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



Reference

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Contents

Intellectual Property Rights	5
Foreword	5
1 Scope	6
2 References	6
3 Definitions and abbreviations	6
3.1 Definitions	6
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, user	9
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 Call/connection request (01)	10
5.2.1.1.2 Connection identifier (VPCI/VCI) allocation/selection	10
5.2.1.1.2.1 Associated signalling (02)	10
5.2.1.1.2.2 Non-associated signalling (03)	11
5.2.1.1.3 Call/connection proceeding (04)	11
5.2.1.1.4 Call/connection confirmation indication (05)	11
5.2.1.1.5 Call/connection acceptance (06)	11
5.2.1.2 Call/connection establishment at the destination interface	11
5.2.1.2.1 Address and compatibility check	12
5.2.1.2.1.1 Address and compatibility check (07)	12
5.2.1.2.1.2 Compatibility check (08)	12
5.2.1.2.2 Connection identifier (VPCI/VCI) allocation/selection	12
5.2.1.2.2.1 Associated signalling (09)	12
5.2.1.2.2.2 Non-associated signalling (10)	13
5.2.1.2.3 QOS and traffic parameter selection procedures (11)	14
5.2.1.2.4 Call/connection confirmation (12)	14
5.2.1.2.5 Active indication (13)	15
5.2.1.3 Call/connection clearing	15
5.2.1.3.1 Exception conditions (14)	15
5.2.1.3.2 Clearing initiated by the user (15)	15
5.2.1.3.3 Clearing initiated by the network (16)	16
5.2.1.3.4 Clear collision (17)	16
5.2.1.4 Restart procedure	17
5.2.1.4.1 Sending RESTART (18)	17
5.2.1.4.2 Receipt of RESTART (19)	17
5.2.1.5 Handling of error conditions	20
5.2.1.5.1 Error handling in U0 (20)	20
5.2.1.5.2 Error handling in U1 (21)	23
5.2.1.5.3 Error handling in U3 (22)	26
5.2.1.5.4 Error handling in U4 (23)	29
5.2.1.5.5 Error handling in U7 (24)	31
5.2.1.5.6 Error handling in U8 (25)	33
5.2.1.5.7 Error handling in U9 (26)	36
5.2.1.5.8 Error handling in U10 - incoming call (27)	38

5.2.1.5.9	Error handling in U10 - outgoing call (28)	41
5.2.1.5.10	Error handling in U11 - incoming call (29)	44
5.2.1.5.11	Error handling in U11 - outgoing call (30)	46
5.2.1.5.12	Error handling in R0 (31)	49
5.2.1.5.13	Error handling in R1 (32)	51
5.2.1.6	Notification procedures (33)	54
5.2.2	Signalling procedures for interworking between N-ISDN and B-ISDN	54
5.2.2.1	Interworking N-ISDN -> B-ISDN (34)	54
5.2.2.2	Interworking B-ISDN -> N-ISDN (35)	55
6	Compliance	55
7	Requirements for a comprehensive testing service	56
	Bibliography	57
	History	58

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS), and is now submitted for the Voting phase of the ETSI standards Two-step Approval Procedure.

The present document is part 3 of a multi-part standard covering the Digital Subscriber Signalling System No. 2 (DSS2) protocol specification for the B-ISDN user-network interface layer 3 specification for basic call/bearer control, as described below:

- Part 1: "Protocol specification";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";**
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] EN 300 443-1 (V1.3): "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] EN 300 443-2 (V1.2): "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 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-2: "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] 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

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

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

user (T_B): DSS2 protocol entity at the User side of the user-network interface where a T_B reference point applies (user is a 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
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
U0	Null call state
U1	Call Initiated call state
U10	Active call state
U11	Release Request call state
U25	Overlap Receiving call state
U3	Outgoing Call Proceeding call state
U4	Call Delivered call state
U7	Call Received call state
U8	Connect request call state
U9	Incoming Call Proceeding call state
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

Call/connection request	(01)
Connection identifier (VPCI/VCI) allocation/selection	
Associated signalling.....	(02)
Non-associated signalling.....	(03)
Call/connection proceeding.....	(04)
Call/connection confirmation indication	(05)
Call/connection acceptance	(06)

Call/connection establishment at the destination interface

Address and compatibility check.....	
Address check	(07)
Compatibility check.....	(08)
Connection identifier (VPCI/VCI) allocation/selection	
Associated signalling.....	(09)
Non-associated signalling.....	(10)
QOS and traffic parameters selection procedures	(11)
Call/connection confirmation	(12)
Active indication	(13)

Call/connection clearing

Exception conditions.....	(14)
Clearing initiated by the user.....	(15)
Clearing initiated by the network	(16)
Clear collision	(17)

Restart procedure

Sending RESTART	(18)
Receipt of RESTART	(19)

Handling of error conditions

Error handling in U0	(20)
Error handling in U1	(21)
Error handling in U3	(22)
Error handling in U4	(23)
Error handling in U7	(24)
Error handling in U8	(25)
Error handling in U9	(26)
Error handling in U10 - incoming call.....	(27)
Error handling in U10 - outgoing call	(28)
Error handling in U11 - incoming call.....	(29)
Error handling in U11 - outgoing call	(30)
Error handling in Rest 0	(31)
Error handling in Rest 1	(32)

Notification procedures

Signalling procedures for interworking between N-ISDN and B-ISDN

Interworking N-ISDN -> B-ISDN	(34)
Interworking B-ISDN -> N-ISDN	(35)

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>_<nnn>		
<suite_id>	=	layer + type of IUT:	"L3BU" for Layer 3 Basic call/bearer control , IUT = User
<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 subclause 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, user

All PICS items referred to in this subclause 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.

5.2.1.1 Call/connection establishment at the originating interface

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

Selection: Outgoing calls supported. PICS: MCu 1.

