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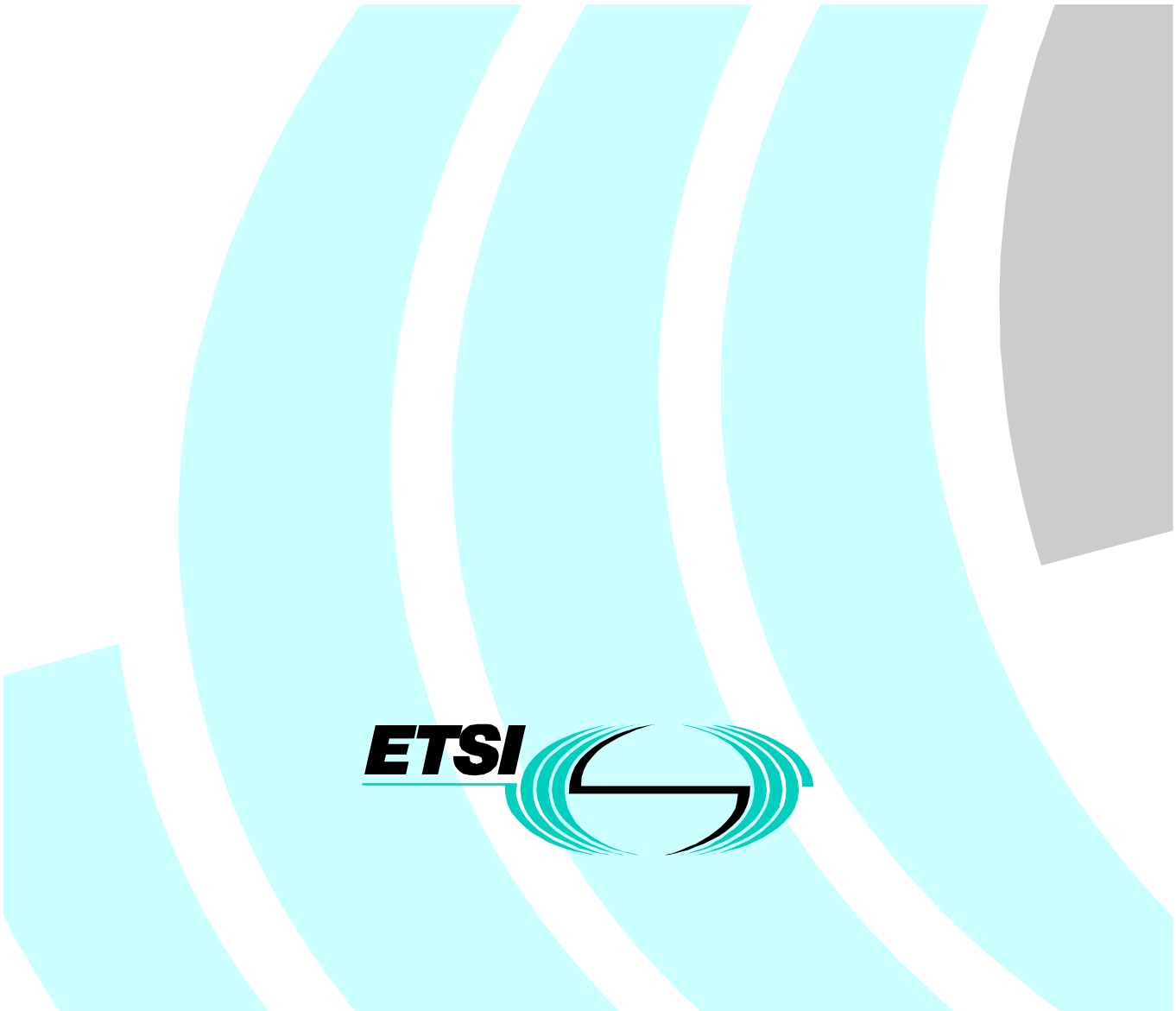
*European Standard (Telecommunications series)*

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



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# Contents

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# Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN), and is now submitted for the ETSI standards One-step Approval Procedure.

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

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

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

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

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

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

# 1 Scope

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

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

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

[1] ETSI EN 300 443-1 (2.0.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".

[2] ETSI EN 300 443-2 (V1.3.1): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

[3] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[4] ISO/IEC 9646-2 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".

[5] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".

[6] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

# 3 Definitions and abbreviations

## 3.1 Definitions

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

### 3.1.1 Definitions related to conformance testing

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

**Abstract Test Method (ATM):** refer to ISO/IEC 9646-1 [3]

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

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

**lower tester:** refer to ISO/IEC 9646-1 [3]

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

**PICS proforma:** refer to ISO/IEC 9646-1 [3]

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

**PIXIT proforma:** refer to ISO/IEC 9646-1 [3]

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

### 3.1.2 Definitions related to EN 300 443-1

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

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

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

## 3.2 Abbreviations

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

| | |
|---|---|
| ATM | Abstract Test Method |
| ATS | Abstract Test Suite |
| B-ISDN | Broadband Integrated Services Digital Network |
| DSS2 | Digital Subscriber Signalling System No. two |
| IUT | Implementation Under Test |
| N0 | Null call state |
| N10 | Active call state |
| N12 | Release Indication call state |
| N2 | Overlap Sending call state |
| N3 | Outgoing Call Proceeding call state |
| N4 | Call Delivered call state |
| N6 | Call Present call state |
| N7 | Call Received call state |
| N9 | Incoming Call Proceeding call state |
| N-ISDN | Narrowband Integrated Services Digital Network |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation eXtra Information for Testing |
| Rest 0 | Restart Null state |
| Rest 1 | Restart Request state |
| Rest 2 | Restart state |
| TP | Test Purpose |
| TSS | Test Suite Structure |
| VC | Virtual Channel |
| VCI | Virtual Channel Identifier |
| VP | Virtual Path |

| | |
|---|---|
| VPC | Virtual Path Connection |
| VPCI | Virtual Path Connection Identifier |

