

ETSI EN 300 443-5 V1.3.1 (2001-06)

European Standard (Telecommunications series)

**Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
B-ISDN user-network interface layer 3
specification for basic call/bearer control;
Part 5: Test Suite Structure and Test Purposes (TSS&TP)
specification for the network**



Reference

REN/SPAN-130254-5

Keywords

BC, B-ISDN, broadband, DSS2, layer 3, network,
TSS&TP, UNI

ETSI

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

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

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

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

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

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

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

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2001.
All rights reserved.

Contents

Intellectual Property Rights	5
Foreword.....	5
1 Scope.....	6
2 References.....	6
3 Definitions and abbreviations.....	7
3.1 Definitions	7
3.1.1 Definitions related to conformance testing.....	7
3.1.2 Definitions related to EN 300 443-1	7
3.2 Abbreviations.....	7
4 Test Suite Structure (TSS)	8
5 Test Purposes (TP).....	9
5.1 Introduction.....	9
5.1.1 TP naming convention	9
5.1.2 Source of TP definition	9
5.1.3 Test strategy	9
5.1.4 Test of call states.....	9
5.2 TPs for the basic call/bearer control, layer 3, network.....	10
5.2.1 Signalling procedures at the coincident S_B/T_B and at the T_B reference points	10
5.2.1.1 Call/connection establishment at the originating interface.....	10
5.2.1.1.1 Connection identifier (VPCI/VCI) allocation/selection (01).....	10
5.2.1.1.2 QOS and traffic parameter selection procedures (04).....	12
5.2.1.1.3 Invalid call/connection control information (05).....	12
5.2.1.1.4 Call/connection proceeding (06)	13
5.2.1.1.5 Call/connection confirmation indication (07)	13
5.2.1.1.6 Call/connection acceptance (08)	13
5.2.1.1.7 Call/connection rejection (09).....	14
5.2.1.1.8 Transit network selection (10)	14
5.2.1.2 Call/connection establishment at the destination interface.....	15
5.2.1.2.1 Incoming call/connection request (11)	15
5.2.1.2.2 Connection identifier (VPCI/VCI) allocation/selection (12).....	15
5.2.1.2.3 Call/connection confirmation (15)	16
5.2.1.2.4 Call/connection acceptance (16)	17
5.2.1.3 Call/connection clearing	17
5.2.1.3.1 Exception conditions (17).....	17
5.2.1.3.2 Clearing initiated by the user (18).....	17
5.2.1.3.3 Clearing initiated by the network (19).....	18
5.2.1.3.4 Clear collision (20).....	18
5.2.1.4 Restart procedure.....	19
5.2.1.4.1 Sending RESTART (21).....	19
5.2.1.4.2 Receipt of RESTART (22)	19
5.2.1.4.3 Remote interface (23).....	22
5.2.1.5 Handling of error conditions	22
5.2.1.5.1 Error handling in N0 (24)	22
5.2.1.5.2 Error handling in N3 (25)	26
5.2.1.5.3 Error handling in N4 (26)	27
5.2.1.5.4 Error handling in N6 (27)	29
5.2.1.5.5 Error handling in N7 (28)	32
5.2.1.5.6 Error handling in N9 (29)	34
5.2.1.5.7 Error handling in N10 - incoming call (30)	37
5.2.1.5.8 Error handling in N10 - outgoing call (31)	40
5.2.1.5.9 Error handling in N12 - incoming call (32)	43
5.2.1.5.10 Error handling in N12 - outgoing call (33)	46
5.2.1.5.11 Error handling in R0 (34)	48

5.2.1.5.12	Error handling in R1 (35)	50
5.2.1.6	Notification procedures (36)	53
5.2.2	Signalling procedures for interworking between N-ISDN and B-ISDN.....	53
5.2.2.1	Interworking N-ISDN -> B-ISDN (37).....	53
5.2.2.2	Interworking B-ISDN -> N-ISDN (38).....	54
5.2.3	End-to-end connection completion indication (39).....	54
6	Compliance	55
7	Requirements for a comprehensive testing service.....	55
Annex A (informative):	Bibliography.....	56
History		57

Intellectual Property Rights

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

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

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 5 of a multi-part deliverable covering Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]";
- 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".

National transposition dates	
Date of adoption of this EN:	15 June 2001
Date of latest announcement of this EN (doa):	30 September 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2002
Date of withdrawal of any conflicting National Standard (dow):	31 March 2002

1 Scope

The present document specifies the network Test Suite Structure and Test Purposes (TSS&TP) for the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [5]) of implementations conforming to the standards for the signalling user-network layer 3 specification for basic call/bearer control of the Digital Subscriber Signalling System No. two (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), EN 300 443-1 [1].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document.

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.

- [1] ETSI EN 300 443-1 (2.0.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
- [2] ETSI EN 300 443-2 (V1.3.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Parts 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-2 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [5] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".
- [6] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 300 443-1 [1] and the following apply.

3.1.1 Definitions related to conformance testing

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

Abstract Test Method (ATM): 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]

lower tester: 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]

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

3.1.2 Definitions related to EN 300 443-1

network: DSS2 protocol entity at the Network side of the user-network interface where a T_B reference point or coincident S_B and T_B reference point applies

network (S_B/T_B): DSS2 protocol entity at the Network side of the user-network interface where a coincident S_B and T_B reference point applies

network (T_B): DSS2 protocol entity at the Network side of the user-network interface where a T_B reference point applies (user is the private ISDN)

3.2 Abbreviations

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

ATM	Abstract Test Method
ATS	Abstract Test Suite
B-ISDN	Broadband Integrated Services Digital Network
DSS2	Digital Subscriber Signalling System No. two
IUT	Implementation Under Test
N0	Null call state
N10	Active call state
N12	Release Indication call state
N2	Overlap Sending call state
N3	Outgoing Call Proceeding call state
N4	Call Delivered call state
N6	Call Present call state
N7	Call Received call state
N9	Incoming Call Proceeding call state
N-ISDN	Narrowband Integrated Services Digital Network
PICS	Protocol Implementation Conformance Statement

PIXIT	Protocol Implementation eXtra Information for Testing
Rest 0	Restart Null state
Rest 1	Restart Request state
Rest 2	Restart state
TP	Test Purpose
TSS	Test Suite Structure
VC	Virtual Channel
VCI	Virtual Channel Identifier
VP	Virtual Path
VPC	Virtual Path Connection
VPCI	Virtual Path Connection Identifier