5.2.1.1.1 Call/connection request (01)

Test purposes for EN 300 443-1 [1] subclause 5.1.1.

L3BU_01_01

Ensure that the IUT in U0, to initiate call establishment,

- sends a SETUP message (Quality of service parameter, Broadband bearer capability, ATM traffic descriptor present) and enters U1.

L3BU_01_02

Ensure that the IUT in U0, to initiate call establishment by using the en bloc sending procedures,

- sends a SETUP message (Quality of service parameter, ATM traffic descriptor, Broadband sending complete present) and enters U1.

L3BU_01_03

Ensure that the IUT in U1, on the first expiry of T303,

- sends a SETUP message (same contents as the first SETUP message) and remains in U1.

L3BU_01_04

Ensure that the IUT in U1, on the second expiry of T303,

- sends no message and enters U0.

5.2.1.1.2 Connection identifier (VPCI/VCI) allocation/selection

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

5.2.1.1.2.1 Associated signalling (02)

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

Selection: Associated signalling on the originating side supported. PICS: MCu 1.1.

L3BU_02_01

Ensure that the IUT in U0, to initiate a call,

- sends a SETUP message (Connection identifier present, VP-associated signalling = VP-associated signalling) and enters U1.

5.2.1.1.2.2 Non-associated signalling (03)

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

L3BU_03_01

Ensure that the IUT in U0, to initiate a call,

- sends a SETUP message (Connection identifier present, VP-associated signalling = explicit indication of VPCI) and enters U1.

L3BU_03_02

Ensure that the IUT in U1, 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 U11.

L3BU_03_03

Ensure that the IUT in U1, 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 U11.

5.2.1.1.3 Call/connection proceeding (04)

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

L3BU_04_01

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message,

- sends no message and enters U3.

L3BU_04_02

Ensure that the IUT in U3, on the expiry of T310,

- sends a RELEASE message (Cause value = 102) and enters U11.

5.2.1.1.4 Call/connection confirmation indication (05)

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

L3BU_05_01

Ensure that the IUT in U3, on receipt of an ALERTING message,

- sends no message and enters U4.

5.2.1.1.5 Call/connection acceptance (06)

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

L3BU_06_01

Ensure that the IUT in U3, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_06_02

Ensure that the IUT in U4, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters U10.

5.2.1.2 Call/connection establishment at the destination interface

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

5.2.1.2.1 Address and compatibility check

Test purposes for EN 300 443-1 [1] subclause 5.2.2.

5.2.1.2.1.1 Address and compatibility check (07)

Test purposes for EN 300 443-1 [1] subclause 5.2.2.1, annex B.3.1.

L3BU_07_01

Ensure that the IUT in U0, which has a number assigned to, on receipt of a SETUP message (Called party number present, Address/number digits indicating a mis-matching number),

- sends a RELEASE COMPLETE message and remains in U0.

L3BU_07_02

Ensure that the IUT in U0, which has a sub-address assigned to, on receipt of a SETUP message (Called party sub-address present, sub-address information indicating a mis-matching sub-address),

- sends a RELEASE COMPLETE message and remains in U0.

L3BU_07_03

Ensure that the IUT in U0, which has no number assigned to, on receipt of a SETUP message (Called party number present, Address/number digits indicating an invalid number),

- sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_07_04

Ensure that the IUT in U0, which has no sub-address assigned to, on receipt of a SETUP message (Called party sub-address present, sub-address information indicating an invalid sub-address),

- sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

5.2.1.2.1.2 Compatibility check (08)

Test purposes for EN 300 443-1 [1] subclauses 5.2.2.2, B.3.2, B.3.3.

L3BU_08_01

Ensure that the IUT in U0, on receipt of a SETUP message (Broadband bearer capability present, requesting a bearer service that is not supported),

- sends a RELEASE COMPLETE message (Cause value = 88) and remains in U0.

L3BU_08_02

Ensure that the IUT in U0, on receipt of a SETUP message (AAL parameters present, requesting a type of AAL that is not supported),

- sends no message or a RELEASE COMPLETE message (Cause value = 88) and remains in U0.

L3BU_08_03

Ensure that the IUT in U0, on receipt of a SETUP message (Incompatible Broadband low layer compatibility present),

- sends no message or a RELEASE COMPLETE message (Cause value = 88) and remains in U0.

L3BU_08_04

Ensure that the IUT in U0, on receipt of a SETUP message (Incompatible Broadband high layer compatibility present),

- sends no message or a RELEASE COMPLETE message (Cause value = 88) and remains in U0.

Selection: Check of Broadband high layer compatibility supported as part of user-to-user compatibility checking procedure.

5.2.1.2.2 Connection identifier (VPCI/VCI) allocation/selection

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

5.2.1.2.2.1 Associated signalling (09)

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

Selection: Associated signalling at the destination side supported. PICS: MCu 2.1

L3BU_09_01

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT 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 the relevant call state U9, U7 or U8.

L3BU_09_02

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT 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 the relevant call state U9, U7 or U8.

L3BU_09_03

Ensure that the IUT in U0, 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 U0.

L3BU_09_04

Ensure that the IUT in U0, 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 U0.

5.2.1.2.2.2 Non-associated signalling (10)

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

L3BU_10_01

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT 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 the relevant call state U9, U7 or U8.

L3BU_10_02

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_10_03

Ensure that the IUT in U0, on receipt of a SETUP message (Connection identifier absent), when a VCI is available within any VPCI,

- sends any of a CALL PROCEEDING, ALERTING or CONNECT 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 the relevant call state U9, U7 or U8.

L3BU_10_04

Ensure that the IUT in U0, 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 U0.

L3BU_10_05

Ensure that the IUT in U0, 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 U0.

L3BU_10_06

Ensure that the IUT in U0, 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 U0.