# 4 Test Suite Structure (TSS)

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

Call/connection establishment at the originating interface
- Connection identifier (VPCI/VCI) allocation/selection (01)
  - Associated signalling (02)
  - Non-associated signalling (03)
- QOS and traffic parameters selection procedures (04)
- Invalid call/connection control information (05)
- Call/connection proceeding (06)
- Call/connection confirmation indication (07)
- Call/connection acceptance (08)
- Call/connection rejection (09)
- Transit network selection (10)

Call/connection establishment at the destination interface
- Incoming call/connection request (11)
- Connection identifier (VPCI/VCI) allocation/selection (12)
  - Associated signalling (13)
  - Non-associated signalling (14)
- Call/connection confirmation (15)
- Call/connection acceptance (16)

Call/connection clearing
- Exception conditions (17)
- Clearing initiated by the user (18)
- Clearing initiated by the network (19)
- Clear collision (20)

Restart procedure
- Sending RESTART (21)
- Receipt of RESTART (22)
- Remote user (23)

Handling of error conditions
- Error handling in N0 (24)
- Error handling in N3 (25)
- Error handling in N4 (26)
- Error handling in N6 (27)
- Error handling in N7 (28)
- Error handling in N9 (29)
- Error handling in N10 - incoming call (30)
- Error handling in N10 - outgoing call (31)
- Error handling in N12 - incoming call (32)
- Error handling in N12 - outgoing call (33)
- Error handling in Rest 0 (34)
- Error handling in Rest 1 (35)

Notification procedures (36)

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

Interworking N-ISDN -> B-ISDN (37)

Interworking B-ISDN -> N-ISDN (38)

End-to-end completion indication procedures (39)

**Figure 1: Test suite structure**

# 5 Test Purposes (TP)

## 5.1 Introduction

For each test requirement a TP is defined.

### 5.1.1 TP naming convention

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

**Table 1: TP identifier naming convention scheme**

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

### 5.1.2 Source of TP definition

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

### 5.1.3 Test strategy

As the base standard EN 300 443-1 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 300 443-2 [2].

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

### 5.1.4 Test of call states

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

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

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

Unless specified:

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

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

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

#### 5.2.1.1 Call/connection establishment at the originating interface

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

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

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

**L3BN_01_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling),

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

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

###### 5.2.1.1.1.1 Associated signalling (02)

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

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

**L3BN_02_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; any VCI), when a VCI is available in the VPC carrying the signalling VC,

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

**L3BN_02_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating a specific VCI), when the requested VCI is available in the VPC carrying the signalling VC,

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

**L3BN_02_03**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; any VCI), when no VCI is available in the VPC carrying the signalling VC,

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

**L3BN_02_04**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = VP associated signalling, preferred exclusive = exclusive VPCI; exclusive VCI, virtual channel identifier indicating a specific VCI), when the requested VCI is not available in the VPC carrying the signalling VC,

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

#### 5.2.1.1.1.2 Non-associated signalling (03)

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

**L3BN_03_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), when a VCI is available within the requested VPCI,

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

**L3BN_03_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VCI is available within the requested VPCI,

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

**L3BN_03_03**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier absent), when a VCI is available within any VPCI,

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

**L3BN_03_04**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), when the requested VPCI is not available,

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

**L3BN_03_05**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VPCI is not available,

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

**L3BN_03_06**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when no VCI is available within the requested VPCI,

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

**L3BN_03_07**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), when the requested VCI is not available within the requested VPCI,

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

**L3BN_03_08**
Ensure that the IUT in N0, on receipt of a SETUP message (Connection identifier absent), when no VCI is available within any VPCI,

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

#### 5.2.1.1.2 QOS and traffic parameter selection procedures (04)

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

**L3BN_04_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Valid combination of traffic parameters, Quality of service parameter present, requesting a QOS class that is not supported),

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

**L3BN_04_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Invalid combination of traffic parameters and QOS class),

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

**L3BN_04_03**
Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, invalid combination of transit delay, traffic parameters and QOS class),

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

**L3BN_04_04**
Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, maximum end-to-end transit delay absent),

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

**L3BN_04_05**
Ensure that the IUT in N0, on receipt of a SETUP message (End-to-end transit delay present, cumulative end-to-end transit delay absent),

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

**L3BN_04_06**
Ensure that the IUT in N3, having received a SETUP message (End-to-end transit delay present), to indicate that the call has been accepted at the called user's side,

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

**L3BN_04_07**
Ensure that the IUT in N4, having received a SETUP message (End-to-end transit delay present, maximum end-to-end transit delay absent), to indicate that the call has been accepted at the called user's side,

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

**L3BN_04_08**
Ensure that the IUT in N0, on receipt of a SETUP message (ATM traffic descriptor present, requesting a peak cell rate that can not be provided),

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

#### 5.2.1.1.3 Invalid call/connection control information (05)

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

**L3BN_05_01**
Ensure that the IUT in N0, on receipt of a SETUP message ( Called party number present, indicating invalid call information, i.e. unassigned called party number),

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

**L3BN_05_02**
Ensure that the IUT in N0, on receipt of a SETUP message ( Called party number present, indicating invalid call information, i.e. no outgoing trunk direction exists for the called party number),

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

**L3BN_05_03**
Ensure that the IUT in N0, on receipt of a SETUP message ( Called party number present, indicating invalid call information, i.e. a called party number that has been changed),

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

**L3BN_05_04**
Ensure that the IUT in N0, on receipt of a SETUP message ( Called party number present, indicating invalid call information, i.e. an incomplete called party number),

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

#### 5.2.1.1.4 Call/connection proceeding (06)

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

**L3BN_06_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is authorized and available),

- sends a CALL PROCEEDING message and enters N3.

**L3BN_06_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is not authorized),

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

**L3BN_06_03**
Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability requesting a service that is not available),

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

#### 5.2.1.1.5 Call/connection confirmation indication (07)

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

**L3BN_07_01**
Ensure that the IUT in N3, to indicate that user alerting has been initiated at the called user's side,

- sends an ALERTING message and enters N4.

#### 5.2.1.1.6 Call/connection acceptance (08)

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

**L3BN_08_01**
Ensure that the IUT in N3, to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message and enters N10.

**L3BN_08_02**
Ensure that the IUT in N4, to indicate that the call has been accepted at the called user's side,

- sends a CONNECT message and enters N10.

