefax G2/G3: Ensure that call establishment can be done with HLC. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" or #2 "destination address is non-ISDN".	
Parameter values:	BC = 3,1 kHz audio, HLC = facsimile group 2/3	
Comments:		

IHP__AU__06	ISDN ref. to: EN 300 403-1 [9] clause 4.5.18	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Successful/Audio	
Selection criteria:		
Test purpose:	Support of voice band data via modem: Ensure that call establishment can be done with LLC. During call establishment a Progress indicator information element shall be returned to the calling user with progress description value #1 "call is not end-to-end ISDN" and optional #2 "destination address is non-ISDN".	
Parameter values:	BC = 3,1 kHz audio, LLC = voice band data via modem	
Comments:		

6.3.3 Unsuccessful

Unsuccessful

IHP__xx_U01	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called PSTN user is busy the network transport the cause value #17 "user busy" to the calling user	
Parameter values:	BC = PIXIT	
Comments:		

IHP__xx_U02	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when calling to a unallocated PSTN number, the network initiate call clearing to the calling user with cause value #1 "unassigned number"	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio in the case when the calling user is calling to an unallocated number the tones or announcement can only by generated in the destination exchange (or intermediate exchange) during call establishment (see ITU-T Recommendation Q.764 [21] clause 2.2). The originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure apply after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHP__xx_U03	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the calling user clears with cause value #16 "normal call clearing" before answer from the called PSTN user, the call is cleared	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure apply after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

IHP__xx_U04	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	ISDN-H.323-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called PSTN user is ringing but not answering, the network initiate call clearing to the calling user with cause value #18 "no user responding" or cause value #19 "no answer from user (user alerted)"	
Parameter values:	BC = PIXIT	
Comments:	If in BC in the SETUP is coded speech or 3,1 kHz audio the originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure apply after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.	

6.4 Test purposes for ISDN-PSTN, Supplementary services

6.4.1 CLIP

IHP__xxSSCLIP01	ISDN ref. to: EN 300 403-1 [9] EN 300 001 [22] ETS 300 648 [23] EN 300 659 [24]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP	
Test purpose:	Ensure that when the Calling party number is provided by the calling user, the Calling party number is user provided correctly delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

IHP__xxSSCLIP02	ISDN ref. to: EN 300 403-1 [9] EN 300 001 [22] ETS 300 648 [23] EN 300 659 [24]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/CLIP	
Selection criteria:	The called user is provided with CLIP	
Test purpose:	Ensure that when no calling party number is provided by the calling user, the Calling party number information element is network provided and correctly delivered to the called (served) user.	
Parameter values:	BC = PIXIT	
Comments:		

6.4.2 CLIR

IHP__xxSSCLIR01	ISDN ref. to: EN 300 403-1 [9] EN 300 001 [22] ETS 300 648 [23] EN 300 659 [24]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/CLIP	
Selection criteria:	the called user is provided with CLIP; the calling user is provided with CLIR	
Test purpose:	The calling user is provided with CLIR permanent mode subscription Ensure that when the Calling party subaddress is provided by the calling user the Calling party number is not delivered to the called user.	
Parameter values:	BC = PIXIT Calling party subaddress	
Comments:		

IHP__xxSSCLIR02	ISDN ref. to: EN 300 403-1 [9] EN 300 001 [22] ETS 300 648 [23] EN 300 659 [24]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/CLIP	
Selection criteria:	the called user is provided with CLIP; the calling user is provided with CLIR	
Test purpose:	The calling user is provided with CLIR permanent mode subscription Ensure that when No Calling party subaddress is provided by the calling user the Calling party number is not delivered to the called user.	
Parameter values:	BC = PIXIT	
Comments:		

6.4.3 COLP

IHP__xxSSCOLP01	ISDN ref. to: EN 300 097-1 [12], clauses 9.5.1 and 11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/COLP	
Selection criteria:	The calling user is provided with COLP	
Test purpose:	Ensure that the Connected number information element is network provided and correctly delivered to the calling user or, if the PSTN does not support this service, the presentation indicator indicate "number not available due to interworking"	
Parameter values:	BC = PIXIT	
Comments:		