4 Test Suite Structure (TSS)

Signalling procedures at the coincident S_B/T_B and at the T_B reference points

Call/connection establishment at the originating interface	
Connection identifier (VPCI/VCI) allocation/selection	(01)
Associated signalling.....	(02)
Non-associated signalling	(03)
QOS and traffic parameters selection procedures.....	(04)
Invalid call/connection control information	(05)
Call/connection proceeding.....	(06)
Call/connection confirmation indication	(07)
Call/connection acceptance	(08)
Call/connection rejection	(09)
Transit network selection	(10)
Call/connection establishment at the destination interface	
Incoming call/connection request	(11)
Connection identifier (VPCI/VCI) allocation/selection	(12)
Associated signalling.....	(13)
Non-associated signalling	(14)
Call/connection confirmation	(15)
Call/connection acceptance	(16)
Call/connection clearing	
Exception conditions	(17)
Clearing initiated by the user.....	(18)
Clearing initiated by the network	(19)
Clear collision	(20)
Restart procedure	
Sending RESTART	(21)
Receipt of RESTART	(22)
Remote user.....	(23)
Handling of error conditions	
Error handling in N0.....	(24)
Error handling in N3.....	(25)
Error handling in N4.....	(26)
Error handling in N6.....	(27)
Error handling in N7.....	(28)
Error handling in N9.....	(29)
Error handling in N10 - incoming call	(30)
Error handling in N10 - outgoing call.....	(31)
Error handling in N12 - incoming call	(32)
Error handling in N12 - outgoing call.....	(33)
Error handling in Rest 0	(34)
Error handling in Rest 1	(35)
Notification procedures.....	(36)

Signalling procedures for interworking between N-ISDN and B-ISDN	
Interworking N-ISDN -> B-ISDN.....	(37)
Interworking B-ISDN -> N-ISDN.....	(38)
End-to-end completion indication procedures	(39)

Figure 1: Test suite structure

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 TP naming convention

TPs are numbered, starting at 01, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite (see table 1).

Table 1: TP identifier naming convention scheme

Identifier:	<suite_id>_<group>_<nn>		
<suite_id>	=	layer + type of IUT:	"L3BN" for Layer 3 Basic call/bearer control, IUT = N etwork
<group>	=	group number:	two character field representing the group reference according to TSS
<nn>	=	sequential number:	(01-99)

5.1.2 Source of TP definition

The TPs are based on EN 300 443-1 [1].

5.1.3 Test strategy

As the base standard EN 300 443-1 [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 300 443-2 [2].

The TPs are only based on conformance requirements related to the externally observable behaviour of the IUT, and are limited to conceivable situations to which a real implementation is likely to be faced (ETS 300 406 [6]).

5.1.4 Test of call states

Many TPs include a reference to the IUT's final call state after the realization of the TP. In these cases the TP includes the requirement to ensure that the IUT has entered this particular final call state. Ensuring that the IUT is in a particular call state shall be realized by following the procedures described in clause 5.6.11 of EN 300 443-1 [1]. According to these procedures, the IUT on receipt of a STATUS ENQUIRY message, shall respond with a STATUS message indicating, in the fifth octet of the Call state information element, the current call state of the IUT. This exchange of messages is not mentioned explicitly in each TP but is considered to be implicit in the reference to the final call state. This way of phrasing the TPs has been used to avoid over-complicating the text and structure of the TPs and to improve the readability.

5.2 TPs for the basic call/bearer control, layer 3, network

All PICS items referred to in this clause are as specified in EN 300 443-2 [2] unless indicated otherwise by another numbered reference.

Unless specified:

- the messages indicated are valid and contain at least the mandatory information elements and possibly optional information elements;
- the information elements indicated are valid and contain at least the mandatory parameters and possibly optional parameters.

5.2.1 Signalling procedures at the coincident S_B/T_B and at the T_B reference points

Test purposes for EN 300 443-1 [1], clause 5.1.

5.2.1.1 Call/connection establishment at the originating interface

Test purposes for EN 300 443-1 [1], clause 5.1.

5.2.1.1.1 Connection identifier (VPCI/VCI) allocation/selection (01)

Test purposes for EN 300 443-1 [1], clause 5.1.2.

L3BN_01_01

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling),

- sends a RELEASE COMPLETE message (Cause value = 36) and remains in N0.

Selection: Associated signalling at the originating side NOT supported. PICS: NOT MCn 1.1.

5.2.1.1.1.1 Associated signalling (02)

Test purposes for EN 300 443-1 [1], clause 5.1.2.1.

Selection: Associated signalling at the originating side supported. PICS: MCn 1.1.

L3BN_02_01

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; any VCI), when a VCI is available in the VPC carrying the signalling VC,

- sends a CALL PROCEEDING message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating a specific VCI) and enters N3.

L3BN_02_02

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating a specific VCI), when the requested VCI is available in the VPC carrying the signalling VC,

- sends a CALL PROCEEDING message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating the requested VCI) and enters N3.

L3BN_02_03

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; any VCI), when no VCI is available in the VPC carrying the signalling VC,

- sends a RELEASE COMPLETE message (Cause value = 45) and remains in N0.

L3BN_02_04

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating a specific VCI), when the requested VCI is not available in the VPC carrying the signalling VC,

- sends a RELEASE COMPLETE message (Cause value = 35) and remains in N0.

5.2.1.1.1.2 Non-associated signalling (03)

Test purposes for EN 300 443-1 [1], clause 5.1.2.2.

L3BN_03_01

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), when a VCI is available within the requested VPCI,

- sends a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating the requested VPCI, virtual channel identifier indicating a specific VCI) and enters N3.

L3BN_03_02

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VCI is available within the requested VPCI,

- sends a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating the requested VPCI, virtual channel identifier indicating the requested VCI) and enters N3.

L3BN_03_03

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier absent), when a VCI is available within any VPCI,

- sends a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI) and enters N3.

L3BN_03_04

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), when the requested VPCI is not available,

- sends a RELEASE COMPLETE message (Cause value = 35) and remains in N0.

L3BN_03_05

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VPCI is not available,

- sends a RELEASE COMPLETE message (Cause value = 35) and remains in N0.

L3BN_03_06

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when no VCI is available within the requested VPCI,

- sends a RELEASE COMPLETE message (Cause value = 45) and remains in N0.

L3BN_03_07

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VCI is not available within the requested VPCI,

- sends a RELEASE COMPLETE message (Cause value = 35) and remains in N0.

L3BN_03_08

Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier absent), when no VCI is available within any VPCI,

- sends a RELEASE COMPLETE message (Cause value = 45) and remains in N0.