**L3BN_08_03**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message,

- sends no message and remains in N10.

#### 5.2.1.1.7 Call/connection rejection (09)

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

**L3BN_09_01**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (Broadband bearer capability not supported),

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

**L3BN_09_02**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (QOS class can not be provided),

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

**L3BN_09_03**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (peak cell rate can not be provided),

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

**L3BN_09_04**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (call rejected),

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

**L3BN_09_05**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (user busy),

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

**L3BN_09_06**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (second expiry of T303),

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

**L3BN_09_07**
Ensure that the IUT in N3, to indicate that the call has not been accepted at the called user's side (expiry of T310),

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

**L3BN_09_08**
Ensure that the IUT in N4, to indicate that the call has not been accepted at the called user's side (expiry of T301),

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

#### 5.2.1.1.8 Transit network selection (10)

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

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

**L3BN_10_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating a transit network not recognized by the IUT),

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

**L3BN_10_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating the transit network selection in an incorrect format),

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

**L3BN_10_03**
Ensure that the IUT in N0, on receipt of a SETUP message (Transit network selection indicating valid network selection information), to indicate that it can not route the call to the requested direction due to insufficient bandwidth,

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

### 5.2.1.2 Call/connection establishment at the destination interface

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

#### 5.2.1.2.1 Incoming call/connection request (11)

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

**L3BN_11_01**
Ensure that the IUT in N0, to indicate the arrival of a call,

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

**L3BN_11_02**
Ensure that the IUT in N0, to indicate the arrival of a call by using the en bloc receiving procedures,

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

**L3BN_11_03**
Ensure that the IUT in N6, on the first expiry of T303,

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

**L3BN_11_04**
Ensure that the IUT in N6, on the second expiry of T303,

- sends a no message and enters N0.

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

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

##### 5.2.1.2.2.1 Associated signalling (13)

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

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

**L3BN_13_01**
Ensure that the IUT in N0, to indicate the arrival of a call,

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

##### 5.2.1.2.2.2 Non-associated signalling (14)

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

**L3BN_14_01**
Ensure that the IUT in N0, to indicate the arrival of a call,

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

**L3BN_14_02**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

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

**L3BN_14_03**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of a CALL PROCEEDING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

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

**L3BN_14_04**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of an ALERTING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

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

**L3BN_14_05**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of an ALERTING message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

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

**L3BN_14_06**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; any VCI, virtual path connection identifier indicating a specific VPCI), on receipt of a CONNECT message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one),

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

**L3BN_14_07**
Ensure that the IUT in N6, having sent a SETUP message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI), on receipt of a CONNECT message (Connection identifier present, VP associated signalling = explicit indication of VPCI, preferred exclusive = exclusive VPCI; exclusive VCI, virtual path connection identifier indicating a VPCI other than the sent one, virtual channel identifier indicating a VCI other than the sent one),

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

#### 5.2.1.2.3 Call/connection confirmation (15)

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

**L3BN_15_01**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message,

- sends no message and enters N9.

**L3BN_15_02**
Ensure that the IUT in N6, on receipt of an ALERTING message,

- sends no message and enters N7.

**L3BN_15_03**
Ensure that the IUT in N9, on receipt of an ALERTING message,

- sends no message and enters N7.

**L3BN_15_04**
Ensure that the IUT in N9, on the expiry of T310,

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

**L3BN_15_05**
Ensure that the IUT in N7, on the expiry of T301,

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

#### 5.2.1.2.4 Call/connection acceptance (16)

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

**L3BN_16_01**
Ensure that the IUT in N6, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

**L3BN_16_02**
Ensure that the IUT in N7, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

**L3BN_16_03**
Ensure that the IUT in N9, on receipt of a CONNECT message,

- sends a CONNECT ACKNOWLEDGE message and enters N10.

#### 5.2.1.3 Call/connection clearing

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

##### 5.2.1.3.1 Exception conditions (17)

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

**L3BN_17_01**
Ensure that the IUT in N6, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

##### 5.2.1.3.2 Clearing initiated by the user (18)

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

**L3BN_18_01**
Ensure that the IUT in N3, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_18_02**
Ensure that the IUT in N4, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_18_03**
Ensure that the IUT in N7, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_18_04**
Ensure that the IUT in N9, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_18_05**
Ensure that the IUT in N10 (incoming call), on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_18_06**
Ensure that the IUT in N10 (outgoing call), on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

##### 5.2.1.3.3 Clearing initiated by the network (19)

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

**L3BN_19_01**
Ensure that the IUT in N3, to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_02**
Ensure that the IUT in N4, to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_03**
Ensure that the IUT in N7, to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_04**
Ensure that the IUT in N9, to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_05**
Ensure that the IUT in N10 (incoming call), to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_06**
Ensure that the IUT in N10 (outgoing call), to initiate call clearing,

- sends a RELEASE message and enters N12.

**L3BN_19_07**
Ensure that the IUT in N12 (incoming call), on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_19_08**
Ensure that the IUT in N12 (outgoing call), on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_19_09**
Ensure that the IUT in N12 (incoming call), on the expiry of T308,

- sends a RELEASE message and remains in N12.

**L3BN_19_10**
Ensure that the IUT in N12 (outgoing call), on the expiry of T308,

- sends a RELEASE message and remains in N12.

#### 5.2.1.3.4 Clear collision (20)

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

**L3BN_20_01**
Ensure that the IUT in N12 (incoming call), on receipt of a RELEASE message,

- sends no message and enters N0.

**L3BN_20_02**
Ensure that the IUT in N12 (outgoing call), on receipt of a RELEASE message,

- sends no message and enters N0.

### 5.2.1.4 Restart procedure

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

#### 5.2.1.4.1 Sending RESTART (21)

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

**L3BN_21_01**
Ensure that the IUT in Rest 0, to return virtual channels to the idle condition,

- sends a RESTART message and enters Rest 1.

**L3BN_21_02**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message,

- sends no message and enters Rest 0.

**L3BN_21_03**
Ensure that the IUT in Rest 1, on the first expiry of T316,

- sends a RESTART message and remains in Rest 1.