6.4.4 COLR

IHP__xxSSCOLR01	ISDN ref. to: EN 300 098-1 [13] clauses 9.3.1, 9.4.1 and 11 EN 300 097-1 [12], clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/COLR	
Selection criteria:	The called PSTN user is provided with COLR, the calling user is provided with COLP	
Test purpose:	Ensure that the Connected number information element is network provided and delivered to the calling user without any digit information or, if the PSTN does not support this service, the presentation indicator indicate "number not available due to interworking"	
Parameter values:	BC = PIXIT	
Comments:		

6.4.5 CUG

IHP__SSCUG01	ISDN ref. to: EN 300 138-1 [20] clauses 9.2.2 and 9.2.4	Other relevant ref.:
TSS reference:	ISDN-H.323-PSTN/Supplementary_services/CUG	
Selection criteria:	The calling user belongs to a CUG with the following CUG supplementary options: not OA; not ocb; not Pref. CUG	
Test purpose:	Ensure that when the calling user belongs to a CUG with outgoing access is not allowed, not outgoing calls barred within the CUG and not preferential CUG and the called user belongs not to a CUG, after the receipt of a SETUP message with a Facility IE containing a cUGCall invoke component with OARequested set to TRUE, CUG Index included; call establishment is not possible and the network initiate call clearing to the calling user with cause value 87 "User Not Member Of CUG".	
Parameter values:	BC = PIXIT; Facility IE with cUGCall invoke component: OARequested set to TRUE CUG Index included	
Comments:		

6.5 Test purposes for PSTN-ISDN, Basic call

6.5.1 Successful - PSTN

Successful
PSTN

PHI__AU__01	ISDN ref. to: EN 300 403-1 [9] clauses 5.2.6 and B.4	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Successful	
Selection criteria:		
Test purpose:	Ensure that call is delivered to the called ISDN user with the Bearer capability information element indicating "3,1 kHz audio".	
Parameter values:		
Comments:	Some networks as an national option are sending during call establishment a Progress indicator information element shall be included in the SETUP message sent to the called user with progress description value #1 "call is not end-to-end ISDN" and optional # 3 'origination address is non-ISDN'	

PHI__AU__02	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Successful	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the calling user clears the call after answering.	
Parameter values:		
Comments:		

PHI__AU__03	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Successful	
Selection criteria:		
Test purpose:	Ensure that the clearing procedure is performed correctly when the called ISDN user clears the call after answering	
Parameter values:		
Comments:		

6.5.2 Unsuccessful - PSTN

Unsuccessful
PSTN

PHI__AU_U01	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called ISDN user is busy, the calling user receives in-band information that the called user is busy	
Parameter values:		
Comments:		

PHI__AU_U02	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called ISDN user terminal is not connected, the calling user receives in-band announcement that the destination is out of order	
Parameter values:		
Comments:		

PHI__AU_U03	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when calling to unallocated ISDN number, the calling user receives in-band information that the called number is unallocated.	
Parameter values:		
Comments:		

PHI__AU_U04	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Multipoint configuration for the called side.	
Test purpose:	Ensure that when the calling user clears before answer from the called ISDN user in a point-to-multipoint access configuration, the call is cleared	
Parameter values:		
Comments:		

PHI__AU_U05	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Point-to-point configuration for the called side.	
Test purpose:	Ensure that when the calling user clears before answer from the called ISDN user in a point-to-point access configuration, the call is cleared	
Parameter values:		
Comments:		

PHI__AU_U06	ISDN ref. to: EN 300 403-1 [9]	**PBN ref. to:** H.246 Annex C [8] clauses C.6.1 and C.7.1
TSS reference:	PSTN-H.323-ISDN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when the called ISDN user is alerted by not answering before timer Q118 expires, the network initiate call clearing.	
Parameter values:		
Comments:		

6.6 Test purposes for PSTN-ISDN, Supplementary services

6.6.1 CLIP

PHI_AUSSCLIP01	ISDN ref. to: EN 300 092-1 [10] clauses 9.5.1 and 11	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	PSTN-H.323-ISDN/Supplementary_services/CLIP	
Selection criteria:	The called (served) user is provided with CLIP	
Test purpose:	Ensure that the Calling party number information element is network provided and correctly delivered to the called ISDN user or, if the PSTN does not support this service, the presentation indicator indicates "number not available due to interworking"	
Parameter values:		
Comments:		

