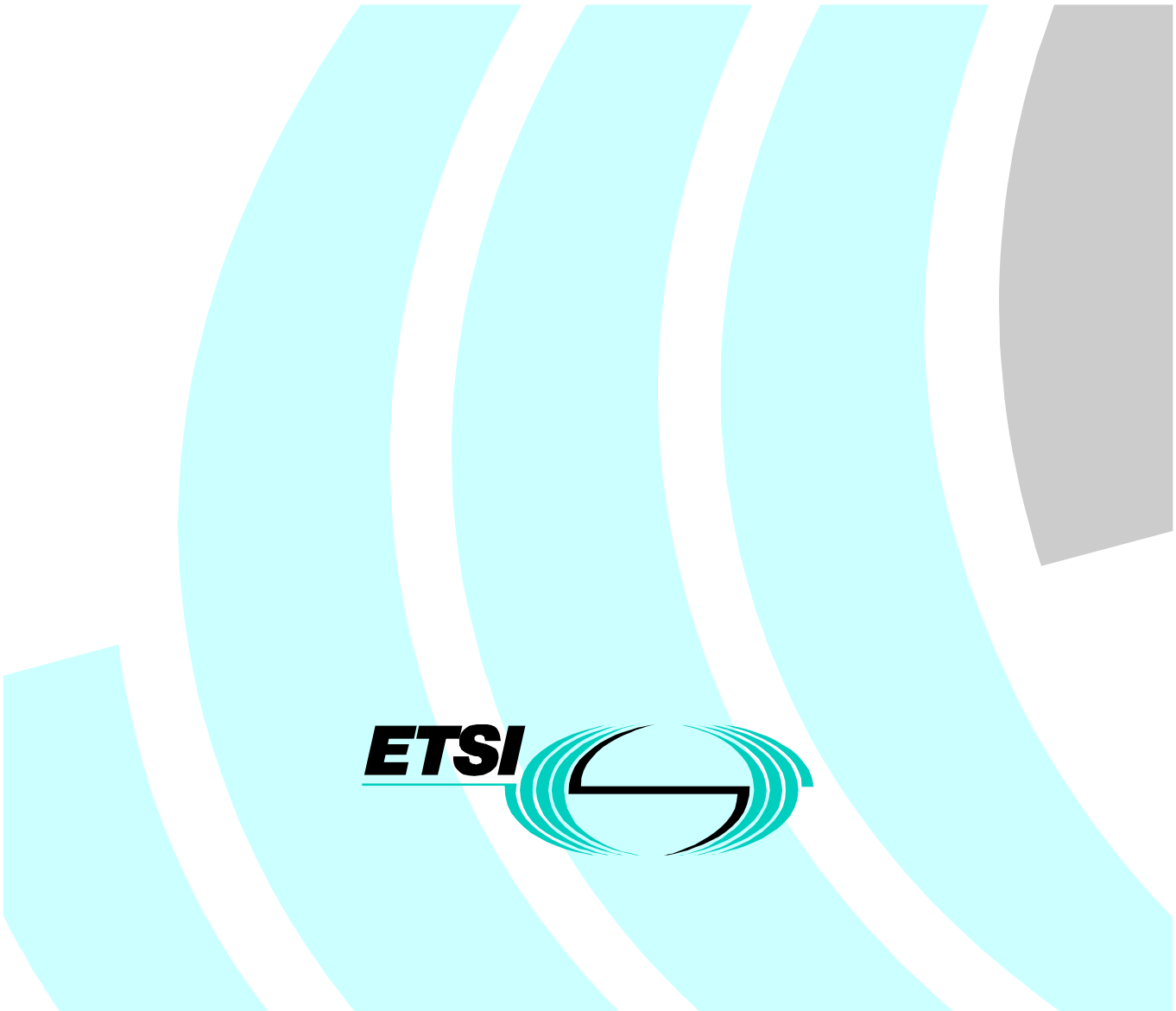
EN 300 185-5 V1.2.4 (1998-06)

European Standard (Telecommunications series)

Integrated Services Digital Network (ISDN); Conference call, add-on (CONF) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 5: Test Suite Structure and Test Purposes (TSS&TP) specification for the network



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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS).

The present document is part 5 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Conference call, add-on (CONF) supplementary service, as described below:

Part 1: "Protocol specification";

Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";

Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";

Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

The present version updates the references to the basic call specifications.