**L3BN_21_04**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Connection identifier different to the one sent by the IUT in the RESTART message),

- sends no message and remains in Rest 1.

#### 5.2.1.4.2 Receipt of RESTART (22)

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

**L3BN_22_01**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating a specific VPCI, virtual channel identifier indicating a specific VCI),

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

**L3BN_22_02**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating a specific VPCI),

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

**L3BN_22_03**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent),

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

**L3BN_22_04**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating a specific VPCI, virtual channel identifier = the signalling virtual channel),

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

**L3BN_22_05**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = IE instruction field not significant),

optionally sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

**L3BN_22_06**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

**L3BN_22_07**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and remains in Rest 0.

**L3BN_22_08**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

**L3BN_22_09**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

**L3BN_22_10**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

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

**L3BN_22_11**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message (Restart indicator class = all virtual channels controlled by the layer 3 entity which sends the RESTART message, Connection identifier absent) and re-enters Rest 0.

**L3BN_22_12**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier absent),

- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 0) and remains in Rest 0.

**L3BN_22_13**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = IE instruction field not significant),

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

**L3BN_22_14**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = IE instruction field not significant),

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

**L3BN_22_15**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

**L3BN_22_16**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

**L3BN_22_17**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_22_18**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_22_19**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = indicated virtual channel, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

**L3BN_22_20**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator class = all virtual channels in the indicated VPC which are controlled via the signalling virtual channel on which the RESTART message is sent, Connection identifier present, virtual path connection identifier indicating an unrecognized VPCI, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

#### 5.2.1.4.3 Remote interface (23)

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

**L3BN_23_01**
Ensure that the IUT in N3, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

**L3BN_23_02**
Ensure that the IUT in N4, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

**L3BN_23_03**
Ensure that the IUT in N7, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

**L3BN_23_04**
Ensure that the IUT in N9, to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

**L3BN_23_05**
Ensure that the IUT in N10 (incoming call), to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

**L3BN_23_06**
Ensure that the IUT in N10 (outgoing call), to indicate that the virtual channels have been returned to an idle condition at the remote interface,

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

### 5.2.1.5 Handling of error conditions

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

#### 5.2.1.5.1 Error handling in N0 (24)

**L3BN_24_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N0.

**L3BN_24_02**
Ensure that the IUT in N0, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N0.

**L3BN_24_03**
Ensure that the IUT in N0, on receipt of a SETUP message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N0.

**L3BN_24_04**
Ensure that the IUT in N0, on receipt of a SETUP message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N0.

**L3BN_24_05**
Ensure that the IUT in N0, on receipt of an ALERTING message,

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

**L3BN_24_06**
Ensure that the IUT in N0, on receipt of a CALL PROCEEDING message,

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

**L3BN_24_07**
Ensure that the IUT in N0, on receipt of a CONNECT message,

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

**L3BN_24_08**
Ensure that the IUT in N0, on receipt of a CONNECT ACKNOWLEDGE message,

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

**L3BN_24_09**
Ensure that the IUT in N0, on receipt of a NOTIFY message,

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

**L3BN_24_10**
Ensure that the IUT in N0, on receipt of a RELEASE message,

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

**L3BN_24_11**
Ensure that the IUT in N0, on receipt of a RELEASE COMPLETE message,

- sends no message and remains in N0.

**L3BN_24_12**
Ensure that the IUT in N0, on receipt of a SETUP message (Call reference flag = 1),

- sends no message and remains in N0.

**L3BN_24_13**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 1),

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

**L3BN_24_14**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 3),

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

**L3BN_24_15**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 4),

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

**L3BN_24_16**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 6),

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

**L3BN_24_17**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 7),

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

**L3BN_24_18**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 8),

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

**L3BN_24_19**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 9),

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

**L3BN_24_20**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 10),

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

**L3BN_24_21**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 11),

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

**L3BN_24_22**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 12),

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

**L3BN_24_23**
Ensure that the IUT in N0, on receipt of a STATUS message (Call state value = 0),

- sends no message and remains in N0.

**L3BN_24_24**
Ensure that the IUT in N0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 1),

- sends no message and remains in N0.

**L3BN_24_25**
Ensure that the IUT in N0, on receipt of a STATUS message (Call reference value = global call reference, call state value = Rest 2),

- sends no message and remains in N0.

**L3BN_24_26**
Ensure that the IUT in N0, on receipt of a STATUS ENQUIRY message,

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

**L3BN_24_27**
Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element missing),

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

**L3BN_24_28**
Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_24_29**
Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_24_30**
Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_24_31**
Ensure that the IUT in N0, on receipt of a SETUP message (Mandatory information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

**L3BN_24_32**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_24_33**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_24_34**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_24_35**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

**L3BN_24_36**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_24_37**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CALL PROCEEDING message and enters N3.

**L3BN_24_38**
Ensure that the IUT in N0, on receipt of a SETUP message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_24_39**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_24_40**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_24_41**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_24_42**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N0.

**L3BN_24_43**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_24_44**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CALL PROCEEDING message and enters N3.

**L3BN_24_45**
Ensure that the IUT in N0, on receipt of a SETUP message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

#### 5.2.1.5.2 Error handling in N3 (25)

**L3BN_25_01**
Ensure that the IUT in N3, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N3.

**L3BN_25_02**
Ensure that the IUT in N3, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N3.

**L3BN_25_03**
Ensure that the IUT in N3, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N3.

**L3BN_25_04**
Ensure that the IUT in N3, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N3.

**L3BN_25_05**
Ensure that the IUT in N3, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N3.

**L3BN_25_06**
Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_25_07**
Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_25_08**
Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_25_09**
Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N3.

**L3BN_25_10**
Ensure that the IUT in N3, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_25_11**
Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_25_12**
Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_25_13**
Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_25_14**
Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N3.