5.2.1.1.2 QOS and traffic parameter selection procedures (04)

Test purposes for EN 300 443-1 [1], clause 5.1.3.

L3BN_04_01

Ensure that the IUT in N0, on receipt of a SETUP message (Valid combination of traffic parameters, Quality of service parameter present, requesting a QOS class that is not supported),

- sends a RELEASE COMPLETE message (Cause value = 49) and remains in N0.

L3BN_04_02

Ensure that the IUT in N0, on receipt of a SETUP message (Invalid combination of traffic parameters and QOS class),

- sends a RELEASE COMPLETE message (Cause value = 73) and remains in N0.

L3BN_04_03

Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, invalid combination of transit delay, traffic parameters and QOS class),

- sends a RELEASE COMPLETE message (Cause value = 73) and remains in N0.

L3BN_04_04

Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, maximum end-to-end transit delay absent),

- sends a RELEASE COMPLETE message (Cause value = 100) and remains in N0.

L3BN_04_05

Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, cumulative end-to-end transit delay absent),

- sends a RELEASE COMPLETE message (Cause value = 100) and remains in N0.

L3BN_04_06

Ensure that the IUT in N3, having received a SETUP message (End-to-end transit delay present), to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message (End-to-end transit delay present, maximum end-to-end transit delay absent) and enters N10.

L3BN_04_07

Ensure that the IUT in N4, having received a SETUP message (End-to-end transit delay present, maximum end-to-end transit delay absent), to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message (End-to-end transit delay present) and enters N10.

L3BN_04_08

Ensure that the IUT in N0, on receipt of a SETUP message (ATM traffic descriptor present, requesting a peak cell rate that can not be provided),

- sends a RELEASE COMPLETE message (Cause value = 37) and remains in N0.

5.2.1.1.3 Invalid call/connection control information (05)

Test purposes for EN 300 443-1 [1], clause 5.1.4.

L3BN_05_01

Ensure that the IUT in N0, on receipt of a SETUP message (Called party number present, indicating invalid call information, i.e. unassigned called party number),

- sends a RELEASE message (Cause value = 1) possibly preceded by a CALL PROCEEDING message and enters N12 or sends a RELEASE COMPLETE message (Cause value = 1) and remains in N0.

L3BN_05_02

Ensure that the IUT in N0, on receipt of a SETUP message (Called party number present, indicating invalid call information, i.e. no outgoing trunk direction exists for the called party number),

- sends a RELEASE message (Cause value = 3) possibly preceded by a CALL PROCEEDING message and enters N12 or sends a RELEASE COMPLETE message (Cause value = 3) and remains in N0.

L3BN_05_03

Ensure that the IUT in N0, on receipt of a SETUP message (Called party number present, indicating invalid call information, i.e. a called party number that has been changed),

- sends a RELEASE message (Cause value = 22) possibly preceded by a CALL PROCEEDING message and enters N12 or sends a RELEASE COMPLETE message (Cause value = 22) and remains in N0.

L3BN_05_04

Ensure that the IUT in N0, on receipt of a SETUP message (Called party number present, indicating invalid call information, i.e. an incomplete called party number),

- sends a RELEASE message (Cause value = 28) possibly preceded by a CALL PROCEEDING message and enters N12 or sends a RELEASE COMPLETE message (Cause value = 28) and remains in N0.

5.2.1.1.4 Call/connection proceeding (06)

Test purposes for EN 300 443-1 [1], clause 5.1.5.

L3BN_06_01

Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is authorized and available),

- sends a CALL PROCEEDING message and enters N3.

L3BN_06_02

Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is not authorized),

- sends a RELEASE COMPLETE message (Cause value = 57) and remains in N0.

L3BN_06_03

Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is not available),

- sends a RELEASE COMPLETE message (Cause value = 58, 63 or 65) and remains in N0.

5.2.1.1.5 Call/connection confirmation indication (07)

Test purposes for EN 300 443-1 [1], clause 5.1.6.

L3BN_07_01

Ensure that the IUT in N3, to indicate that user alerting has been initiated at the called user's side,

- sends an ALERTING message and enters N4.

5.2.1.1.6 Call/connection acceptance (08)

Test purposes for EN 300 443-1 [1], clause 5.1.7.

L3BN_08_01

Ensure that the IUT in N3, to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message and enters N10.

L3BN_08_02

Ensure that the IUT in N4, to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message and enters N10.

L3BN_08_03

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message,

- sends no message and remains in N10.

5.2.1.1.7 Call/connection rejection (09)

Test purposes for EN 300 443-1 [1], clauses 5.1.8, 5.2.5, 5.4 and annex B.

L3BN_09_01

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (Broadband bearer capability not supported),

- sends a RELEASE message (Cause value = 88) and enters N12.

L3BN_09_02

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (QOS class can not be provided),

- sends a RELEASE message (Cause value = 49) and enters N12.

L3BN_09_03

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (peak cell rate can not be provided),

- sends a RELEASE message (Cause value = 47) and enters N12.

L3BN_09_04

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (call rejected),

- sends a RELEASE message (Cause value = 21) and enters N12.

L3BN_09_05

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (user busy),

- sends a RELEASE message (Cause value = 17) and enters N12.

L3BN_09_06

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (second expiry of T303),

- sends a RELEASE message (Cause value = 18) and enters N12.

L3BN_09_07

Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (expiry of T310),

- sends a RELEASE message (Cause value = 18) and enters N12.

L3BN_09_08

Ensure that the IUT in N4, to indicate that the call has not been accepted at the called user's side (expiry of T301),

- sends a RELEASE message (Cause value = 19) and enters N12.

5.2.1.1.8 Transit network selection (10)

Test purposes for EN 300 443-1 [1], clause 5.1.9, annex D.

Selection: Transit network selection procedures supported. PICS: MCn 11.

L3BN_10_01

Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating a transit network not recognized by the IUT),

- sends a RELEASE message (Cause value = 2) preceded by a CALL PROCEEDING message and enters N12.

L3BN_10_02

Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating the transit network selection in an incorrect format),

- sends a RELEASE message (Cause value = 91) preceded by a CALL PROCEEDING message and enters N12.

L3BN_10_03

Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating valid network selection information), to indicate that it can not route the call to the requested direction due to insufficient bandwidth,

- sends a RELEASE message (Cause value = 37) preceded by a CALL PROCEEDING message and enters N12.

5.2.1.2 Call/connection establishment at the destination interface

Test purposes for EN 300 443-1 [1], clause 5.2.

5.2.1.2.1 Incoming call/connection request (11)

Test purposes for EN 300 443-1 [1], clauses 5.2.1 and 5.2.4.