National transposition dates	
Date of adoption of this EN:	19 June 1998
Date of latest announcement of this EN (doa):	30 September 1998
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 1999
Date of withdrawal of any conflicting National Standard (dow):	31 March 1999

1 Scope

This fifth part of EN 300 185 specifies the Test Suite Structure and Test Purposes (TSS&TP) for the Network side of the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [7]) of implementations conforming to the stage three standard for the Conference call, add-on (CONF) supplementary service for the pan-European Integrated Services Digital Network (ISDN) by means of Digital Subscriber Signalling System No. one (DSS1) protocol, EN 300 185-1 [1].

A further part of this EN specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document. Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the User side of the T reference point or coincident S and T reference point of implementations conforming to EN 300 185-1 [1].

2 Normative references

References may be made to:

a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or

b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or

c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or

d) publications without mention of a specific version, in which case the latest version applies.

A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1] EN 300 185-1 (V1.2): "Integrated Services Digital Network (ISDN); Conference call, add-on (CONF) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[2] EN 300 185-2 (V1.2): "Integrated Services Digital Network (ISDN); Conference call, add-on (CONF) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

[3] ISO/IEC 9646-1: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 1: General Concepts".

[4] ISO/IEC 9646-2: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 2: Abstract Test Suite specification".

[5] ISO/IEC 9646-3: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 3: The Tree and Tabular Combined Notation".

[6] 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".

[7] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".

[8] 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]".

[9] ITU-T Recommendation I.112: "Vocabulary and terms for ISDNs".

[10] CCITT Recommendation E.164: "Numbering plan for the ISDN era".

[11] ITU-T Recommendation I.210: "Principles of the telecommunication services supported by an ISDN and the means to describe them".

3 Definitions

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

3.1 Definitions related to conformance testing

abstract test case: Refer to ISO/IEC 9646-1 [3].

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [3].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [3].

implicit send event: Refer to ISO/IEC 9646-3 [5].

lower tester: Refer to ISO/IEC 9646-1 [3].

point of control and observation: Refer to ISO/IEC 9646-1 [3].

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1 [3].

PICS proforma: Refer to ISO/IEC 9646-1 [3].

Protocol Implementation eXtra Information for Testing (PIXIT): Refer to ISO/IEC 9646-1 [3].

PIXIT proforma: Refer to ISO/IEC 9646-1 [3].

system under test: Refer to ISO/IEC 9646-1 [3].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [3].

3.2 Definitions related to EN 300 185-1

Call Held auxiliary state: See EN 300 196-1 [6], subclause 7.1.2.

call reference: See EN 300 403-1 [8], subclause 4.3.

component: See EN 300 196-1 [6], subclause 11.2.2.1.

Idle auxiliary state: See EN 300 196-1 [6], subclause 7.1.2.

Integrated Services Digital Network (ISDN): See ITU-T Recommendation I.112 [9], definition 308.

ISDN number: A number conforming to the numbering and structure specified in CCITT Recommendation E.164 [10].

invoke component: See EN 300 196-1 [6], subclause 11.2.2.1.

network: The DSS1 protocol entity at the Network side of the user-network interface where a T reference point or coincident S and T reference point applies.

network (S/T): The DSS1 protocol entity at the Network side of the user-network interface where a coincident S and T reference point applies.

network (T): The DSS1 protocol entity at the Network side of the user-network interface where a T reference point applies (Network connected to Private ISDN).

remote user: A user which is involved in an instance of the CONF supplementary service but who has no control over it.

return error component: See EN 300 196-1 [6], subclause 11.2.2.1.

return result component: See EN 300 196-1 [6], subclause 11.2.2.1.

served user: The user who invokes the CONF supplementary service.

service; telecommunication service: See ITU-T Recommendation I.112 [9], definition 201.

