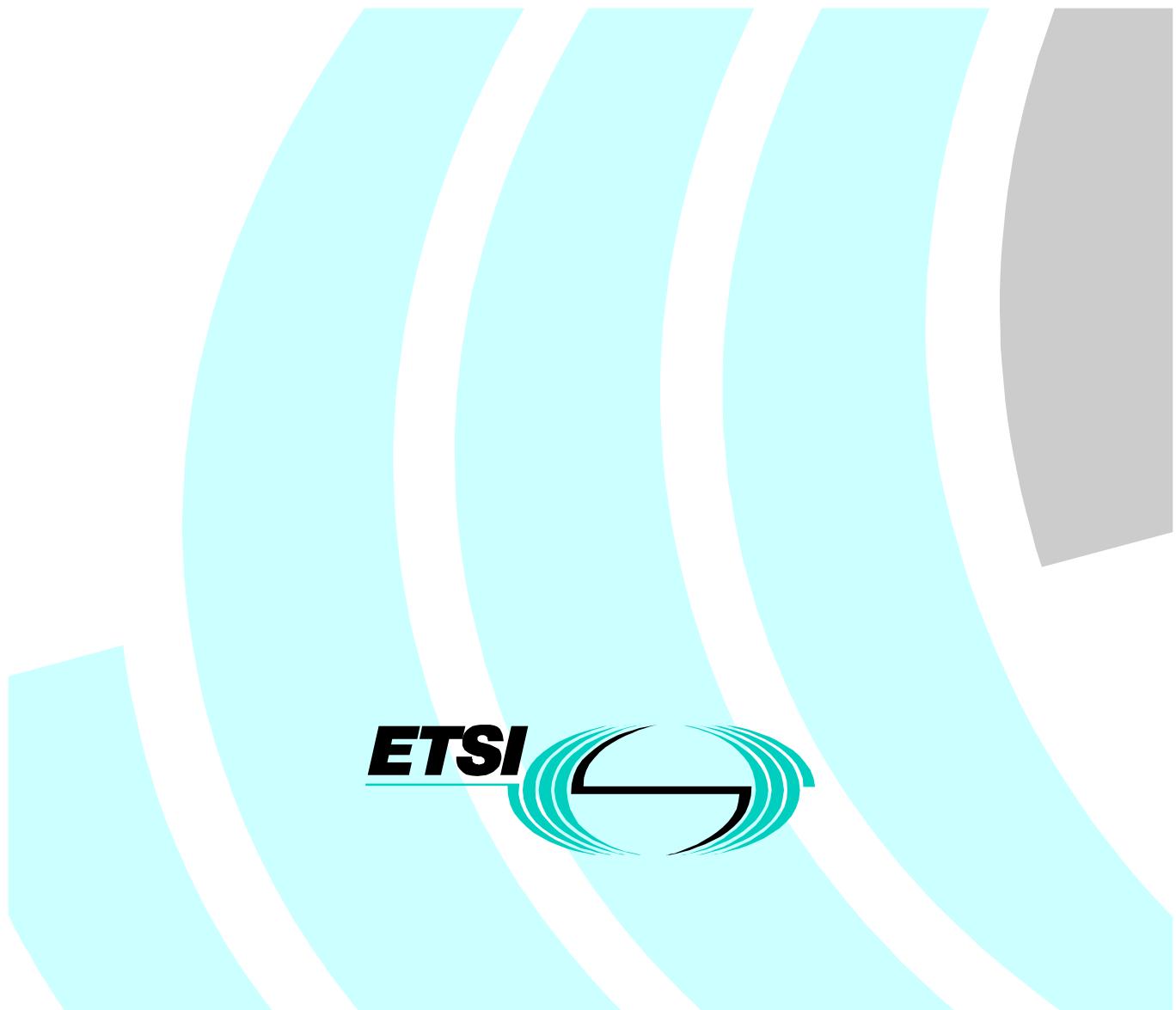


**Broadband Integrated Services Digital Network (B-ISDN);  
Digital Subscriber Signalling System No. two (DSS2) protocol;  
B-ISDN user-network interface layer 3 specification  
for basic call/bearer control;  
Part 3: Test Suite Structure and Test Purposes (TSS&TP)  
specification for the user**

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Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

---

Office address650 Route des Lucioles - Sophia Antipolis  
Valbonne - FRANCETel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16  
Siret N° 348 623 562 00017 - NAF 742 C  
Association à but non lucratif enregistrée à la  
Sous-Préfecture de Grasse (06) N° 7803/88

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Internet

secretariat@etsi.fr

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## Foreword

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

The present document is part 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".

<b>National transposition dates</b>	
Date of adoption of this EN:	29 October 1999
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## 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<sub>B</sub> reference point or coincident S<sub>B</sub> and T<sub>B</sub> reference point applies

**user (S<sub>B</sub>/T<sub>B</sub>):** DSS2 protocol entity at the User side of the user-network interface where a coincident S<sub>B</sub> and T<sub>B</sub> reference point applies

**user (T<sub>B</sub>):** DSS2 protocol entity at the User side of the user-network interface where a T<sub>B</sub> 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<sub>B</sub>/T<sub>B</sub> and at the T<sub>B</sub> 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 .....

    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 .....

    Call/connection confirmation .....

    Active indication .....(13)

Call/connection clearing

    Exception conditions .....(14)

    Clearing initiated by the user.....(15)

    Clearing initiated by the network .....

    Clear collision .....(17)

Restart procedure

    Sending RESTART.....(18)

    Receipt of RESTART .....

Handling of error conditions

    Error handling in U0 .....(20)

    Error handling in U1 .....

    Error handling in U3 .....

    Error handling in U4 .....

    Error handling in U7 .....

    Error handling in U8 .....

    Error handling in U9 .....

    Error handling in U10 - incoming call.....(27)

    Error handling in U10 - outgoing call .....

    Error handling in U11 - incoming call.....(29)

    Error handling in U11 - outgoing call .....

    Error handling in Rest 0 .....

    Error handling in Rest 1 .....

Notification procedures .....

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

Interworking N-ISDN -> B-ISDN .....

Interworking B-ISDN -> N-ISDN .....

**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 <b>Layer 3</b> 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 (ETSI 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 TP<sub>s</sub> 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<sub>B</sub>/T<sub>B</sub> and at the T<sub>B</sub> 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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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-confirmed 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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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 ≠ '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.

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## 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.

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## 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].

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## 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)".

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## History

<b>Document history</b>			
V1.1.1	January 1999	Public Enquiry	PE 9922: 1999-01-29 to 1999-05-28
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