

# EN 301 060-3 V1.1.3 (1998-11)

---

*European Standard (Telecommunications series)*

**Integrated Services Digital Network (ISDN);  
Digital Subscriber Signalling System No. one (DSS1) protocol;  
Basic call control;  
Enhancement at the "b" service entry point for  
Virtual Private Network (VPN) applications;  
Part 3: Test Suite Structure and Test Purposes (TSS&TP)  
specification for the user**

---



---

**Reference**

DEN/SPS-05109-3 (9tcr0ie0.PDF)

---

**Keywords**

ISDN, DSS1, basic, VPN, TSS&TP, user

**ETSI**

---

**Postal address**

F-06921 Sophia Antipolis Cedex - FRANCE

---

**Office address**

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

---

**Internet**

secretariat@etsi.fr  
Individual copies of this ETSI deliverable  
can be downloaded from  
<http://www.etsi.org>

---

**Copyright Notification**

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

© European Telecommunications Standards Institute 1998.  
All rights reserved.

# Contents

Intellectual Property Rights .....	6
Foreword .....	6
1 Scope .....	7
2 Normative references .....	7
3 Definitions and abbreviations .....	8
3.1 Definitions .....	8
3.1.1 Definitions related to conformance testing .....	8
3.1.2 Definitions related to EN 301 060-1 .....	9
3.2 Abbreviations .....	9
4 Test Suite Structure (TSS) .....	9
5 Test Purposes (TP) .....	11
5.1 Introduction .....	11
5.1.1 TP naming convention .....	11
5.1.2 Source of TP definition .....	11
5.1.3 TP structure .....	12
5.1.4 Test strategy .....	12
5.1.5 Test of call states .....	13
5.1.6 Test of inopportune and syntactically invalid behaviour .....	13
5.2 TPs for the basic call control VPN, layer 3, user .....	13
5.2.1 Null call state U00 .....	13
5.2.1.1 Valid .....	13
5.2.1.2 Inopportune .....	15
5.2.1.3 Syntactically invalid .....	16
5.2.1.4 Active .....	17
5.2.2 Call Initiated call state U01 .....	18
5.2.2.1 Valid .....	18
5.2.2.2 Inopportune .....	18
5.2.2.3 Syntactically invalid .....	19
5.2.2.4 Active .....	20
5.2.3 Overlap sending call state U02 .....	20
5.2.3.1 Valid .....	20
5.2.3.2 Inopportune .....	20
5.2.3.3 Syntactically invalid .....	21
5.2.3.4 Active .....	22
5.2.4 Outgoing call proceeding call state U03 .....	22
5.2.4.1 Valid .....	22
5.2.4.2 Inopportune .....	23
5.2.4.3 Syntactically invalid .....	24
5.2.4.4 Active .....	24
5.2.5 Call delivered call state U04 .....	25
5.2.5.1 Valid .....	25
5.2.5.2 Inopportune .....	25
5.2.5.3 Syntactically invalid .....	26
5.2.5.4 Active .....	27
5.2.6 Call received call state U07 .....	27
5.2.6.1 Valid .....	27
5.2.6.2 Inopportune .....	27
5.2.6.3 Syntactically invalid .....	28
5.2.6.4 Active .....	29
5.2.7 Connect request call state U08 .....	29
5.2.7.1 Valid .....	29
5.2.7.2 Inopportune .....	30
5.2.7.3 Syntactically invalid .....	30