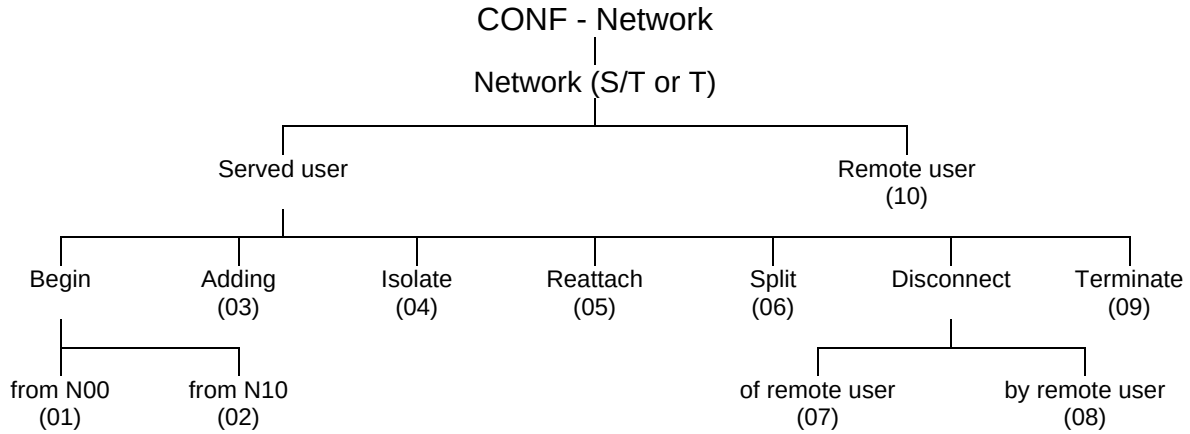
supplementary service: See ITU-T Recommendation I.210 [11], subclause 2.4.

4 Abbreviations

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

ATM	Abstract Test Method
ATS	Abstract Test Suite
CCRef	Call Reference for call related to the conference
CONF	Conference call, add-on
DSS1	Digital Subscriber Signalling System No. one
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
N00	Idle call state
N02	Overlap Sending call state
N04	Call Delivered call state
N06	Call Present call state
N07	Call Received call state
N09	Incoming Call Proceeding call state
N10	Active call state
N12	Disconnect Indication call state
N19	Release Request call state
N25	Overlap Receiving call state
SCRef	Call Reference for a private call not related to the conference
TP	Test Purpose
TSS	Test Suite Structure

5 Test Suite Structure (TSS)



NOTE: Numbers in brackets represent group numbers and are used in TP identifiers.

Figure 1: Test suite structure

6 Test Purposes (TP)

6.1 Introduction

For each test requirement a TP is defined.

6.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see table 1).

Table 1: TP identifier naming convention scheme

Identifier: **<ss>_<iut><group>_<nnn>**				
<ss>	=	supplementary service:	e.g. "CONF"	
<iut>	=	type of IUT:	U N	User Network
<group>	=	group	2 digit field representing group reference according to TSS	
<nnn>	=	sequential number	(001-999)	

6.1.2 Source of TP definition

The TPs are based on EN 300 185-1 [1], clauses 9, 10 and 14.

6.1.3 TP structure

Each TP has been written in a manner which is consistent with all other TPs. The intention of this is to make the TPs more readable and checkable. A particular structure has been used and this is illustrated in table 2. This table should be read in conjunction with any TP, i.e. use a TP as an example to fully understand the table.

Table 2: Structure of a single TP

TP part	Text	Example
Header	<Identifier> *tab* <paragraph number in base ETS> *tab* <type of test> *tab* <condition> *CR.*	see table 1 subclause 0.0.0 valid, invalid, inopportune mandatory, optional, conditional
Stimulus	Ensure that the IUT in the <basic call state> <trigger> *see below for message structure* *or* <goal>	 N10, N10, etc. receiving a XXXX message to request a ...
Reaction	<action> <conditions> *if the action is sending* *see below for message structure* <next action>, *etc.* and remains in the same state *or* and enters state <state>	sends, saves, does, etc. using en-bloc sending, ...
Message structure	<message type> message containing a *a)* <info element> information element with *b)* a <field name> encoded as *or* including <coding of the field> and *back to a or b,*	SETUP, FACILITY, CONNECT, ... Bearer capability, Facility, ...
NOTE: Text in italics will not appear in TPs and text between <> is filled in for each TP and may differ from one TP to the next.		

6.1.4 Test strategy

As the base standard EN 300 185-1 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 300 185-2 [2]. The criteria applied include the following:

- only the requirements from the point of view of the T or coincident S and T reference point are considered;
- whether or not a test case can be built from the TP is not considered.