L3BN_11_01

Ensure that the IUT in N0, to indicate the arrival of a call,

- sends a SETUP message (Quality of service parameter, ATM traffic descriptor present) and enters N6.

L3BN_11_02

Ensure that the IUT in N0, to indicate the arrival of a call by using the en bloc receiving procedures,

- sends a SETUP message (Quality of service parameter, ATM traffic descriptor, Broadband sending complete present) and enters N6.

L3BN_11_03

Ensure that the IUT in N6, on the first expiry of T303,

- sends a SETUP message (same contents as the first SETUP message) and remains in N6.

L3BN_11_04

Ensure that the IUT in N6, on the second expiry of T303,

- sends a no message and enters N0.

5.2.1.2.2 Connection identifier (VPCI/VCI) allocation/selection (12)

Test purposes for EN 300 443-1 [1], clause 5.2.3.

5.2.1.2.2.1 Associated signalling (13)

Test purposes for EN 300 443-1 [1], clause 5.2.3.1.

Selection: Associated signalling on the destination side supported. PICS: MCn 2.1.

L3BN_13_01

Ensure that the IUT in N0, to indicate the arrival of a call,

- sends a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling) and enters N6.

5.2.1.2.2.2 Non-associated signalling (14)

Test purposes for EN 300 443-1 [1], clause 5.2.3.2.

L3BN_14_01

Ensure that the IUT in N0, to indicate the arrival of a call,

- sends a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI) and enters N6.

L3BN_14_02

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

L3BN_14_03

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

L3BN_14_04

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of an ALERTING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

L3BN_14_05

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of an ALERTING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

L3BN_14_06

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of a CONNECT message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

L3BN_14_07

Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of a CONNECT message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

- sends a RELEASE message (Cause value = 36) and enters N12.

5.2.1.2.3 Call/connection confirmation (15)

Test purposes for EN 300 443-1 [1], clause 5.2.5.

L3BN_15_01

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message,

- sends no message and enters N9.

L3BN_15_02

Ensure that the IUT in N6, on receipt of an ALERTING message,

- sends no message and enters N7.

L3BN_15_03

Ensure that the IUT in N9, on receipt of an ALERTING message,

- sends no message and enters N7.

L3BN_15_04

Ensure that the IUT in N9, on the expiry of T310,

- sends a RELEASE message (Cause value = 102) and enters N12.

L3BN_15_05

Ensure that the IUT in N7, on the expiry of T301,

- sends a RELEASE message (Cause value = 102) and enters N12.

5.2.1.2.4 Call/connection acceptance (16)

Test purposes for EN 300 443-1 [1], clause 5.2.6.

L3BN_16_01

Ensure that the IUT in N6, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_16_02

Ensure that the IUT in N7, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_16_03

Ensure that the IUT in N9, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

5.2.1.3 Call/connection clearing

Test purposes for EN 300 443-1 [1], clause 5.4.

5.2.1.3.1 Exception conditions (17)

Test purposes for EN 300 443-1 [1], clause 5.4.2.

L3BN_17_01

Ensure that the IUT in N6, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

5.2.1.3.2 Clearing initiated by the user (18)

Test purposes for EN 300 443-1 [1], clause 5.4.3.

L3BN_18_01

Ensure that the IUT in N3, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_18_02

Ensure that the IUT in N4, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_18_03

Ensure that the IUT in N7, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_18_04

Ensure that the IUT in N9, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_18_05

Ensure that the IUT in N10 (incoming call), on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_18_06

Ensure that the IUT in N10 (outgoing call), on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

5.2.1.3.3 Clearing initiated by the network (19)

Test purposes for EN 300 443-1 [1], clause 5.4.4.

L3BN_19_01

Ensure that the IUT in N3, to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_02

Ensure that the IUT in N4, to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_03

Ensure that the IUT in N7, to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_04

Ensure that the IUT in N9, to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_05

Ensure that the IUT in N10 (incoming call), to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_06

Ensure that the IUT in N10 (outgoing call), to initiate call clearing,
- sends a RELEASE message and enters N12.

L3BN_19_07

Ensure that the IUT in N12 (incoming call), on receipt of a RELEASE COMPLETE message,
- sends no message and enters N0.

L3BN_19_08

Ensure that the IUT in N12 (outgoing call), on receipt of a RELEASE COMPLETE message,
- sends no message and enters N0.

L3BN_19_09

Ensure that the IUT in N12 (incoming call), on the expiry of T308,
- sends a RELEASE message and remains in N12.

L3BN_19_10

Ensure that the IUT in N12 (outgoing call), on the expiry of T308,
- sends a RELEASE message and remains in N12.

5.2.1.3.4 Clear collision (20)

Test purposes for EN 300 443-1 [1], clause 5.4.5.

L3BN_20_01

Ensure that the IUT in N12 (incoming call), on receipt of a RELEASE message,
- sends no message and enters N0.

L3BN_20_02

Ensure that the IUT in N12 (outgoing call), on receipt of a RELEASE message,
- sends no message and enters N0.

5.2.1.4 Restart procedure

Test purposes for EN 300 443-1 [1], clause 5.5.

5.2.1.4.1 Sending RESTART (21)

Test purposes for EN 300 443-1 [1], clause 5.5.1.

L3BN_21_01

Ensure that the IUT in Rest 0, to return virtual channels to the idle condition,

- sends a RESTART message and enters Rest 1.

L3BN_21_02

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message,

- sends no message and enters Rest 0.

L3BN_21_03

Ensure that the IUT in Rest 1, on the first expiry of T316,

- sends a RESTART message and remains in Rest 1.

L3BN_21_04

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Connection identifier different to the one sent by the IUT in the RESTART message),

- sends no message and remains in Rest 1.

5.2.1.4.2 Receipt of RESTART (22)

Test purposes for EN 300 443-1 [1], clause 5.5.2.

L3BN_22_01

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI),

- sends a RESTART ACKNOWLEDGE message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating the requested VPCI, virtual channel identifier indicating the requested VCI) and re-enters Rest 0.

L3BN_22_02

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating a specific VPCI),

- sends a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating the requested VPCI) and re-enters Rest 0.

L3BN_22_03

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent),

- sends a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

L3BN_22_04

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating a specific VPCI, virtual channel identifier = the signalling virtual channel),

- sends no message or optionally sends a STATUS message (Call reference value = global call reference, cause value = 82, call state value = Rest 0) and remains in Rest 0.

L3BN_22_05

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = IE instruction field not significant),
optionally sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

L3BN_22_06

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),
- sends no message and remains in Rest 0.