L3BU_10_07

Ensure that the IUT in U0, 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 U0.

L3BU_10_08

Ensure that the IUT in U0, 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 U0.

5.2.1.2.3 QOS and traffic parameter selection procedures (11)

Test purposes for EN 300 443-1 [1] subclause 5.2.4.

L3BU_11_01

Ensure that the IUT in U0, on receipt of a SETUP message (Quality of service parameter present, requesting a QOS class that can not be provided),

- sends a RELEASE COMPLETE message (Cause value = 49) and remains in U0.

NOTE: There is only one non-reserved value for the QOS class defined in EN 300 443-1 [1].

L3BU_11_02

Ensure that the IUT in U0, 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 = 47) and remains in U0.

L3BU_11_03

Ensure that the IUT in U0, on receipt of a SETUP message (cumulative end-to-end transit delay is not acceptable),

- sends a RELEASE COMPLETE message (Cause value = 49) and remains in U0.

5.2.1.2.4 Call/connection confirmation (12)

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

L3BU_12_01

Ensure that the IUT in U0, on receipt of a compatible SETUP message, to accept the call,

- sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_12_02

Ensure that the IUT in U0, on receipt of a compatible SETUP message, to refuse the call,

- sends a RELEASE COMPLETE message (Cause value = 21) and remains in U0.

L3BU_12_03

Ensure that the IUT in U0, on receipt of a SETUP message (user compatible but busy),

- sends a RELEASE COMPLETE message (Cause value = 17) and remains in U0.

5.2.1.2.5 Active indication (13)

Test purposes for EN 300 443-1 [1] subclause 5.2.7.

L3BU_13_01

Ensure that the IUT in U8, on receipt of a CONNECT ACKNOWLEDGE message,

- sends no message and enters U10.

L3BU_13_02

Ensure that the IUT in U8, on the expiry of T313,

- sends a RELEASE message (Cause value = 102) and enters U11.

5.2.1.3 Call/connection clearing

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

5.2.1.3.1 Exception conditions (14)

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

L3BU_14_01

Ensure that the IUT in U1, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

5.2.1.3.2 Clearing initiated by the user (15)

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

L3BU_15_01

Ensure that the IUT in U3, to initiate call clearing,

- sends a RELEASE message and enters U11.

L3BU_15_02

Ensure that the IUT in U4, to initiate call clearing,

- sends a RELEASE message and enters U11.

L3BU_15_03

Ensure that the IUT in U7, to initiate call clearing,

- sends a RELEASE message and enters U11.

Selection: IUT stable in U7.

L3BU_15_04

Ensure that the IUT in U8, to initiate call clearing,

- sends a RELEASE message and enters U11.

L3BU_15_05

Ensure that the IUT in U9, to initiate call clearing,

- sends a RELEASE message and enters U11.

Selection: IUT stable in U9.

L3BU_15_06

Ensure that the IUT in U10 (incoming call), to initiate call clearing,

- sends a RELEASE message and enters U11.

L3BU_15_07

Ensure that the IUT in U10 (outgoing call), to initiate call clearing,
 - sends a RELEASE message and enters U11.

L3BU_15_08

Ensure that the IUT in U11 (incoming call), on receipt of a RELEASE COMPLETE message,
 - sends no message and enters U0.

L3BU_15_09

Ensure that the IUT in U11 (outgoing call), on receipt of a RELEASE COMPLETE message,
 - sends no message and enters U0.

L3BU_15_10

Ensure that the IUT in U11 (incoming call), on the expiry of T308,
 - sends a RELEASE message and remains in U11.

L3BU_15_11

Ensure that the IUT in U11 (outgoing call), on the expiry of T308,
 - sends a RELEASE message and remains in U11.

5.2.1.3.3 Clearing initiated by the network (16)

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

L3BU_16_01

Ensure that the IUT in U1, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

L3BU_16_02

Ensure that the IUT in U3, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

L3BU_16_03

Ensure that the IUT in U4, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

L3BU_16_04

Ensure that the IUT in U7, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

Selection: IUT stable in U7.

L3BU_16_05

Ensure that the IUT in U8, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

L3BU_16_06

Ensure that the IUT in U9, on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

Selection: IUT stable in U9.

L3BU_16_07

Ensure that the IUT in U10 (incoming call), on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

L3BU_16_08

Ensure that the IUT in U10 (outgoing call), on receipt of a RELEASE message,
 - sends a RELEASE COMPLETE message and enters U0.

5.2.1.3.4 Clear collision (17)

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

L3BU_17_01

Ensure that the IUT in U11 (incoming call), on receipt of a RELEASE message,

- sends no message and enters U0.

L3BU_17_02

Ensure that the IUT in U11 (outgoing call), on receipt of a RELEASE message,

- sends no message and enters U0.

5.2.1.4 Restart procedure

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

5.2.1.4.1 Sending RESTART (18)

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

L3BU_18_01

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

- sends a RESTART message and enters Rest 1.

L3BU_18_02

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

- sends no message and enters Rest 0.

L3BU_18_03

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

- sends a RESTART message and remains in Rest 1.

L3BU_18_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 (19)

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

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

L3BU_19_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.

5.2.1.5 Handling of error conditions

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

5.2.1.5.1 Error handling in U0 (20)

L3BU_20_01

Ensure that the IUT in U0, on receipt of a SETUP message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U0.

L3BU_20_02

Ensure that the IUT in U0, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U0.

L3BU_20_03

Ensure that the IUT in U0, 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 U0.

L3BU_20_04

Ensure that the IUT in U0, 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 U0.