6.2 Network TPs for CONF

All PICS items referred to in this subclause are as specified in EN 300 185-2 [2] unless indicated otherwise by another numbered reference.

6.2.1 Served user

6.2.1.1 Beginning the conference

6.2.1.1.1 Begin from N00

CONF_N01_001 subclause 9.2.1.1 valid mandatory

Ensure that the IUT in the call state N00 receiving a SETUP message with a Facility information element including a BeginCONF invoke component to request a conference,

does not use the SETUP ACKNOWLEDGE message and does respond with a CALL PROCEEDING message followed by a CONNECT message with a Facility information element including a BeginCONF return result component containing a ConferenceId parameter and enters state N10.

NOTE 1: The CALL PROCEEDING message is mandatory as en-bloc sending procedures apply (see EN 300 403-1 [8] subclause 5.1.5.1). The receipt of an ALERTING is possible as well.

CONF_N01_002 subclause 9.2.1.1 valid mandatory
Ensure that the IUT in the call state N00 receiving a SETUP message with a Facility information element including a BeginCONF invoke component to request a conference and the conference size requested by the user equals the size supported by the network side,

does not use the SETUP ACKNOWLEDGE message and does respond with a CALL PROCEEDING message followed by a CONNECT message with a Facility information element including a BeginCONF return result component containing a ConferenceId parameter and enters state N10.

NOTE 2: The CALL PROCEEDING message is mandatory as en-bloc sending procedures apply (see EN 300 403-1 [8] subclause 5.1.5.1). The receipt of an ALERTING is possible as well.

CONF_N01_003 subclause 9.2.1.2 inopportune mandatory
Ensure that the IUT in the call state N00 receiving a SETUP message with a Facility information element including a BeginCONF invoke component to request a conference but the user is not subscribed to the CONF supplementary service,

sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a BeginCONF return error component indicating "notSubscribed" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and enters the call state N12 or N00.

CONF_N01_004 subclause 9.2.1.2 inopportune mandatory
Ensure that the IUT in the call state N00 receiving a (valid for CONF purpose) SETUP message to request a conference and the conference size requested by the user exceeds the size supported by the network side,

sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a BeginCONF return error component indicating "numberOfPartiesExceeded" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and re-enters the call state N00.

CONF_N01_005 subclause 9.2.1.2 inopportune mandatory
Ensure that the IUT in the call state N00 receiving a SETUP message with a Facility information element including a BeginCONF invoke component to request a conference and the IUT cannot accept the operation because of lack of a conference bridge or other resources,

sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a BeginCONF return error component indicating "resourceUnavailable" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and re-enters the call state N00.

CONF_N01_006 subclause 9.2.1.2 inopportune mandatory
Ensure that the IUT in the call state N00 receiving a SETUP message with a Facility information element including a BeginCONF invoke component to request a conference but with an incompatible (for CONF purpose) Bearer capability information element,

sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a BeginCONF return error component indicating "notAvailable" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) re-enters the call state N00.

6.2.1.1.2 Begin from N10

Selection: IUT supports beginning of the conference from the Active state N10. PICS: MC 4.2.

CONF_N02_001 subclause 9.2.2.1 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,

sends a FACILITY message with a Facility information element including a BeginCONF return result component containing a ConferenceId parameter and a unique PartyId parameter and remains in the same state.

CONF_N02_002 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference but the user is not subscribed to the CONF supplementary service,

sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "notSubscribed" and remains in the same state.

CONF_N02_003 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference and the conference size contained in the ConfSize parameter exceeds the size supported by the network,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "numberOfPartiesExceeded" and remains in the same state.

CONF_N02_004 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference and the network side cannot accept the operation because of the lack of a conference bridge or other resources,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "resourceUnavailable" and remains in the same state.

CONF_N02_005 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N02, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_006 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N04, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_007 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N06, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_008 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N07, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_009 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N09, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_010 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N12, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_011 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N19, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_012 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N25, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "invalidCallState" and remains in the same state.

CONF_N02_013 subclause 9.2.2.2 inopportune mandatory
Ensure that the IUT in the call state N10, reached with a Bearer capability information element for which CONF is not allowed, receiving a FACILITY message with a Facility information element including a BeginCONF invoke component to request a conference,

sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "notAvailable" and remains in the same state (SCRef).