**L3BN_25_15**
Ensure that the IUT in N3, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_25_16**
Ensure that the IUT in N3, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_25_17**
Ensure that the IUT in N3, on receipt of a RELEASE message (Cause information element absent),

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

**L3BN_25_18**
Ensure that the IUT in N3, on receipt of a RELEASE message (Cause information element with content error present),

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

**L3BN_25_19**
Ensure that the IUT in N3, on receipt of a RELEASE message (Unrecognized information element present),

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

**L3BN_25_20**
Ensure that the IUT in N3, on receipt of a RELEASE message (Optional information element with content error present),

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

**L3BN_25_21**
Ensure that the IUT in N3, on receipt of an AAL-ESTABLISH-indication primitive,

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

**L3BN_25_22**
Ensure that the IUT in N3, on receipt of a STATUS ENQUIRY message,

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

**L3BN_25_23**
Ensure that the IUT in N3, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.3 Error handling in N4 (26)

**L3BN_26_01**
Ensure that the IUT in N4, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N4.

**L3BN_26_02**
Ensure that the IUT in N4, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N4.

**L3BN_26_03**
Ensure that the IUT in N4, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N4.

**L3BN_26_04**
Ensure that the IUT in N4, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N4.

**L3BN_26_05**
Ensure that the IUT in N4, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N4.

**L3BN_26_06**
Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_26_07**
Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_26_08**
Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_26_09**
Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N4.

**L3BN_26_10**
Ensure that the IUT in N4, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_26_11**
Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_26_12**
Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_26_13**
Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_26_14**
Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N4.

**L3BN_26_15**
Ensure that the IUT in N4, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_26_16**
Ensure that the IUT in N4, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_26_17**
Ensure that the IUT in N4, on receipt of a RELEASE message (Cause information element absent),

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

**L3BN_26_18**
Ensure that the IUT in N4, on receipt of a RELEASE message (Cause information element with content error present),

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

**L3BN_26_19**
Ensure that the IUT in N4, on receipt of a RELEASE message (Unrecognized information element present),

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

**L3BN_26_20**
Ensure that the IUT in N4, on receipt of a RELEASE message (Optional information element with content error present),

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

**L3BN_26_21**
Ensure that the IUT in N4, on receipt of an AAL-ESTABLISH-indication primitive,

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

**L3BN_26_22**
Ensure that the IUT in N4, on receipt of a STATUS ENQUIRY message,

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

**L3BN_26_23**
Ensure that the IUT in N4, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.4 Error handling in N6 (27)

**L3BN_27_01**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N6.

**L3BN_27_02**
Ensure that the IUT in N6, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N6.

**L3BN_27_03**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N6.

**L3BN_27_04**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N6.

**L3BN_27_05**
Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_27_06**
Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_27_07**
Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_27_08**
Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N6.

**L3BN_27_09**
Ensure that the IUT in N6, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_27_10**
Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_27_11**
Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_27_12**
Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_27_13**
Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N6.

**L3BN_27_14**
Ensure that the IUT in N6, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_27_15**
Ensure that the IUT in N6, on receipt of a RELEASE message,

- sends a RELEASE COMPLETE message and enters N0.

**L3BN_27_16**
Ensure that the IUT in N6, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_27_17**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_27_18**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_27_19**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_27_20**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N6.

**L3BN_27_21**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_27_22**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N9.

**L3BN_27_23**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_27_24**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_27_25**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_27_26**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_27_27**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N6.

**L3BN_27_28**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_27_29**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N9.

**L3BN_27_30**
Ensure that the IUT in N6, on receipt of a CALL PROCEEDING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_27_31**
Ensure that the IUT in N6, on receipt of an AAL-ESTABLISH-indication primitive,

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

**L3BN_27_32**
Ensure that the IUT in N6, on receipt of a STATUS ENQUIRY message,

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

**L3BN_27_33**
Ensure that the IUT in N6, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.5 Error handling in N7 (28)

**L3BN_28_01**
Ensure that the IUT in N7, on receipt of a CONNECT message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N7.

**L3BN_28_02**
Ensure that the IUT in N7, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N7.

**L3BN_28_03**
Ensure that the IUT in N7, on receipt of a CONNECT message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N7.

**L3BN_28_04**
Ensure that the IUT in N7, on receipt of a CONNECT message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N7.

**L3BN_28_05**
Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_28_06**
Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_28_07**
Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_28_08**
Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N7.

**L3BN_28_09**
Ensure that the IUT in N7, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_28_10**
Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_28_11**
Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_28_12**
Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_28_13**
Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N7.

**L3BN_28_14**
Ensure that the IUT in N7, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_28_15**
Ensure that the IUT in N7, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_28_16**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_28_17**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_28_18**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_28_19**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N7.

**L3BN_28_20**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_28_21**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CONNECT ACKNOWLEDGE message and enters N10.

**L3BN_28_22**
Ensure that the IUT in N7, on receipt of a CONNECT message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_28_23**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_28_24**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_28_25**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_28_26**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N7.

**L3BN_28_27**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_28_28**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a CONNECT ACKNOWLEDGE message and enters N10.

**L3BN_28_29**
Ensure that the IUT in N7, on receipt of a CONNECT message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_28_30**
Ensure that the IUT in N7, on receipt of an AAL-ESTABLISH-indication primitive,

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

**L3BN_28_31**
Ensure that the IUT in N7, on receipt of a STATUS ENQUIRY message,

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

**L3BN_28_32**
Ensure that the IUT in N7, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.6 Error handling in N9 (29)

**L3BN_29_01**
Ensure that the IUT in N9, on receipt of an ALERTING message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N9.

**L3BN_29_02**
Ensure that the IUT in N9, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N9.

**L3BN_29_03**
Ensure that the IUT in N9, on receipt of an ALERTING message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N9.

**L3BN_29_04**
Ensure that the IUT in N9, on receipt of an ALERTING message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N9.

**L3BN_29_05**
Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_29_06**
Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_29_07**
Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_29_08**
Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N9.

**L3BN_29_09**
Ensure that the IUT in N9, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_29_10**
Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_29_11**
Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_29_12**
Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_29_13**
Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N9.

**L3BN_29_14**
Ensure that the IUT in N9, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_29_15**
Ensure that the IUT in N9, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_29_16**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_29_17**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_29_18**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_29_19**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N9.

**L3BN_29_20**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_29_21**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N7.

**L3BN_29_22**
Ensure that the IUT in N9, on receipt of an ALERTING message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_29_23**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_29_24**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_29_25**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_29_26**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N9.