L3BU_20_05

Ensure that the IUT in U0, on receipt of an ALERTING message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_06

Ensure that the IUT in U0, on receipt of a CALL PROCEEDING message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_07

Ensure that the IUT in U0, on receipt of a CONNECT message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_08

Ensure that the IUT in U0, on receipt of a CONNECT ACKNOWLEDGE message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_09

Ensure that the IUT in U0, on receipt of a NOTIFY message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_10

Ensure that the IUT in U0, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message (Cause value = 81) and remains in U0.

L3BU_20_11

Ensure that the IUT in U0, on receipt of a RELEASE COMPLETE message,

- sends no message and remains in U0.

L3BU_20_12

Ensure that the IUT in U0, on receipt of a SETUP message (Call reference flag = 1),

- sends no message and remains in U0.

L3BU_20_13

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 1),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_14

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 3),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_15

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 4),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_16

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 6),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_17

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 7),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_18

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 8),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_19

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 9),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_20

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 10),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_21

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 11),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_22

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 12),

- sends a RELEASE COMPLETE message (Cause value = 101) and remains in U0.

L3BU_20_23

Ensure that the IUT in U0, on receipt of a STATUS message (Call state value = 0),

- sends no message and remains in U0.

L3BU_20_24

Ensure that the IUT in U0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 1),

- sends no message and remains in U0.

L3BU_20_25

Ensure that the IUT in U0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 2),

- sends no message and remains in U0.

L3BU_20_26

Ensure that the IUT in U0, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 0) and remains in U0.

L3BU_20_27

Ensure that the IUT in U0, on receipt of a SETUP message (Mandatory information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and remains in U0.

L3BU_20_28

Ensure that the IUT in U0, 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 U0.

L3BU_20_29

Ensure that the IUT in U0, 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 U0.

L3BU_20_30

Ensure that the IUT in U0, 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 U0.

L3BU_20_31

Ensure that the IUT in U0, 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 U0.

L3BU_20_32

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_33

Ensure that the IUT in U0, 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 U0.

L3BU_20_34

Ensure that the IUT in U0, 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 U0.

L3BU_20_35

Ensure that the IUT in U0, 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 U0.

L3BU_20_36

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_37

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_38

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_39

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_40

Ensure that the IUT in U0, 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 U0.

L3BU_20_41

Ensure that the IUT in U0, 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 U0.

L3BU_20_42

Ensure that the IUT in U0, 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 U0.

L3BU_20_43

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_44

Ensure that the IUT in U0, 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 any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_20_45

Ensure that the IUT in U0, 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 = 6) followed by any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

5.2.1.5.2 Error handling in U1 (21)

L3BU_21_01

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U1.

L3BU_21_02

Ensure that the IUT in U1, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U1.

L3BU_21_03

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in U1.

L3BU_21_04

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in U1.

L3BU_21_05

Ensure that the IUT in U1, on receipt of an unexpected message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 101, call state value = 1) and remains in U1.

L3BU_21_06

Ensure that the IUT in U1, 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 U11.

L3BU_21_07

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_08

Ensure that the IUT in U1, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U1.

L3BU_21_09

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_10

Ensure that the IUT in U1, on receipt of an unrecognized message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 97, call state value = 1) and remains in U1.

L3BU_21_11

Ensure that the IUT in U1, 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 U11.

L3BU_21_12

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_13

Ensure that the IUT in U1, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U1.

L3BU_21_14

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_15

Ensure that the IUT in U1, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_21_16

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Connection identifier information element missing),

- sends a STATUS message (Cause value = 96, call state value = 1) and remains in U1.

L3BU_21_17

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Connection identifier 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 = 1) and remains in U0.

L3BU_21_18

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Connection identifier 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 U11.

L3BU_21_19

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Connection identifier 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 = 1) and remains in U1.

L3BU_21_20

Ensure that the IUT in U1, on receipt of a CALL PROCEEDING message (Connection identifier information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in U1.

L3BU_21_21

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_22

Ensure that the IUT in U1, 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 U11.

L3BU_21_23

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_24

Ensure that the IUT in U1, 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 U1.

L3BU_21_25

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_26

Ensure that the IUT in U1, 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 U3.

L3BU_21_27

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_28

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_29

Ensure that the IUT in U1, 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 U11.

L3BU_21_30

Ensure that the IUT in U1, 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 = 1) and remains in U1.

L3BU_21_31

Ensure that the IUT in U1, 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 U1.

L3BU_21_32

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_33

Ensure that the IUT in U1, 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 U3.

L3BU_21_34

Ensure that the IUT in U1, 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 = 3) and enters U3.

L3BU_21_35

Ensure that the IUT in U1, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in U1.

L3BU_21_36

Ensure that the IUT in U1, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 1) and remains in U1.

L3BU_21_37

Ensure that the IUT in U1, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.3 Error handling in U3 (22)

L3BU_22_01

Ensure that the IUT in U3, on receipt of an ALERTING message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U3.

L3BU_22_02

Ensure that the IUT in U3, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U3.

L3BU_22_03

Ensure that the IUT in U3, 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 U3.

L3BU_22_04

Ensure that the IUT in U3, 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 U3.

L3BU_22_05

Ensure that the IUT in U3, 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 U3.

L3BU_22_06

Ensure that the IUT in U3, 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 U11.

L3BU_22_07

Ensure that the IUT in U3, 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 U3.

L3BU_22_08

Ensure that the IUT in U3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U3.

L3BU_22_09

Ensure that the IUT in U3, 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 U3.

L3BU_22_10

Ensure that the IUT in U3, 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 U3.

L3BU_22_11

Ensure that the IUT in U3, 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 U11.

L3BU_22_12

Ensure that the IUT in U3, 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 U3.

L3BU_22_13

Ensure that the IUT in U3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U3.

L3BU_22_14

Ensure that the IUT in U3, 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 U3.

L3BU_22_15

Ensure that the IUT in U3, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_22_16

Ensure that the IUT in U3, 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 U4.