6.2.1.2 Adding

CONF_N03_001 subclause 9.2.3.1 valid mandatory
Ensure that the IUT in the call state N10 (SCRef and CCRef), receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to a conference,

sends a DISCONNECT message to the served user with a Facility information element including an AddCONF return result component containing a unique PartyId parameter and a Cause information element, indicating cause #31 "Normal, unspecified" and a location field indicating "public network serving the local user" (value = 2 (0010)) and enters state N12 (SCRef).

CONF_N03_002 subclause 9.2.3.1 valid mandatory
Ensure that the IUT in the call state N10 (SCRef and CCRef), receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to a conference, which if accepted will have reached the maximum number of parties allowed,

sends a DISCONNECT message to the served user with a Facility information element including an AddCONF return result component containing a unique PartyId parameter and a Cause information element, indicating cause #31 "Normal, unspecified" and a location field indicating "public network serving the local user" (value = 2 (0010)) and enters state N12 (SCRef).

CONF_N03_003 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to a conference, containing a ConferenceId not associated with a conference known to the IUT,

sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "illConferenceId" and remains in the same state.

CONF_N03_004 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to a conference in excess of the maximum number of parties available,

sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "numberOfPartiesExceeded" and remains in the same state.

CONF_N03_005 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to a conference in violation of Closed User Group rules,

sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "supplementaryServiceInteractionNotAllowed".

CONF_N03_006 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N02,

sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_007 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N04,

sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_008 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N06,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_009 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N07,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_010 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N09,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_011 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N12,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_012 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N19,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_013 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 for CCRef, receiving a FACILITY message with a Facility information element including an AddCONF invoke component for a call reference (SCRef) value in the call state N25,
sends a FACILITY message containing a Facility information element, with an AddCONF return error component indicating "invalidCallState".

CONF_N03_014 subclause 9.2.3.2 inopportune mandatory
Ensure that the IUT in the call state N10 (SCRef) reached with a Bearer capability information element for which CONF is not allowed, receiving a FACILITY message with a Facility information element including an AddCONF invoke component to request the addition of a new remote user to an existing conference (CCRef),
sends a FACILITY message containing a Facility information element, with a BeginCONF return error component indicating "notAllowed" and remains in the same state (SCRef).

6.2.1.3 Isolate

CONF_N04_001 subclause 9.2.4.1 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a IsolateCONF invoke component to request the isolation of a remote user,
sends a FACILITY message to the served user with a Facility information element containing an IsolateCONF return result component and remains in the same state.

CONF_N04_002 subclause 9.2.4.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a IsolateCONF invoke component to request the isolation of a remote user containing a PartyId which is not associated with a remote user,
sends a FACILITY message containing a Facility information element, with an IsolateCONF return error component indicating "illPartyId" and remains in the same state.

CONF_N04_003 subclause 9.2.4.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a IsolateCONF invoke component to request the isolation of a remote user and the conference has not successfully been established,
sends a FACILITY message containing a Facility information element, with an IsolateCONF return error component indicating "notActive".

CONF_N04_004 subclause 9.2.4.2 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a IsolateCONF invoke component to request the isolation of a remote user and this remote user is already isolated,
sends a FACILITY message containing a Facility information element with an IsolateCONF return result component and remains in the same state.

6.2.1.4 Reattach

CONF_N05_001 subclause 9.2.5.1 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a ReattachCONF invoke component to request the reattachment of an isolated remote user,
sends a FACILITY message including a Facility information element containing a ReattachCONF return result component and remains in the same state.

CONF_N05_002 subclause 9.2.5.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a ReattachCONF invoke component to request the reattachment of an isolated remote user containing a PartyId which is not associated with this remote user,
sends a FACILITY message containing a Facility information element, with a ReattachCONF return error component indicating "illPartyId" and remains in the same state.

CONF_N05_003 subclause 9.2.5.2 inopportune mandatory
Ensure that the IUT, receiving a FACILITY message to reattach a remote user and the network cannot accept this operation because the conference has not successfully been established,
sends a FACILITY message containing a Facility information element, with a ReattachCONF return error component indicating "notActive".

CONF_N05_004 subclause 9.2.5.2 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a ReattachCONF invoke component to request the reattachment of an isolated remote user and this remote user is already reattached,
sends a FACILITY message containing a Facility information element, with a ReattachCONF return result component and remains in the same state.