6.6.2 CLIR

PHI_AUSSCLIR01	ISDN ref. to: EN 300 093-1 [11] clause 9.4.1 EN 300 092-1 [10] clause 9.5.1	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	PSTN-H.323-ISDN/Supplementary_services/CLIR	
Selection criteria:	The calling (served) user is provided with CLIR, the called user with CLIP	
Test purpose:	Ensure that the Calling party number information element is network provided and correctly delivered to the called user without any digit information or, if the PSTN does not support this service, the presentation indicator indicates "number not available due to interworking"	
Parameter values:		
Comments:		

6.6.3 DDI

PHI_AUSSDDI01	ISDN ref. to: EN 300 403-1 [9] clause 5.1.5.2	**PBN ref. to:** H.246 Annex C [8] clauses C.6.2 and C.7.2
TSS reference:	PSTN-H.323-ISDN/Supplementary_services/DDI	
Selection criteria:	overlap sending at user A DDI at user B	
Test purpose:	Ensure that call establishment using overlap sending is performed correctly when user B supports DDI.	
Parameter values:		
Comments:	The network in the call state N25 to indicate that an INFORMATION message received from the originating network contained a Called party number information element with the full ISDN number including DDI digits and a Sending complete information element is to be sent to the called user; transmits to user B an INFORMATION message with a valid Called party number information element with the numbering plan identification field set to "ISDN/telephony numbering plan" and type of number field set to "national number", "international number" or "subscriber number" with the DDI digits contained in the number digits field.	

6.6.4 CUG

PHI_AUSSCUG01	ISDN ref. to: EN 300 138-1 [20] clauses 9.2.2 and 9.2.4	Other relevant ref.:
TSS reference:	PSTN-H.323-ISDNSupplementary_services/CUG	
Selection criteria:	The calling user belongs to a CUG with the following CUG supplementary options: not OA; not ocb; not Pref. CUG	
Test purpose:	Ensure that when the calling user belongs to a CUG with outgoing access is not allowed; call establishment is not possible and the network initiate call clearing to the calling user with cause value 87 "User Not Member Of CUG".	
Parameter values:		
Comments:		

Annex A (informative): Bibliography

- ETSI ETS 300 083: "Integrated Services Digital Network (ISDN); Circuit mode structured bearer service category usable for speech information transfer; Terminal requirements for end-to-end compatibility".
- ETSI ETS 300 084: "Integrated Services Digital Network (ISDN); Circuit mode structured bearer service category usable for 3,1 kHz audio information transfer; Terminal requirements necessary for end-to-end compatibility".
- ETSI TBR 008: "Integrated Services Digital Network (ISDN); Telephony 3,1 kHz teleservice; Attachment requirements for handset terminals".
- ETSI ETR 193: "Methods for Testing and Specification (MTS); Network Integration Testing (NIT); Methodology aspects; Test Co-ordination Procedure (TCP) style guide".
- ITU-T Recommendation I.411 (1988): "ISDN user-network interfaces - Reference configurations".
- ETSI ETS 300 121: "Integrated Services Digital Network (ISDN); Application of the ISDN User Part (ISUP) of CCITT Signalling System No.7 for international ISDN interconnections (ISUP version 1)".
- ITU-T Recommendation H.242: "System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s".
- ETSI EG 201 018: "Integrated Services Digital Network (ISDN);Application of the Bearer Capability (BC), High Layer Compatibility (HLC) and Low Layer Compatibility (LLC) information elements by terminals supporting ISDN services".
- ETSI ETR 018: "Integrated Services Digital Network (ISDN); Application of the Bearer Capability (BC), High Layer Compatibility (HLC) and Low Layer Compatibility (LLC) information elements by terminals supporting ISDN services".
- ETSI ETS 300 092-1/Amendment 2: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ITU-T Recommendation H.245: "Control protocol for multimedia communication".
- ETSI EN 300 267-1: "Integrated Services Digital Network (ISDN); Telephony 7 kHz and videotelephony teleservices; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

History

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