L3BU_22_17

Ensure that the IUT in U3, 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 U11.

L3BU_22_18

Ensure that the IUT in U3, 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 = 3) and remains in U3.

L3BU_22_19

Ensure that the IUT in U3, 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 U3.

L3BU_22_20

Ensure that the IUT in U3, 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 = 4) and enters U4.

L3BU_22_21

Ensure that the IUT in U3, 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 U4.

L3BU_22_22

Ensure that the IUT in U3, 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 = 4) and enters U4.

L3BU_22_23

Ensure that the IUT in U3, 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 = 4) and enters U4.

L3BU_22_24

Ensure that the IUT in U3, 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 U11.

L3BU_22_25

Ensure that the IUT in U3, 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 = 3) and remains in U3.

L3BU_22_26

Ensure that the IUT in U3, 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 U3.

L3BU_22_27

Ensure that the IUT in U3, 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 = 4) and enters U4.

L3BU_22_28

Ensure that the IUT in U3, 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 U4.

L3BU_22_29

Ensure that the IUT in U3, 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 = 4) and enters U4.

L3BU_22_30

Ensure that the IUT in U3, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in U3.

L3BU_22_31

Ensure that the IUT in U3, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 3) and remains in U3.

L3BU_22_32

Ensure that the IUT in U3, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.4 Error handling in U4 (23)**L3BU_23_01**

Ensure that the IUT in U4, on receipt of a CONNECT message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U4.

L3BU_23_02

Ensure that the IUT in U4, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U4.

L3BU_23_03

Ensure that the IUT in U4, 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 U4.

L3BU_23_04

Ensure that the IUT in U4, 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 U4.

L3BU_23_05

Ensure that the IUT in U4, 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 U4.

L3BU_23_06

Ensure that the IUT in U4, 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 U11.

L3BU_23_07

Ensure that the IUT in U4, 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 U4.

L3BU_23_08

Ensure that the IUT in U4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U4.

L3BU_23_09

Ensure that the IUT in U4, 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 U4.

L3BU_23_10

Ensure that the IUT in U4, 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 U4.

L3BU_23_11

Ensure that the IUT in U4, 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 U11.

L3BU_23_12

Ensure that the IUT in U4, 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 U4.

L3BU_23_13

Ensure that the IUT in U4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U4.

L3BU_23_14

Ensure that the IUT in U4, 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 U4.

L3BU_23_15

Ensure that the IUT in U4, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_23_16

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_17

Ensure that the IUT in U4, 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 U11.

L3BU_23_18

Ensure that the IUT in U4, 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 = 4) and remains in U4.

L3BU_23_19

Ensure that the IUT in U4, 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 U4.

L3BU_23_20

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_21

Ensure that the IUT in U4, 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 U10.

L3BU_23_22

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_23

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_24

Ensure that the IUT in U4, 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 U11.

L3BU_23_25

Ensure that the IUT in U4, 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 = 4) and remains in U4.

L3BU_23_26

Ensure that the IUT in U4, 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 U4.

L3BU_23_27

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_28

Ensure that the IUT in U4, 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 U10.

L3BU_23_29

Ensure that the IUT in U4, 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 = 10) followed by a CONNECT ACKNOWLEDGE message and enters U10.

L3BU_23_30

Ensure that the IUT in U4, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in U4.

L3BU_23_31

Ensure that the IUT in U4, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 4) and remains in U4.

L3BU_23_32

Ensure that the IUT in U4, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.5 Error handling in U7 (24)

Selection: IUT stable in U7.

L3BU_24_01

Ensure that the IUT in U7, on receipt of a RELEASE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U7.

L3BU_24_02

Ensure that the IUT in U7, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U7.

L3BU_24_03

Ensure that the IUT in U7, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in U7.

L3BU_24_04

Ensure that the IUT in U7, 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 U7.

L3BU_24_05

Ensure that the IUT in U7, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in U7.

L3BU_24_06

Ensure that the IUT in U7, 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 U7.

L3BU_24_07

Ensure that the IUT in U7, 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 U11.

L3BU_24_08

Ensure that the IUT in U7, 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 U7.

L3BU_24_09

Ensure that the IUT in U7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U7.

L3BU_24_10

Ensure that the IUT in U7, 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 U7.

L3BU_24_11

Ensure that the IUT in U7, 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 U7.

L3BU_24_12

Ensure that the IUT in U7, 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 U11.

L3BU_24_13

Ensure that the IUT in U7, 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 U7.

L3BU_24_14

Ensure that the IUT in U7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U7.

L3BU_24_15

Ensure that the IUT in U7, 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 U7.

L3BU_24_16

Ensure that the IUT in U7, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_24_17

Ensure that the IUT in U7, on receipt of a RELEASE message (Cause information element absent),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters U0.

L3BU_24_18

Ensure that the IUT in U7, on receipt of a RELEASE message (Cause information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters U0.

L3BU_24_19

Ensure that the IUT in U7, on receipt of a RELEASE message (Unrecognized information element present),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters U0.

L3BU_24_20

Ensure that the IUT in U7, on receipt of a RELEASE message (Optional information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters U0.

L3BU_24_21

Ensure that the IUT in U7, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in U7.

L3BU_24_22

Ensure that the IUT in U7, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 7) and remains in U7.

L3BU_24_23

Ensure that the IUT in U7, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.6 Error handling in U8 (25)

L3BU_25_01

Ensure that the IUT in U8, on receipt of a RELEASE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U8.

L3BU_25_02

Ensure that the IUT in U8, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U8.

L3BU_25_03

Ensure that the IUT in U8, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in U8.

L3BU_25_04

Ensure that the IUT in U8, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in U8.

L3BU_25_05

Ensure that the IUT in U8, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in U8.

L3BU_25_06

Ensure that the IUT in U8, on receipt of an unexpected message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 101, call state value = 8) and remains in U8.