L3BN_22_07

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),
- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and remains in Rest 0.

L3BN_22_08

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),
- sends no message and remains in Rest 0.

L3BN_22_09

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),
- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

L3BN_22_10

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),
- sends a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

L3BN_22_11

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),
- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

L3BN_22_12

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier absent),
- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 0) and remains in Rest 0.

L3BN_22_13

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_22_14

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_22_15

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

L3BN_22_16

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

L3BN_22_17

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_22_18

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_22_19

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

L3BN_22_20

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

5.2.1.4.3 Remote interface (23)

Test purposes for EN 300 443-1 [1], clause 5.5.

L3BN_23_01

Ensure that the IUT in N3, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

L3BN_23_02

Ensure that the IUT in N4, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

L3BN_23_03

Ensure that the IUT in N7, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

L3BN_23_04

Ensure that the IUT in N9, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

L3BN_23_05

Ensure that the IUT in N10 (incoming call), to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

L3BN_23_06

Ensure that the IUT in N10 (outgoing call), to indicate that the virtual channels have been returned to an idle condition at the remote interface,

- sends a RELEASE message (Cause value = 41) and enters N12.

5.2.1.5 Handling of error conditions

Test purposes for EN 300 443-1 [1], clauses 5.6 and 5.7.

5.2.1.5.1 Error handling in N0 (24)

L3BN_24_01

Ensure that the IUT in N0, on receipt of a SETUP message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N0.

L3BN_24_02

Ensure that the IUT in N0, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N0.

L3BN_24_03

Ensure that the IUT in N0, on receipt of a SETUP message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N0.

L3BN_24_04

Ensure that the IUT in N0, on receipt of a SETUP message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N0.

L3BN_24_05

Ensure that the IUT in N0, on receipt of an ALERTING message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_06

Ensure that the IUT in N0, on receipt of a CALL PROCEEDING message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_07

Ensure that the IUT in N0, on receipt of a CONNECT message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_08

Ensure that the IUT in N0, on receipt of a CONNECT ACKNOWLEDGE message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_09

Ensure that the IUT in N0, on receipt of a NOTIFY message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_10

Ensure that the IUT in N0, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in N0.

L3BN_24_11

Ensure that the IUT in N0, on receipt of a RELEASE COMPLETE message,

- sends no message and remains in N0.

L3BN_24_12

Ensure that the IUT in N0, on receipt of a SETUP message (Call reference flag = 1),

- sends no message and remains in N0.

L3BN_24_13

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 1),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_14

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 3),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_15

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 4),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_16

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 6),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_17

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 7),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_18

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 8),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_19

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 9),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_20

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 10),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_21

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 11),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_22

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 12),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in N0.

L3BN_24_23

Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 0),

- sends no message and remains in N0.

L3BN_24_24

Ensure that the IUT in N0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 1),

- sends no message and remains in N0.

L3BN_24_25

Ensure that the IUT in N0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 2),

- sends no message and remains in N0.

L3BN_24_26

Ensure that the IUT in N0, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 0) and remains in N0.

L3BN_24_27

Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and remains in N0.

L3BN_24_28

Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 100) and remains in N0.

L3BN_24_29

Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE COMPLETE message (Cause value = 100) and remains in N0.

L3BN_24_30

Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 0) and remains in N0.

L3BN_24_31

Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

L3BN_24_32

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- optionally sends a STATUS message (Cause value = 99, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

L3BN_24_33

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE COMPLETE message (Cause value = 99) and remains in N0.

L3BN_24_34

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 0) and remains in N0.

L3BN_24_35

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

L3BN_24_36

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

L3BN_24_37

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CALL PROCEEDING message and enters N3.

L3BN_24_38

Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

L3BN_24_39

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- optionally sends a STATUS message (Cause value = 100, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

L3BN_24_40

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE COMPLETE message (Cause value = 100) and remains in N0.

L3BN_24_41

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 0) and remains in N0.

L3BN_24_42

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

L3BN_24_43

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 100, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

L3BN_24_44

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CALL PROCEEDING message and enters N3.

L3BN_24_45

Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 100, call state value = 1) followed by a CALL PROCEEDING message and enters N3.

5.2.1.5.2 Error handling in N3 (25)

L3BN_25_01

Ensure that the IUT in N3, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N3.

L3BN_25_02

Ensure that the IUT in N3, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N3.

L3BN_25_03

Ensure that the IUT in N3, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N3.

L3BN_25_04

Ensure that the IUT in N3, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N3.

L3BN_25_05

Ensure that the IUT in N3, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N3.

L3BN_25_06

Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 3) and remains in N3.

L3BN_25_07

Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_25_08

Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 3) and remains in N3.

L3BN_25_09

Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N3.

L3BN_25_10

Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 3) and remains in N3.

L3BN_25_11

Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 3) and remains in N3.

L3BN_25_12

Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_25_13

Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 3) and remains in N3.

L3BN_25_14

Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N3.

L3BN_25_15

Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 3) and remains in N3.

L3BN_25_16

Ensure that the IUT in N3, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_25_17

Ensure that the IUT in N3, on receipt of a RELEASE message (Cause information element absent),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters N0.

L3BN_25_18

Ensure that the IUT in N3, on receipt of a RELEASE message (Cause information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_25_19

Ensure that the IUT in N3, on receipt of a RELEASE message (Unrecognized information element present),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_25_20

Ensure that the IUT in N3, on receipt of a RELEASE message (Optional information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_25_21

Ensure that the IUT in N3, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in N3.

L3BN_25_22

Ensure that the IUT in N3, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 3) and remains in N3.

L3BN_25_23

Ensure that the IUT in N3, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.3 Error handling in N4 (26)

L3BN_26_01

Ensure that the IUT in N4, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N4.

L3BN_26_02

Ensure that the IUT in N4, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N4.

L3BN_26_03

Ensure that the IUT in N4, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N4.

L3BN_26_04

Ensure that the IUT in N4, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N4.

L3BN_26_05

Ensure that the IUT in N4, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N4.

L3BN_26_06

Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 4) and remains in N4.

L3BN_26_07

Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_26_08

Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 4) and remains in N4.

L3BN_26_09

Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N4.

L3BN_26_10

Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 4) and remains in N4.

L3BN_26_11

Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 4) and remains in N4.

L3BN_26_12

Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_26_13

Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 4) and remains in N4.

L3BN_26_14

Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N4.

L3BN_26_15

Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 4) and remains in N4.

L3BN_26_16

Ensure that the IUT in N4, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_26_17

Ensure that the IUT in N4, on receipt of a RELEASE message (Cause information element absent),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters N0.