6.2.1.5 Split

CONF_N06_001 subclause 9.2.6.1 valid mandatory
Ensure that the IUT in the CCRef call state N10, receiving a SETUP message with a Facility information element including a SplitCONF invoke component to split a remote user,
does not use the SETUP ACKNOWLEDGE message and does respond with a CALL PROCEEDING message followed by a CONNECT message with a Facility information element including a SplitCONF return result component, releases the PartyId parameter and enters state N10.

NOTE: The CALL PROCEEDING message is mandatory as en-bloc sending procedures apply (see EN 300 403-1 [8], subclause 5.1.5.1). The receipt of an ALERTING is possible also.

CONF_N06_002 subclause 9.2.6.2 inopportune mandatory
Ensure that the IUT in the SCRef call state N00 and in the CCRef call state N10, receiving a SETUP message with a Facility information element including a SplitCONF invoke component to split a remote user and the ConferenceId used is not associated with the conference,
sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a SplitCONF return error component indicating "illConferenceId" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and enters state N12 or N00.

CONF_N06_003 subclause 9.2.6.2 inopportune mandatory
Ensure that the IUT in the SCRef call state N00 and in the CCRef call state N10, receiving a SETUP message with a Facility information element including a SplitCONF invoke component to split a remote user and the PartyId used is not associated with a remote user,
sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a SplitCONF return error component indicating "illPartyId" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and re-enters state N12 or N00.

6.2.1.6 Conference disconnection

6.2.1.6.1 Disconnect of remote user

CONF_N07_001 subclause 9.2.7.1 valid mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a DropCONF invoke component to disconnect a remote user,
sends a FACILITY message containing a Facility information element with a DropCONF return result component and remains in the same state.

CONF_N07_002 subclause 9.2.7.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a DropCONF invoke component to disconnect a remote user containing a PartyId not associated with a remote user,
sends a FACILITY message containing a Facility information element, with a DropCONF return error component indicating "illPartyId" and remains in the same state.

CONF_N07_003 subclause 9.2.7.2 inopportune mandatory
Ensure that the IUT in the call state N10, receiving a FACILITY message with a Facility information element including a DropCONF invoke component to disconnect a remote user and the network cannot accept this operation because the conference has not successfully been established,
sends a FACILITY message containing a Facility information element, with a DropCONF return error component indicating "notActive".

6.2.1.6.2 Disconnect by Remote User

CONF_N08_001 subclause 9.2.8.1 valid mandatory
Ensure that the IUT in the call state N10, to indicate to the served user that a remote user has disconnected itself from the conference,
sends a FACILITY message containing a Facility information element with a PartyDISC invoke component with a parameter indicating the PartyId associated with the disconnected remote user.

6.2.1.7 Terminate

CONF_N09_001 subclause 9.2.9.1 inopportune mandatory
Ensure that the IUT in the CCRef call state N11 receiving a FACILITY message containing an IsolateCONF invoke component which was valid for this CCRef,
sends a FACILITY message containing an IsolateCONF return error component indicating "notActive".

CONF_N09_002 subclause 9.2.9.1 inopportune mandatory
Ensure that the IUT in the CCRef call state N11 receiving a FACILITY message containing a ReattachCONF invoke component which was valid for this CCRef,
sends a FACILITY message containing a ReattachCONF return error component indicating "notActive".

CONF_N09_003 subclause 9.2.9.1 inopportune mandatory
Ensure that the IUT in the CCRef call state N11 receiving a FACILITY message containing a DropCONF invoke component which was valid for this CCRef,
sends a FACILITY message containing a DropCONF return error component indicating "notActive".

CONF_N09_004 subclause 9.2.9.1 inopportune mandatory
Ensure that the IUT in the CCRef call state N11 receiving a SETUP message containing an AddCONF invoke component which was valid for this CCRef,
sends a FACILITY message containing an AddCONF return error component indicating "illConferenceId".

CONF_N09_005 subclause 9.2.9.1 inopportune mandatory
Ensure that the IUT in the CCRef call state N11 receiving a SETUP message containing a SplitCONF invoke component which was valid for this CCRef,
sends a DISCONNECT or a RELEASE COMPLETE message containing a Facility information element, with a SplitCONF return error component indicating "illConferenceId" and a Cause information element indicating cause #31 "Normal, unspecified" and containing a location field indicating "public network serving the local user" (value = 2 (0010)) and enters state N12 or N00.