**L3BN_29_27**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_29_28**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters N7.

**L3BN_29_29**
Ensure that the IUT in N9, on receipt of an ALERTING message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_29_30**
Ensure that the IUT in N9, on receipt of an AAL-ESTABLISH-indication primitive,

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

**L3BN_29_31**
Ensure that the IUT in N9, on receipt of a STATUS ENQUIRY message,

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

**L3BN_29_32**
Ensure that the IUT in N9, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.7 Error handling in N10 - incoming call (30)

**L3BN_30_01**
Ensure that the IUT in N10, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N10.

**L3BN_30_02**
Ensure that the IUT in N10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N10.

**L3BN_30_03**
Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N10.

**L3BN_30_04**
Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N10.

**L3BN_30_05**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_30_06**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_30_07**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_30_08**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

**L3BN_30_09**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_30_10**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_30_11**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_30_12**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_30_13**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

**L3BN_30_14**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_30_15**
Ensure that the IUT in N10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_30_16**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element missing),

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

**L3BN_30_17**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element missing),

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

**L3BN_30_18**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_30_19**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_30_20**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = follow explicit instructions),

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

**L3BN_30_21**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_30_22**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_30_23**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

**L3BN_30_24**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_30_25**
Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_30_26**
Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

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

**L3BN_30_27**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_30_28**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_30_29**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

**L3BN_30_30**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_30_31**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

**L3BN_30_32**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_30_33**
Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_30_34**
Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

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

**L3BN_30_35**
Ensure that the IUT in N10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in N10.

**L3BN_30_36**
Ensure that the IUT in N10, after having sent an AAL-ESTABLISH-request primitive in response to an AAL-RELEASE-indication primitive, on receipt of an AAL-ESTABLISH-confirm primitive,

- sends a STATUS ENQUIRY message and remains in N10.

**L3BN_30_37**
Ensure that the IUT in N10, on receipt of a STATUS ENQUIRY message,

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

**L3BN_30_38**
Ensure that the IUT in N10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.8 Error handling in N10 - outgoing call (31)

**L3BN_31_01**
Ensure that the IUT in N10, on receipt of a RELEASE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N10.

**L3BN_31_02**
Ensure that the IUT in N10, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N10.

**L3BN_31_03**
Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N10.

**L3BN_31_04**
Ensure that the IUT in N10, on receipt of a RELEASE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N10.

**L3BN_31_05**
Ensure that the IUT in N10, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N10.

**L3BN_31_06**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_31_07**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_31_08**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_31_09**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

**L3BN_31_10**
Ensure that the IUT in N10, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_31_11**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_31_12**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

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

**L3BN_31_13**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_31_14**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N10.

**L3BN_31_15**
Ensure that the IUT in N10, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_31_16**
Ensure that the IUT in N10, on receipt of a RELEASE COMPLETE message,

- sends no message and enters N0.

**L3BN_31_17**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element missing),

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

**L3BN_31_18**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element missing),

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

**L3BN_31_19**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_20**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_21**
Ensure that the IUT in N10, on receipt of a RELEASE message (Cause information element with content error present, IE instruction field flag = follow explicit instructions),

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

**L3BN_31_22**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_31_23**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_31_24**
Ensure that the IUT in N10, on receipt of a NOTIFY message (Notification indicator information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

**L3BN_31_25**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_26**
Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_27**
Ensure that the IUT in N10, on receipt of a RELEASE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

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

**L3BN_31_28**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_31_29**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_31_30**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

**L3BN_31_31**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_31_32**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

**L3BN_31_33**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_31_34**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_35**
Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_31_36**
Ensure that the IUT in N10, on receipt of a RELEASE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

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

**L3BN_31_37**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

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

**L3BN_31_38**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_31_39**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in N10.

**L3BN_31_40**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed and report status),

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

**L3BN_31_41**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and remains in N10.

**L3BN_31_42**
Ensure that the IUT in N10, on receipt of a CONNECT ACKNOWLEDGE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

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

**L3BN_31_43**
Ensure that the IUT in N10, on receipt of an AAL-ESTABLISH-indication primitive,

- sends a STATUS ENQUIRY message and remains in N10.

**L3BN_31_44**
Ensure that the IUT in N10, after having sent an AAL-ESTABLISH-request primitive in response to an AAL-RELEASE-indication primitive, on receipt of an AAL-ESTABLISH-confirm primitive,

- sends a STATUS ENQUIRY message and remains in N10.

**L3BN_31_45**
Ensure that the IUT in N10, on receipt of a STATUS ENQUIRY message,

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

**L3BN_31_46**
Ensure that the IUT in N10, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.9 Error handling in N12 - incoming call (32)

**L3BN_32_01**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N12.

**L3BN_32_02**
Ensure that the IUT in N12, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N12.

**L3BN_32_03**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N12.

**L3BN_32_04**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N12.

**L3BN_32_05**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_32_06**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

**L3BN_32_07**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_32_08**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

**L3BN_32_09**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_32_10**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_32_11**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

**L3BN_32_12**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_32_13**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

**L3BN_32_14**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_32_15**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

**L3BN_32_16**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

**L3BN_32_17**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

**L3BN_32_18**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

**L3BN_32_19**
Ensure that the IUT in N12, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in N12.

**L3BN_32_20**
Ensure that the IUT in N12, on receipt of a STATUS ENQUIRY message,

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

**L3BN_32_21**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in N12.

**L3BN_32_22**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in N12.

**L3BN_32_23**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in N12.

**L3BN_32_24**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in N12.

**L3BN_32_25**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in N12.

**L3BN_32_26**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in N12.

**L3BN_32_27**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in N12.

**L3BN_32_28**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in N12.

**L3BN_32_29**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in N12.

**L3BN_32_30**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in N12.

**L3BN_32_31**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.10 Error handling in N12 - outgoing call (33)

**L3BN_33_01**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in N12.

**L3BN_33_02**
Ensure that the IUT in N12, on receipt of a message which is too short (Message length information element incomplete),

- sends no message and remains in N12.