L3BN_26_18

Ensure that the IUT in N4, on receipt of a RELEASE message (Cause information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_26_19

Ensure that the IUT in N4, on receipt of a RELEASE message (Unrecognized information element present),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_26_20

Ensure that the IUT in N4, on receipt of a RELEASE message (Optional information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_26_21

Ensure that the IUT in N4, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in N4.

L3BN_26_22

Ensure that the IUT in N4, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 4) and remains in N4.

L3BN_26_23

Ensure that the IUT in N4, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.4 Error handling in N6 (27)

L3BN_27_01

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N6.

L3BN_27_02

Ensure that the IUT in N6, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N6.

L3BN_27_03

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N6.

L3BN_27_04

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N6.

L3BN_27_05

Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 6) and remains in N6.

L3BN_27_06

Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_27_07

Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 6) and remains in N6.

L3BN_27_08

Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N6.

L3BN_27_09

Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 6) and remains in N6.

L3BN_27_10

Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 6) and remains in N6.

L3BN_27_11

Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_27_12

Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 6) and remains in N6.

L3BN_27_13

Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N6.

L3BN_27_14

Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 6) and remains in N6.

L3BN_27_15

Ensure that the IUT in N6, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

L3BN_27_16

Ensure that the IUT in N6, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_27_17

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 99, call state value = 9) and enters N9.

L3BN_27_18

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 99) and enters N12.

L3BN_27_19

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 6) and remains in N6.

L3BN_27_20

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N6.

L3BN_27_21

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 9) and enters N9.

L3BN_27_22

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N9.

L3BN_27_23

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 9) and enters N9.

L3BN_27_24

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 100, call state value = 9) and enters N9.

L3BN_27_25

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_27_26

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 6) and remains in N6.

L3BN_27_27

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N6.

L3BN_27_28

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 100, call state value = 9) and enters N9.

L3BN_27_29

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N9.

L3BN_27_30

Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 100, call state value = 9) and enters N9.

L3BN_27_31

Ensure that the IUT in N6, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in N6.

L3BN_27_32

Ensure that the IUT in N6, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 6) and remains in N6.

L3BN_27_33

Ensure that the IUT in N6, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.5 Error handling in N7 (28)**L3BN_28_01**

Ensure that the IUT in N7, on receipt of a CONNECT message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N7.

L3BN_28_02

Ensure that the IUT in N7, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N7.

L3BN_28_03

Ensure that the IUT in N7, on receipt of a CONNECT message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N7.

L3BN_28_04

Ensure that the IUT in N7, on receipt of a CONNECT message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N7.

L3BN_28_05

Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 7) and remains in N7.

L3BN_28_06

Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_28_07

Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 7) and remains in N7.

L3BN_28_08

Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N7.

L3BN_28_09

Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 7) and remains in N7.

L3BN_28_10

Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 7) and remains in N7.

L3BN_28_11

Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_28_12

Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 7) and remains in N7.

L3BN_28_13

Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N7.

L3BN_28_14

Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 7) and remains in N7.

L3BN_28_15

Ensure that the IUT in N7, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_28_16

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- optionally sends a STATUS message (Cause value = 99, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_17

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 99) and enters N12.

L3BN_28_18

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 7) and remains in N7.

L3BN_28_19

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N7.

L3BN_28_20

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_21

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_22

Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_23

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- optionally sends a STATUS message (Cause value = 100, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_24

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_28_25

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 7) and remains in N7.

L3BN_28_26

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N7.

L3BN_28_27

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 100, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_28

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_29

Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 100, call state value = 8) followed by a CONNECT ACKNOWLEDGE message and enters N10.

L3BN_28_30

Ensure that the IUT in N7, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in N7.

L3BN_28_31

Ensure that the IUT in N7, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 7) and remains in N7.

L3BN_28_32

Ensure that the IUT in N7, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.6 Error handling in N9 (29)

L3BN_29_01

Ensure that the IUT in N9, on receipt of an ALERTING message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N9.

L3BN_29_02

Ensure that the IUT in N9, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N9.

L3BN_29_03

Ensure that the IUT in N9, on receipt of an ALERTING message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N9.

L3BN_29_04

Ensure that the IUT in N9, on receipt of an ALERTING message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N9.

L3BN_29_05

Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 9) and remains in N9.

L3BN_29_06

Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_29_07

Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 9) and remains in N9.

L3BN_29_08

Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N9.

L3BN_29_09

Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 9) and remains in N9.

L3BN_29_10

Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 9) and remains in N9.

L3BN_29_11

Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_29_12

Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 9) and remains in N9.

L3BN_29_13

Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N9.

L3BN_29_14

Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 9) and remains in N9.

L3BN_29_15

Ensure that the IUT in N9, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_29_16

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 99, call state value = 7) and enters N7.

L3BN_29_17

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 99) and enters N12.

L3BN_29_18

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 9) and remains in N9.

L3BN_29_19

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N9.

L3BN_29_20

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 7) and enters N7.

L3BN_29_21

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N7.

L3BN_29_22

Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 7) and enters N7.

L3BN_29_23

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 100, call state value = 7) and enters N7.

L3BN_29_24

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_29_25

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 9) and remains in N9.

L3BN_29_26

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N9.

L3BN_29_27

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 100, call state value = 7) and enters N7.

L3BN_29_28

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N7.

L3BN_29_29

Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 100, call state value = 7) and enters N7.

L3BN_29_30

Ensure that the IUT in N9, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in N9.

L3BN_29_31

Ensure that the IUT in N9, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 9) and remains in N9.

L3BN_29_32

Ensure that the IUT in N9, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.7 Error handling in N10 - incoming call (30)**L3BN_30_01**

Ensure that the IUT in N10, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N10.

L3BN_30_02

Ensure that the IUT in N10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N10.

L3BN_30_03

Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N10.

L3BN_30_04

Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N10.

L3BN_30_05

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_30_06

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_30_07

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_30_08

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

L3BN_30_09

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_30_10

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_30_11

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_30_12

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_30_13

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

L3BN_30_14

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_30_15

Ensure that the IUT in N10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_30_16

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element missing),

- sends a STATUS message (Cause value = 96, call state value = 10) and remains in N10.

L3BN_30_17

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters N0.

L3BN_30_18

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_30_19

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_30_20

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_30_21

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_30_22

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_30_23

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

L3BN_30_24

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_30_25

Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_30_26

Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_30_27

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 99) and enters N12.

L3BN_30_28

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_30_29

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

L3BN_30_30

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_30_31

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

L3BN_30_32

Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_30_33

Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_30_34

Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_30_35

Ensure that the IUT in N10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in N10.