6.2.2 Remote user

CONF_N10_001 subclause 9.2.2.1 valid mandatory
Ensure that the IUT in the call state N10, to indicate that the conference is established,
sends a NOTIFY message to the remote user with Notification indicator information element indicating that this remote user has been added to the conference ("Conference established") and remains in the same state.

CONF_N10_002 subclause 9.2.3.1 valid mandatory
Ensure that the IUT in the call state N10, to indicate the adding of a new user to the conference ,
sends a NOTIFY message, to the remote user who has been added, with Notification indicator information element indicating that this remote user has been added to the conference ("Conference established") and remains in the same state.

CONF_N10_003 subclause 9.2.3.1 valid mandatory
Ensure that the IUT in the call state N10, to indicate the adding of a new user to the conference,
sends a NOTIFY message, to the remote user who was already part of the conference, with Notification indicator information element indicating that another remote user has been added to the conference ("Other party added") and remains in the same state.

NOTE 1: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

CONF_N10_004 subclause 9.2.4.1 valid mandatory
Ensure that the IUT in the call state N10, after the isolation of a remote user,
sends a NOTIFY message to the isolated remote user with Notification indicator information element indicating that this remote user has been isolated ("Isolated") and remains in the same state.

CONF_N10_005 subclause 9.2.4.1 valid mandatory
Ensure that the IUT in the call state N10, after the isolation of a remote user,
sends a NOTIFY message to the remote user with a Notification indicator information element indicating that a remote user has been isolated ("Other party isolated").

NOTE 2: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

CONF_N10_006 subclause 9.2.5.1 valid mandatory
Ensure that the IUT in the call state N10, after the reattachment of a remote user,
sends a NOTIFY message to the isolated remote user with Notification indicator information element indicating that this remote user has been reattached ("Reattached") and remains in the same state.

CONF_N10_007 subclause 9.2.5.1 valid mandatory
Ensure that the IUT, if previously isolated remote user has been successfully reattached,
sends a NOTIFY message to the remote user with a Notification indicator information element indicating that a remote user has been reattached ("Other party reattached").

NOTE 3: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

CONF_N10_008 subclause 9.2.6.1 valid mandatory
Ensure that the IUT in the SCRef call state N10, after the splitting of a remote user,
sends a NOTIFY message to the split remote user with Notification indicator information element indicating "Conference disconnected" and remains in the same state.

CONF_N10_009 subclause 9.2.6.1 valid mandatory
Ensure that the IUT, if a remote user has been successfully split,
sends a NOTIFY message to the remote user with a Notification indicator information element indicating that a remote user has been split ("Other party split").

NOTE 4: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

CONF_N10_010 subclause 9.2.7.1 valid mandatory
Ensure that the IUT, if a remote user has been successfully disconnected from the conference,
sends a NOTIFY message to the remote user with a Notification indicator information element indicating that a remote user has been disconnected ("Other party disconnected").

NOTE 5: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

CONF_N10_011 subclause 9.2.8.1 valid mandatory
Ensure that the IUT, if a remote user has successfully disconnected itself from the conference,
sends a NOTIFY message to the remote user with a Notification indicator information element indicating that a remote user has been disconnected ("Other party disconnected").

NOTE 6: The focus of the test purpose is the single interface with one remote user. It should be noted that the network is required to send notification to all remote users.

7 Compliance

An ATS which complies with this TSS&TP specification shall:

a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 6;

b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 5;

c) use the same naming conventions for the test groups and test cases;

d) maintain the relationship specified in clause 6 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;

e) comply with ISO/IEC 9646-2 [4].

In the case of a) or b) above, a subset shall be used only where a particular Abstract Test Method (ATM) makes some TPs untestable. All testable TPs from clause 6 shall be included in a compliant ATS.

8 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [4], shall be used by any organization claiming to provide a comprehensive testing service for network equipment claiming conformance to EN 300 185-1 [1].

Annex A (informative): Changes with respect to the previous ETS 300 185-5

The following changes have been done:

- conversion to EN layout;
- replacement of references to ETS 300 102 with EN 300 403;
- substitution of non-specific references to basic standards where the intention is to refer to the latest version.

History

Document history		
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