**L3BN_33_03**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in N12.

**L3BN_33_04**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in N12.

**L3BN_33_05**
Ensure that the IUT in N12, on receipt of a SETUP message (Call reference value already in use),

- sends no message and remains in N12.

**L3BN_33_06**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = message instruction field not significant),

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

**L3BN_33_07**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

**L3BN_33_08**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_33_09**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

**L3BN_33_10**
Ensure that the IUT in N12, on receipt of an unexpected message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_33_11**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = message instruction field not significant),

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

**L3BN_33_12**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = clear call),

- sends no message and remains in N12.

**L3BN_33_13**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and report status),

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

**L3BN_33_14**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = discard and ignore),

- sends no message and remains in N12.

**L3BN_33_15**
Ensure that the IUT in N12, on receipt of an unrecognized message (Message type flag = follow explicit instructions, Message action indicator = reserved value),

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

**L3BN_33_16**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

**L3BN_33_17**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

**L3BN_33_18**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = IE instruction field not significant),

- sends no message and enters N0.

**L3BN_33_19**
Ensure that the IUT in N12, on receipt of a RELEASE COMPLETE message (Optional information element with content error present, IE instruction field flag = follow explicit instructions),

- sends no message and enters N0.

**L3BN_33_20**
Ensure that the IUT in N12, on receipt of an AAL-ESTABLISH-indication primitive,

- sends no message and remains in N12.

**L3BN_33_21**
Ensure that the IUT in N12, on receipt of a STATUS ENQUIRY message,

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

**L3BN_33_22**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 1),

- sends no message and remains in N12.

**L3BN_33_23**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 3),

- sends no message and remains in N12.

**L3BN_33_24**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 4),

- sends no message and remains in N12.

**L3BN_33_25**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 6),

- sends no message and remains in N12.

**L3BN_33_26**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 7),

- sends no message and remains in N12.

**L3BN_33_27**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 8),

- sends no message and remains in N12.

**L3BN_33_28**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 9),

- sends no message and remains in N12.

**L3BN_33_29**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 10),

- sends no message and remains in N12.

**L3BN_33_30**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 11),

- sends no message and remains in N12.

**L3BN_33_31**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 12),

- sends no message and remains in N12.

**L3BN_33_32**
Ensure that the IUT in N12, on receipt of a STATUS message (Call state value = 0),

- sends no message and enters N0.

#### 5.2.1.5.11 Error handling in R0 (34)

**L3BN_34_01**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in Rest 0.

**L3BN_34_02**
Ensure that the IUT in Rest 0, on receipt of a message which is too short (Call reference value = global call reference, message length information element incomplete),

- sends no message and remains in Rest 0.

**L3BN_34_03**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in Rest 0.

**L3BN_34_04**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in Rest 0.

**L3BN_34_05**
Ensure that the IUT in Rest 0, on receipt of an ALERTING message (Call reference value = global call reference),

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

**L3BN_34_06**
Ensure that the IUT in Rest 0, on receipt of a CALL PROCEEDING message (Call reference value = global call reference),

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

**L3BN_34_07**
Ensure that the IUT in Rest 0, on receipt of a CONNECT message (Call reference value = global call reference),

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

**L3BN_34_08**
Ensure that the IUT in Rest 0, on receipt of a CONNECT ACKNOWLEDGE message (Call reference value = global call reference),

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

**L3BN_34_09**
Ensure that the IUT in Rest 0, on receipt of a NOTIFY message (Call reference value = global call reference),

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

**L3BN_34_10**
Ensure that the IUT in Rest 0, on receipt of a RELEASE message (Call reference value = global call reference),

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

**L3BN_34_11**
Ensure that the IUT in Rest 0, on receipt of a RELEASE COMPLETE message (Call reference value = global call reference),

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

**L3BN_34_12**
Ensure that the IUT in Rest 0, on receipt of a SETUP message (Call reference value = global call reference),

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

**L3BN_34_13**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Call reference flag = 1),

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

**L3BN_34_14**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element absent),

- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 0) and remains in Rest 0.

**L3BN_34_15**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = IE instruction field not significant),

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

**L3BN_34_16**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

**L3BN_34_17**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

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

**L3BN_34_18**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

**L3BN_34_19**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

optionally sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

**L3BN_34_20**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and remains in Rest 0.

**L3BN_34_21**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and remains in Rest 0.

**L3BN_34_22**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 0.

**L3BN_34_23**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

**L3BN_34_24**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends a RESTART ACKNOWLEDGE message and re-enters Rest 0.

**L3BN_34_25**
Ensure that the IUT in Rest 0, on receipt of a RESTART message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 2) followed by a RESTART ACKNOWLEDGE message and re-enters Rest 0.

**L3BN_34_26**
Ensure that the IUT in Rest 0, on receipt of a STATUS ENQUIRY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 30, call state value = Rest 0) and remains in Rest 0.

**L3BN_34_27**
Ensure that the IUT in Rest 0, on receipt of a STATUS message (Call state value = Rest 0),

- sends no message and remains in Rest 0.

#### 5.2.1.5.12 Error handling in R1 (35)

**L3BN_35_01**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Protocol discriminator coded other than ITU-T Recommendation Q.2931 user-network call control message),

- sends no message and remains in Rest 1.

**L3BN_35_02**
Ensure that the IUT in Rest 1, on receipt of a message which is too short (Call reference value = global call reference, message length information element incomplete),

- sends no message and remains in Rest 1.

**L3BN_35_03**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference with invalid format, octet 1, bits 8 - 5 ≠ '0000'B),

- sends no message and remains in Rest 1.

**L3BN_35_04**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference with invalid format, octet 1, bits 4 - 1 ≠ '0011'B),

- sends no message and remains in Rest 1.

**L3BN_35_05**
Ensure that the IUT in Rest 1, on receipt of an ALERTING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_06**
Ensure that the IUT in Rest 1, on receipt of a CALL PROCEEDING message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_07**
Ensure that the IUT in Rest 1, on receipt of a CONNECT message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_08**
Ensure that the IUT in Rest 1, on receipt of a CONNECT ACKNOWLEDGE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_09**
Ensure that the IUT in Rest 1, on receipt of a NOTIFY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_10**
Ensure that the IUT in Rest 1, on receipt of a RELEASE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_11**
Ensure that the IUT in Rest 1, on receipt of a RELEASE COMPLETE message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_12**
Ensure that the IUT in Rest 1, on receipt of a SETUP message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_13**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Call reference flag = 0),

- sends a STATUS message (Call reference value = global call reference, cause value = 81, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_14**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element absent),

- sends a STATUS message (Call reference value = global call reference, cause value = 96, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_15**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = IE instruction field not significant),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_16**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and enters Rest 0.