L3BU_25_07

Ensure that the IUT in U8, 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 U11.

L3BU_25_08

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_09

Ensure that the IUT in U8, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U8.

L3BU_25_10

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_11

Ensure that the IUT in U8, on receipt of an unrecognized message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 97, call state value = 8) and remains in U8.

L3BU_25_12

Ensure that the IUT in U8, 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 U11.

L3BU_25_13

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_14

Ensure that the IUT in U8, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U8.

L3BU_25_15

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_16

Ensure that the IUT in U8, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_25_17

Ensure that the IUT in U8, on receipt of a RELEASE message (Cause information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters U0.

L3BU_25_18

Ensure that the IUT in U8, 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 U0.

L3BU_25_19

Ensure that the IUT in U8, 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 U0.

L3BU_25_20

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_21

Ensure that the IUT in U8, 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 U11.

L3BU_25_22

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_23

Ensure that the IUT in U8, 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 U8.

L3BU_25_24

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_25

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_26

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_27

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_28

Ensure that the IUT in U8, 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 U11.

L3BU_25_29

Ensure that the IUT in U8, 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 = 8) and remains in U8.

L3BU_25_30

Ensure that the IUT in U8, 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 U8.

L3BU_25_31

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_32

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_33

Ensure that the IUT in U8, 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 enters U10.

L3BU_25_34

Ensure that the IUT in U8, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or sends a STATUS ENQUIRY message and remains in U8.

L3BU_25_35

Ensure that the IUT in U8, 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 U8.

L3BU_25_36

Ensure that the IUT in U8, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 8) and remains in U8.

L3BU_25_37

Ensure that the IUT in U8, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.7 Error handling in U9 (26)

Selection: IUT stable in U9.

L3BU_26_01

Ensure that the IUT in U9, on receipt of a RELEASE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U9.

L3BU_26_02

Ensure that the IUT in U9, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U9.

L3BU_26_03

Ensure that the IUT in U9, 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 U9.

L3BU_26_04

Ensure that the IUT in U9, 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 U9.

L3BU_26_05

Ensure that the IUT in U9, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in U9.

L3BU_26_06

Ensure that the IUT in U9, 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 U9.

L3BU_26_07

Ensure that the IUT in U9, 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 U11.

L3BU_26_08

Ensure that the IUT in U9, 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 U9.

L3BU_26_09

Ensure that the IUT in U9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U9.

L3BU_26_10

Ensure that the IUT in U9, 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 U9.

L3BU_26_11

Ensure that the IUT in U9, 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 U9.

L3BU_26_12

Ensure that the IUT in U9, 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 U11.

L3BU_26_13

Ensure that the IUT in U9, 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 U9.

L3BU_26_14

Ensure that the IUT in U9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U9.

L3BU_26_15

Ensure that the IUT in U9, 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 U9.

L3BU_26_16

Ensure that the IUT in U9, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_26_17

Ensure that the IUT in U9, on receipt of a RELEASE message (Cause information element absent),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters U0.

L3BU_26_18

Ensure that the IUT in U9, on receipt of a RELEASE message (Cause information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters U0.

L3BU_26_19

Ensure that the IUT in U9, on receipt of a RELEASE message (Unrecognized information element present),

- sends a RELEASE COMPLETE message (Cause value = 99) and enters U0.

L3BU_26_20

Ensure that the IUT in U9, on receipt of a RELEASE message (Optional information element with content error present),

- sends a RELEASE COMPLETE message (Cause value = 100) and enters U0.

L3BU_26_21

Ensure that the IUT in U9, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message or optionally sends a STATUS ENQUIRY message and remains in U9.

L3BU_26_22

Ensure that the IUT in U9, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 9) and remains in U9.

L3BU_26_23

Ensure that the IUT in U9, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.8 Error handling in U10 - incoming call (27)**L3BU_27_01**

Ensure that the IUT in U10, on receipt of a RELEASE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U10.

L3BU_27_02

Ensure that the IUT in U10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U10.

L3BU_27_03

Ensure that the IUT in U10, 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 U10.

L3BU_27_04

Ensure that the IUT in U10, 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 U10.

L3BU_27_05

Ensure that the IUT in U10, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in U10.

L3BU_27_06

Ensure that the IUT in U10, 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 U10.

L3BU_27_07

Ensure that the IUT in U10, 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 U11.

L3BU_27_08

Ensure that the IUT in U10, 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 U10.

L3BU_27_09

Ensure that the IUT in U10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U10.

L3BU_27_10

Ensure that the IUT in U10, 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 U10.

L3BU_27_11

Ensure that the IUT in U10, 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 U10.

L3BU_27_12

Ensure that the IUT in U10, 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 U11.

L3BU_27_13

Ensure that the IUT in U10, 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 U10.

L3BU_27_14

Ensure that the IUT in U10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U10.

L3BU_27_15

Ensure that the IUT in U10, 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 U10.

L3BU_27_16

Ensure that the IUT in U10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_27_17

Ensure that the IUT in U10, 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 U10.

L3BU_27_18

Ensure that the IUT in U10, on receipt of a RELEASE message (Cause information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters U0.

L3BU_27_19

Ensure that the IUT in U10, 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 U10.

L3BU_27_20

Ensure that the IUT in U10, 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 U0.

L3BU_27_21

Ensure that the IUT in U10, 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 U0.

L3BU_27_22

Ensure that the IUT in U10, 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 U11.

L3BU_27_23

Ensure that the IUT in U10, 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 U10.

L3BU_27_24

Ensure that the IUT in U10, 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 U10.

L3BU_27_25

Ensure that the IUT in U10, 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 U10.

L3BU_27_26

Ensure that the IUT in U10, 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 U0.