L3BN_30_36

Ensure that the IUT in N10, after having sent an AAL-ESTABLISH-request primitive in response to an AAL-RELEASE-indication primitive, on receipt of an AAL-ESTABLISH-confirm primitive,

- sends a STATUS ENQUIRY message and remains in N10.

L3BN_30_37

Ensure that the IUT in N10, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 10) and remains in N10.

L3BN_30_38

Ensure that the IUT in N10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.8 Error handling in N10 - outgoing call (31)**L3BN_31_01**

Ensure that the IUT in N10, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N10.

L3BN_31_02

Ensure that the IUT in N10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N10.

L3BN_31_03

Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N10.

L3BN_31_04

Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N10.

L3BN_31_05

Ensure that the IUT in N10, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N10.

L3BN_31_06

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_31_07

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 101) and enters N12.

L3BN_31_08

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_31_09

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

L3BN_31_10

Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 10) and remains in N10.

L3BN_31_11

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_31_12

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends a RELEASE message (Cause value = 97) and enters N12.

L3BN_31_13

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_31_14

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

L3BN_31_15

Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 10) and remains in N10.

L3BN_31_16

Ensure that the IUT in N10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

L3BN_31_17

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element missing),

- sends a STATUS message (Cause value = 96, call state value = 10) and remains in N10.

L3BN_31_18

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters N0.

L3BN_31_19

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_20

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_31_21

Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_31_22

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_31_23

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_24

Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

L3BN_31_25

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_31_26

Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_31_27

Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters N0.

L3BN_31_28

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 99) and enters N12.

L3BN_31_29

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_31_30

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

L3BN_31_31

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_31_32

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

L3BN_31_33

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 99, call state value = 10) and remains in N10.

L3BN_31_34

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_35

Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_31_36

Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters N0.

L3BN_31_37

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends a RELEASE message (Cause value = 100) and enters N12.

L3BN_31_38

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_39

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

L3BN_31_40

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_41

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

L3BN_31_42

Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Cause value = 100, call state value = 10) and remains in N10.

L3BN_31_43

Ensure that the IUT in N10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in N10.

L3BN_31_44

Ensure that the IUT in N10, after having sent an AAL-ESTABLISH-request primitive in response to an AAL-RELEASE-indication primitive, on receipt of an AAL-ESTABLISH-confirm primitive,

- sends a STATUS ENQUIRY message and remains in N10.

L3BN_31_45

Ensure that the IUT in N10, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 10) and remains in N10.

L3BN_31_46

Ensure that the IUT in N10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.9 Error handling in N12 - incoming call (32)

L3BN_32_01

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N12.

L3BN_32_02

Ensure that the IUT in N12, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N12.

L3BN_32_03

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N12.

L3BN_32_04

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N12.

L3BN_32_05

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_32_06

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

L3BN_32_07

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_32_08

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

L3BN_32_09

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_32_10

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_32_11

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

L3BN_32_12

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_32_13

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

L3BN_32_14

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_32_15

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

L3BN_32_16

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

L3BN_32_17

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

L3BN_32_18

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

L3BN_32_19

Ensure that the IUT in N12, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in N12.

L3BN_32_20

Ensure that the IUT in N12, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 12) and remains in N12.

L3BN_32_21

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in N12.

L3BN_32_22

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in N12.

L3BN_32_23

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in N12.

L3BN_32_24

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in N12.

L3BN_32_25

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in N12.

L3BN_32_26

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in N12.

L3BN_32_27

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in N12.

L3BN_32_28

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in N12.

L3BN_32_29

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in N12.

L3BN_32_30

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in N12.

L3BN_32_31

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.10 Error handling in N12 - outgoing call (33)**L3BN_33_01**

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N12.

L3BN_33_02

Ensure that the IUT in N12, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N12.

L3BN_33_03

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in N12.

L3BN_33_04

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in N12.

L3BN_33_05

Ensure that the IUT in N12, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N12.

L3BN_33_06

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_33_07

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

L3BN_33_08

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_33_09

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

L3BN_33_10

Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 101, call state value = 12) and remains in N12.

L3BN_33_11

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_33_12

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

L3BN_33_13

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_33_14

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

L3BN_33_15

Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

- sends a STATUS message (Cause value = 97, call state value = 12) and remains in N12.

L3BN_33_16

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

L3BN_33_17

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

L3BN_33_18

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

L3BN_33_19

Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

L3BN_33_20

Ensure that the IUT in N12, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in N12.

L3BN_33_21

Ensure that the IUT in N12, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 12) and remains in N12.

L3BN_33_22

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in N12.

L3BN_33_23

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in N12.

L3BN_33_24

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in N12.

L3BN_33_25

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in N12.

L3BN_33_26

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in N12.

L3BN_33_27

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in N12.

L3BN_33_28

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in N12.

L3BN_33_29

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in N12.

L3BN_33_30

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in N12.

L3BN_33_31

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in N12.

L3BN_33_32

Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

5.2.1.5.11 Error handling in R0 (34)**L3BN_34_01**

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in Rest 0.

L3BN_34_02

Ensure that the IUT in Rest 0, on receipt of a message which is too short (Call reference value = global call reference, message length information element incomplete),

- sends no message and remains in Rest 0.

L3BN_34_03

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in Rest 0.

L3BN_34_04

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in Rest 0.

L3BN_34_05

Ensure that the IUT in Rest 0, on receipt of an ALERTING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_06

Ensure that the IUT in Rest 0, on receipt of a CALL PROCEEDING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_07

Ensure that the IUT in Rest 0, on receipt of a CONNECT message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_08

Ensure that the IUT in Rest 0, on receipt of a CONNECT ACKNOWLEDGE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_09

Ensure that the IUT in Rest 0, on receipt of a NOTIFY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_10

Ensure that the IUT in Rest 0, on receipt of a RELEASE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_11

Ensure that the IUT in Rest 0, on receipt of a RELEASE COMPLETE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_12

Ensure that the IUT in Rest 0, on receipt of a SETUP message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_13

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference flag = 1),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 0) and remains in Rest 0.

L3BN_34_14

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element absent),

- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 0) and remains in Rest 0.

L3BN_34_15

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_34_16

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

L3BN_34_17

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 0) and remains in Rest 0.

L3BN_34_18

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

L3BN_34_19

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),
 optionally sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

L3BN_34_20

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),
 - sends no message and remains in Rest 0.

L3BN_34_21

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),
 - sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and remains in Rest 0.

L3BN_34_22

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),
 - sends no message and remains in Rest 0.

L3BN_34_23

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),
 - sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

L3BN_34_24

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),
 - sends a RESTART ACKNOWLEDGE message and re-enters Rest 0.