**L3BN_35_17**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 100, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_18**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Restart indicator information element with contents error present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 1.

**L3BN_35_19**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = IE instruction field not significant),

- sends no message or optionally sends a STATUS message (Call reference value = global call reference, cause value = 99) and remains in Rest 1.

**L3BN_35_20**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = clear call),

- sends no message and enters Rest 0.

**L3BN_35_21**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 1) and remains in Rest 1.

**L3BN_35_22**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard message),

- sends no message and remains in Rest 1.

**L3BN_35_23**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element, proceed, and report status),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and enters Rest 0.

**L3BN_35_24**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = discard information element and proceed),

- sends no message and enters Rest 0.

**L3BN_35_25**
Ensure that the IUT in Rest 1, on receipt of a RESTART ACKNOWLEDGE message (Unrecognized information element present, IE instruction field flag = follow explicit instructions, IE action indicator = reserved value),

- sends a STATUS message (Call reference value = global call reference, cause value = 99, call state value = Rest 0) and enters Rest 0.

**L3BN_35_26**
Ensure that the IUT in Rest 1, on receipt of a STATUS ENQUIRY message (Call reference value = global call reference),

- sends a STATUS message (Call reference value = global call reference, cause value = 30, call state value = Rest 1) and remains in Rest 1.

### 5.2.1.6 Notification procedures (36)

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

**L3BN_36_01**
Ensure that the IUT in N10 (incoming call), to provide notifications,

- sends a NOTIFY message and remains in N10.

**L3BN_36_02**
Ensure that the IUT in N10 (outgoing call), to provide notifications,

- sends a NOTIFY message and remains in N10.

**L3BN_36_03**
Ensure that the IUT in N3, on receipt of a NOTIFY message,

- sends no message and remains in N3.

**L3BN_36_04**
Ensure that the IUT in N4, on receipt of a NOTIFY message,

- sends no message and remains in N4.

**L3BN_36_05**
Ensure that the IUT in N7, on receipt of a NOTIFY message,

- sends no message and remains in N7.

**L3BN_36_06**
Ensure that the IUT in N9, on receipt of a NOTIFY message,

- sends no message and remains in N9.

**L3BN_36_07**
Ensure that the IUT in N10 (incoming call), on receipt of a NOTIFY message,

- sends no message and remains in N10.

**L3BN_36_08**
Ensure that the IUT in N10 (outgoing call), on receipt of a NOTIFY message,

- sends no message and remains in N10.

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

Test purposes for EN 300 443-1 [1] clause 6.

**Selection:** Additional procedures for the provision of 64 kbit/s circuit-mode services supported. PICS: MCn 9.

### 5.2.2.1 Interworking N-ISDN -> B-ISDN (37)

Test purposes for EN 300 443-1 [1] clauses 6.3 and 6.5.

**L3BN_37_01**
Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Broadband sending complete and complete address information present),

- sends a CALL PROCEEDING message and enters N3.

**L3BN_37_02**
Ensure that the IUT in N0, on receipt of a SETUP message (Broadband bearer capability present, bearer class = BCOB-A, susceptibility to clipping = susceptible to clipping, Narrowband bearer capability present, Broadband sending complete absent, called party number absent),

- sends a SETUP ACKNOWLEDGE message and enters N2.

### 5.2.2.2 Interworking B-ISDN -> N-ISDN (38)

Test purposes for EN 300 443-1 [1] clause 6.4.

**L3BN_38_01**
Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN,

- sends a SETUP message (Narrowband bearer capability present) and enters N6.

**L3BN_38_02**
Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN and to provide narrowband high layer compatibility information,

- sends a SETUP message (Narrowband bearer capability present, Narrowband high layer compatibility present) and enters N6.

**L3BN_38_03**
Ensure that the IUT in N0, to indicate the arrival of a call which originated in the N-ISDN and to provide narrowband low layer compatibility information,

- sends a SETUP message (Narrowband bearer capability present, Narrowband low layer compatibility present) and enters N6.

## 5.2.3 End-to-end connection completion indication (39)

Test purposes for EN 300 443-1 [1] annex N.

**L3BN_39_01**
Ensure that the IUT in N3, to indicate that the call has been accepted at the called user's side with the request of the end-to-end connection completion indication,

- sends a CONNECT message (Broadband report type present, type of report = End-to-end connection completion indication requested) and enters N10.

**L3BN_39_02**
Ensure that the IUT in N4, to indicate that the call has been accepted at the called user's side with the request of the end-to-end connection completion indication,

- sends a CONNECT message (Broadband report type present, type of report = End-to-end connection completion indication requested) and enters N10.

**L3BN_39_03**
Ensure that the IUT in N10, on receipt of a CONNECTION AVAILABLE message (Broadband report type present, type of report = End-to-end connection completed),

- sends no message and remains in N10.

**L3BN_39_04**
Ensure that the IUT in N10, to indicate that the end-to-end connection is completed,

- sends a CONNECTION AVAILABLE message (Broadband report type present, type of report = End-to-end connection completed) and remains in N10.

# 6 Compliance

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

a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 5;

b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;

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

d) maintain the relationship specified in clause 5 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;

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

In the case of a) or b) above, a subset shall be used only where a particular Abstract Test Method (ATM) makes some TPs untestable. All testable TPs from clause 5 shall be included in a compliant ATS.

# 7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [4], shall be used by any organization claiming to provide a comprehensive testing service for network equipment claiming conformance to EN 300 443-1 [1].

# Annex A (informative): Bibliography


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

# History

| Document history | | |
|---|---|---|
| V1.1.1 | November 1999 | Publication |
| V1.2.1 | October 2000 | Publication |
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