L3BU_27_27

Ensure that the IUT in U10, 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 U0.

L3BU_27_28

Ensure that the IUT in U10, 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 U11.

L3BU_27_29

Ensure that the IUT in U10, 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 U10.

L3BU_27_30

Ensure that the IUT in U10, 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 U10.

L3BU_27_31

Ensure that the IUT in U10, 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 U10.

L3BU_27_32

Ensure that the IUT in U10, 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 U10.

L3BU_27_33

Ensure that the IUT in U10, 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 U10.

L3BU_27_34

Ensure that the IUT in U10, 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 U0.

L3BU_27_35

Ensure that the IUT in U10, 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 U0.

L3BU_27_36

Ensure that the IUT in U10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in U10.

L3BU_27_37

Ensure that the IUT in U10, 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 U10.

L3BU_27_38

Ensure that the IUT in U10, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 10) and remains in U10.

L3BU_27_39

Ensure that the IUT in U10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.9 Error handling in U10 - outgoing call (28)**L3BU_28_01**

Ensure that the IUT in U10, on receipt of a RELEASE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U10.

L3BU_28_02

Ensure that the IUT in U10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U10.

L3BU_28_03

Ensure that the IUT in U10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in U10.

L3BU_28_04

Ensure that the IUT in U10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in U10.

L3BU_28_05

Ensure that the IUT in U10, 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 U10.

L3BU_28_06

Ensure that the IUT in U10, 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 U11.

L3BU_28_07

Ensure that the IUT in U10, 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 U10.

L3BU_28_08

Ensure that the IUT in U10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U10.

L3BU_28_09

Ensure that the IUT in U10, 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 U10.

L3BU_28_10

Ensure that the IUT in U10, 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 U10.

L3BU_28_11

Ensure that the IUT in U10, 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 U11.

L3BU_28_12

Ensure that the IUT in U10, 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 U10.

L3BU_28_13

Ensure that the IUT in U10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U10.

L3BU_28_14

Ensure that the IUT in U10, 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 U10.

L3BU_28_15

Ensure that the IUT in U10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters U0.

L3BU_28_16

Ensure that the IUT in U10, 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 U10.

L3BU_28_17

Ensure that the IUT in U10, on receipt of a RELEASE message (Cause information element missing),

- sends a RELEASE COMPLETE message (Cause value = 96) and enters U0.

L3BU_28_18

Ensure that the IUT in U10, 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 U10.

L3BU_28_19

Ensure that the IUT in U10, 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 U0.

L3BU_28_20

Ensure that the IUT in U10, 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 U0.

L3BU_28_21

Ensure that the IUT in U10, 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 U11.

L3BU_28_22

Ensure that the IUT in U10, 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 U10.

L3BU_28_23

Ensure that the IUT in U10, 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 U10.

L3BU_28_24

Ensure that the IUT in U10, 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 U10.

L3BU_28_25

Ensure that the IUT in U10, 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 U0.

L3BU_28_26

Ensure that the IUT in U10, 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 U0.

L3BU_28_27

Ensure that the IUT in U10, 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 U11.

L3BU_28_28

Ensure that the IUT in U10, 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 U10.

L3BU_28_29

Ensure that the IUT in U10, 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 U10.

L3BU_28_30

Ensure that the IUT in U10, 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 U10.

L3BU_28_31

Ensure that the IUT in U10, 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 U10.

L3BU_28_32

Ensure that the IUT in U10, 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 U10.

L3BU_28_33

Ensure that the IUT in U10, 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 U0.

L3BU_28_34

Ensure that the IUT in U10, 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 U0.

L3BU_28_35

Ensure that the IUT in U10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in U10.

L3BU_28_36

Ensure that the IUT in U10, 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 U10.

L3BU_28_37

Ensure that the IUT in U10, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 10) and remains in U10.

L3BU_28_38

Ensure that the IUT in U10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.10 Error handling in U11 - incoming call (29)**L3BU_29_01**

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U11.

L3BU_29_02

Ensure that the IUT in U11, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U11.

L3BU_29_03

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in U11.

L3BU_29_04

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in U11.

L3BU_29_05

Ensure that the IUT in U11, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in U11.

L3BU_29_06

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 101, call state value = 11) and remains in U11.

L3BU_29_07

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call)

- sends no message and remains in U11.

L3BU_29_08

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_29_09

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U11.

L3BU_29_10

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_29_11

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 97, call state value = 11) and remains in U11.

L3BU_29_12

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call)

- sends no message and remains in U11.

L3BU_29_13

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_29_14

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U11.

L3BU_29_15

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_29_16

Ensure that the IUT in U11, 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 U0.

L3BU_29_17

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters U0.

L3BU_29_18

Ensure that the IUT in U11, 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 U0.

L3BU_29_19

Ensure that the IUT in U11, 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 U0.

L3BU_29_20

Ensure that the IUT in U11, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in U11.

L3BU_29_21

Ensure that the IUT in U11, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 11) and remains in U11.

L3BU_29_22

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in U11.

L3BU_29_23

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in U11.

L3BU_29_24

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in U11.

L3BU_29_25

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in U11.

L3BU_29_26

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in U11.

L3BU_29_27

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in U11.

L3BU_29_28

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in U11.

L3BU_29_29

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in U11.

L3BU_29_30

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in U11.

L3BU_29_31

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in U11.

L3BU_29_32

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.11 Error handling in U11 - outgoing call (30)**L3BU_30_01**

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in U11.

L3BU_30_02

Ensure that the IUT in U11, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in U11.

L3BU_30_03

Ensure that the IUT in U11, 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 U11.

L3BU_30_04

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in U11.

L3BU_30_05

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 101, call state value = 11) and remains in U11.

L3BU_30_06

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call)

- sends no message and remains in U11.

L3BU_30_07

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_30_08

Ensure that the IUT in U11, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U11.