L3BN_34_25

Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),
 - sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

L3BN_34_26

Ensure that the IUT in Rest 0, on receipt of a STATUS ENQUIRY message (Call reference value = global call reference),
 - sends a STATUS message (Call reference value = global call reference, cause value = 30, call state value = Rest 0) and remains in Rest 0.

L3BN_34_27

Ensure that the IUT in Rest 0, on receipt of a STATUS message (Call state value = Rest 0),
 - sends no message and remains in Rest 0.

5.2.1.5.12 Error handling in R1 (35)**L3BN_35_01**

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),
 - sends no message and remains in Rest 1.

L3BN_35_02

Ensure that the IUT in Rest 1, on receipt of a message which is too short (Call reference value = global call reference, message length information element incomplete),
 - sends no message and remains in Rest 1.

L3BN_35_03

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference with invalid format, octet 1, bits 8 - 5 \neq '0000'B),

- sends no message and remains in Rest 1.

L3BN_35_04

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference with invalid format, octet 1, bits 4 - 1 \neq '0011'B),

- sends no message and remains in Rest 1.

L3BN_35_05

Ensure that the IUT in Rest 1, on receipt of an ALERTING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_06

Ensure that the IUT in Rest 1, on receipt of a CALL PROCEEDING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_07

Ensure that the IUT in Rest 1, on receipt of a CONNECT message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_08

Ensure that the IUT in Rest 1, on receipt of a CONNECT ACKNOWLEDGE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_09

Ensure that the IUT in Rest 1, on receipt of a NOTIFY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_10

Ensure that the IUT in Rest 1, on receipt of a RELEASE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_11

Ensure that the IUT in Rest 1, on receipt of a RELEASE COMPLETE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_12

Ensure that the IUT in Rest 1, on receipt of a SETUP message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_13

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference flag = 0),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

L3BN_35_14

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element absent),

- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 1) and remains in Rest 1.

L3BN_35_15

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 1) and remains in Rest 1.

L3BN_35_16

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and enters Rest 0.

L3BN_35_17

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 1) and remains in Rest 1.

L3BN_35_18

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 1.

L3BN_35_19

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Call reference value = global call reference, cause value = 99) and remains in Rest 1.

L3BN_35_20

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and enters Rest 0.

L3BN_35_21

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 1) and remains in Rest 1.

L3BN_35_22

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 1.

L3BN_35_23

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and enters Rest 0.

L3BN_35_24

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters Rest 0.

L3BN_35_25

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and enters Rest 0.

L3BN_35_26

Ensure that the IUT in Rest 1, on receipt of a STATUS ENQUIRY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 30, call state value = Rest 1) and remains in Rest 1.

5.2.1.6 Notification procedures (36)

Test purposes for EN 300 443-1 [1], clause 5.9.

L3BN_36_01

Ensure that the IUT in N10 (incoming call), to provide notifications,

- sends a NOTIFY message and remains in N10.

L3BN_36_02

Ensure that the IUT in N10 (outgoing call), to provide notifications,

- sends a NOTIFY message and remains in N10.

L3BN_36_03

Ensure that the IUT in N3, on receipt of a NOTIFY message,

- sends no message and remains in N3.

L3BN_36_04

Ensure that the IUT in N4, on receipt of a NOTIFY message,

- sends no message and remains in N4.

L3BN_36_05

Ensure that the IUT in N7, on receipt of a NOTIFY message,

- sends no message and remains in N7.

L3BN_36_06

Ensure that the IUT in N9, on receipt of a NOTIFY message,

- sends no message and remains in N9.

L3BN_36_07

Ensure that the IUT in N10 (incoming call), on receipt of a NOTIFY message,

- sends no message and remains in N10.

L3BN_36_08

Ensure that the IUT in N10 (outgoing call), on receipt of a NOTIFY message,

- sends no message and remains in N10.

5.2.2 Signalling procedures for interworking between N-ISDN and B-ISDN

Test purposes for EN 300 443-1 [1], clause 6.

Selection: Additional procedures for the provision of 64 kbit/s circuit-mode services supported.
PICS: MCn 9.

5.2.2.1 Interworking N-ISDN -> B-ISDN (37)

Test purposes for EN 300 443-1 [1], clauses 6.3 and 6.5.

L3BN_37_01

Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Broadband sending complete and complete address information present),

- sends a CALL PROCEEDING message and enters N3.

L3BN_37_02

Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Broadband sending complete absent, called party number absent),

- sends a SETUP ACKNOWLEDGE message and enters N2.

5.2.2.2 Interworking B-ISDN -> N-ISDN (38)

Test purposes for EN 300 443-1 [1], clause 6.4.

L3BN_38_01

Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN,

- sends a SETUP message (Narrowband bearer capability present) and enters N6.

L3BN_38_02

Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN and to provide narrowband high layer compatibility information,

- sends a SETUP message (Narrowband bearer capability present, Narrowband high layer compatibility present) and enters N6.

L3BN_38_03

Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN and to provide narrowband low layer compatibility information,

- sends a SETUP message (Narrowband bearer capability present, Narrowband low layer compatibility present) and enters N6.

5.2.3 End-to-end connection completion indication (39)

Test purposes for EN 300 443-1 [1], annex N.

L3BN_39_01

Ensure that the IUT in N3, to indicate that the call has been accepted at the called user's side with the request of the end-to-end connection completion indication,

- sends a CONNECT message (Broadband report type present, type of report = End-to-end connection completion indication requested) and enters N10.

L3BN_39_02

Ensure that the IUT in N4, to indicate that the call has been accepted at the called user's side with the request of the end-to-end connection completion indication,

- sends a CONNECT message (Broadband report type present, type of report = End-to-end connection completion indication requested) and enters N10.

L3BN_39_03

Ensure that the IUT in N10, on receipt of a CONNECTION AVAILABLE message (Broadband report type present, type of report = End-to-end connection completed),

- sends no message and remains in N10.

L3BN_39_04

Ensure that the IUT in N10, to indicate that the end-to-end connection is completed,

- sends a CONNECTION AVAILABLE message (Broadband report type present, type of report = End-to-end connection completed) and remains in N10.

6 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 5;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 5 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 5 shall be included in a compliant ATS.

7 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 300 443-1 [1].

Annex A (informative): Bibliography

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

History

Document history		
V1.1.3	November 1999	Publication
V1.2.1	October 2000	Publication
V1.3.1	February 2001	One-step Approval Procedure OAP 20010615: 2001-02-14 to 2001-06-15
V1.3.1	June 2001	Publication