L3BU_30_09

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_30_10

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = message instruction field not significant)

- sends a STATUS message (Cause value = 97, call state value = 11) and remains in U11.

L3BU_30_11

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call)

- sends no message and remains in U11.

L3BU_30_12

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_30_13

Ensure that the IUT in U11, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore)

- sends no message and remains in U11.

L3BU_30_14

Ensure that the IUT in U11, 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 = 11) and remains in U11.

L3BU_30_15

Ensure that the IUT in U11, 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 U0.

L3BU_30_16

Ensure that the IUT in U11, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters U0.

L3BU_30_17

Ensure that the IUT in U11, 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 U0.

L3BU_30_18

Ensure that the IUT in U11, 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 U0.

L3BU_30_19

Ensure that the IUT in U11, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in U11.

L3BU_30_20

Ensure that the IUT in U11, on receipt of a STATUS ENQUIRY message,

- sends a STATUS message (Cause value = 30, call state value = 11) and remains in U11.

L3BU_30_21

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in U11.

L3BU_30_22

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in U11.

L3BU_30_23

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in U11.

L3BU_30_24

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in U11.

L3BU_30_25

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in U11.

L3BU_30_26

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in U11.

L3BU_30_27

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in U11.

L3BU_30_28

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in U11.

L3BU_30_29

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in U11.

L3BU_30_30

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in U11.

L3BU_30_31

Ensure that the IUT in U11, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters U0.

5.2.1.5.12 Error handling in R0 (31)

L3BU_31_01

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

- sends no message and remains in Rest 0.

L3BU_31_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.

L3BU_31_03

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

- sends no message and remains in Rest 0.

L3BU_31_04

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

- sends no message and remains in Rest 0.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

L3BU_31_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.

5.2.1.5.13 Error handling in R1 (32)**L3BU_32_01**

Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Protocol discriminator coded other than Q.2931 user-network call control message),

- sends no message and remains in Rest 1.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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.

L3BU_32_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 (33)

Test purposes for EN 300 443-1 [1] subclause 5.9.

L3BU_33_01

Ensure that the IUT in U10 (incoming call), to provide notifications,
 - sends a NOTIFY message and remains in U10.

L3BU_33_02

Ensure that the IUT in U10 (outgoing call), to provide notifications,
 - sends a NOTIFY message and remains in U10.

L3BU_33_03

Ensure that the IUT in U3, on receipt of a NOTIFY message,
 - sends no message and remains in U3.

L3BU_33_04

Ensure that the IUT in U4, on receipt of a NOTIFY message,
 - sends no message and remains in U4.

L3BU_33_05

Ensure that the IUT in U7, on receipt of a NOTIFY message,
 - sends no message and remains in U7.

L3BU_33_06

Ensure that the IUT in U8, on receipt of a NOTIFY message,
 - sends no message and remains in U8.

L3BU_33_07

Ensure that the IUT in U9, on receipt of a NOTIFY message,
 - sends no message and remains in U9.

L3BU_33_08

Ensure that the IUT in U10 (incoming call), on receipt of a NOTIFY message,
 - sends no message and remains in U10.

L3BU_33_09

Ensure that the IUT in U10 (outgoing call), on receipt of a NOTIFY message,
 - sends no message and remains in U10.

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: MCu 9.

5.2.2.1 Interworking N-ISDN -> B-ISDN (34)

Test purposes for EN 300 443-1 [1] subclause 6.3.

L3BU_34_01

Ensure that the IUT in U0, to initiate a call which originated in the N-ISDN,
 - sends a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present) and enters U1.

L3BU_34_02

Ensure that the IUT in U0, to initiate a call which originated in the N-ISDN and to provide narrowband high layer compatibility information,
 - sends a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Narrowband high layer compatibility present) and enters U1.

L3BU_34_03

Ensure that the IUT in U0, to initiate a call which originated in the N-ISDN and to provide narrowband low layer compatibility information,

- sends a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Narrowband low layer compatibility present) and enters U1.

5.2.2.2 Interworking B-ISDN -> N-ISDN (35)

Test purposes for EN 300 443-1 [1] subclauses 6.4 and 6.5.

L3BU_35_01

Ensure that the IUT in U0, on receipt of a SETUP message (Narrowband bearer capability present, Broadband sending complete and complete address information present),

- sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_35_02

Ensure that the IUT in U0, on receipt of a SETUP message (Narrowband bearer capability absent, Broadband sending complete and complete address information present),

- sends a RELEASE message (Cause value = 63) and enters U11.

L3BU_35_03

Ensure that the IUT in U0, on receipt of a SETUP message (Narrowband bearer capability present, Broadband sending complete absent, called party number absent),

- sends a SETUP ACKNOWLEDGE message and enters U25.

L3BU_35_04

Ensure that the IUT in U25, on receipt of an INFORMATION message (Broadband sending complete absent, incomplete called number information present),

- sends no message and remains in U25.

L3BU_35_05

Ensure that the IUT in U25, on receipt of an INFORMATION message (Broadband sending complete present, complete called number information present),

- sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state U9, U7 or U8.

L3BU_35_06

Ensure that the IUT in U25, not having received the complete called number information, on the expiry of T302,

- sends a RELEASE message (Cause value = 28) and enters U11.

L3BU_35_07

Ensure that the IUT in U25, on receipt of an INFORMATION message (Broadband sending complete present, invalid called number information present),

- sends a RELEASE message (Cause value = 1, 3, 22 or 28) and enters U11.

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 user equipment claiming conformance to EN 300 443-1 [1].

Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

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				
V1.1.1	January 1999	Public Enquiry	PE 9922:	1999-01-29 to 1999-05-28
V1.1.2	August 1999	Vote	V 9945:	1999-08-24 to 1999-10-22