5.2.7.4	Active .....	31
5.2.8	Incoming call proceeding call state U09 .....	31
5.2.8.1	Valid .....	31
5.2.8.2	Inopportune .....	32
5.2.8.3	Syntactically invalid .....	33
5.2.8.4	Active .....	33
5.2.9	Active call state U10 (incoming call) .....	34
5.2.9.1	Valid .....	34
5.2.9.2	Inopportune .....	35
5.2.9.3	Syntactically invalid .....	36
5.2.9.4	Active .....	36
5.2.10	Active call state U10 (outgoing call).....	37
5.2.10.1	Valid .....	37
5.2.10.2	Inopportune .....	38
5.2.10.3	Syntactically invalid .....	38
5.2.10.4	Active .....	39
5.2.11	Disconnect request call state U11 (incoming call) .....	39
5.2.11.1	Valid .....	39
5.2.11.2	Inopportune .....	40
5.2.11.3	Syntactically invalid .....	41
5.2.11.4	Active .....	41
5.2.12	Disconnect request call state U11 (outgoing call) .....	42
5.2.12.1	Valid .....	42
5.2.12.2	Inopportune .....	42
5.2.12.3	Syntactically invalid .....	43
5.2.12.4	Active .....	43
5.2.13	Disconnect indication call state U12 (incoming call) .....	44
5.2.13.1	Valid .....	44
5.2.13.2	Inopportune .....	44
5.2.13.3	Syntactically invalid .....	45
5.2.13.4	Active .....	45
5.2.14	Disconnect indication call state U12 (outgoing call).....	46
5.2.14.1	Valid .....	46
5.2.14.2	Inopportune .....	46
5.2.14.3	Syntactically invalid .....	47
5.2.14.4	Active .....	47
5.2.15	Release request call state U19 (incoming call).....	47
5.2.15.1	Valid .....	47
5.2.15.2	Inopportune .....	48
5.2.15.3	Syntactically invalid .....	49
5.2.15.4	Active .....	49
5.2.16	Release request call state U19 (outgoing call).....	49
5.2.16.1	Valid .....	49
5.2.16.2	Inopportune .....	50
5.2.16.3	Syntactically invalid .....	50
5.2.16.4	Active .....	51
5.2.17	Overlap receiving call state U25 .....	51
5.2.17.1	Valid .....	51
5.2.17.2	Inopportune .....	52
5.2.17.3	Syntactically invalid .....	52
5.2.17.4	Active .....	53
5.2.18	Restart null call state R00 (incoming call) .....	54
5.2.18.1	Valid .....	54
5.2.18.2	Inopportune .....	54
5.2.18.3	Syntactically invalid .....	55
5.2.18.4	Active .....	56
5.2.19	Restart null call state R00 (outgoing call) .....	56
5.2.19.1	Valid .....	56
5.2.19.2	Inopportune .....	57
5.2.19.3	Syntactically invalid .....	57

5.2.19.4	Active .....	58
5.2.20	Restart request call state R01 .....	58
5.2.20.1	Valid .....	58
5.2.20.2	Inopportune .....	58
5.2.20.3	Syntactically invalid .....	59
5.2.20.4	Active .....	60
5.2.21	Message segmentation procedure.....	60
5.2.21.1	Valid .....	60
5.2.21.2	Inopportune .....	60
5.2.21.3	Syntactically invalid .....	61
5.2.21.4	Active .....	61
6	Compliance .....	61
7	Requirements for a comprehensive testing service.....	61
History	.....	62

# Intellectual Property Rights

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

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

## Foreword

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

The present document is part 3 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) basic call control extensions at the "b" service entry point for VPN applications, as identified below:

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

National transposition dates	
Date of adoption of this EN:	20 November 1998
Date of latest announcement of this EN (doa):	28 February 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 August 1999
Date of withdrawal of any conflicting National Standard (dow):	31 August 1999

---

# 1 Scope

The third part of EN 301 060 is applicable to the basic call control extensions at the "b" service entry point for Virtual Private Network (VPN) applications for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators at the T reference point (as defined in ITU-T Recommendation I.411 [15]) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol. Stage three identifies the protocol procedures and switching functions needed to support a telecommunications service (see CCITT Recommendation I.130 [11]).

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for the user side for the ISDN DSS1 basic call control extensions at the "b" service entry point for VPN applications as specified in EN 301 060-1 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [10].

---

# 2 Normative references

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case the latest version applies.

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

- [1] EN 301 060-1 (V1.2): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Basic call control; Enhancement at the "b" service entry point for Virtual Private Network (VPN) applications; Part 1: Protocol specification".
- [2] EN 301 060-2 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Basic call control; Enhancement at the "b" service entry point for Virtual Private Network (VPN) applications; Part 2: Protocol implementation Conformance Statement (PICS) proforma specification".
- [3] EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".
- [4] ETS 300 403-2: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 2: Specification and Description Language (SDL) diagrams".
- [5] EN 300 403-3: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 3: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [6] ETS 300 403-5: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 5: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user".
- [7] ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

- [8] ISO/IEC 9646-1: "Information technology; Open systems interconnection; Conformance testing methodology and framework; Part 1: General concepts".
- [9] ISO/IEC 9646-3: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [10] ISO/IEC 9646-7: "Information technology; Open systems interconnection; Conformance testing methodology and framework; Part 7: Implementation Conformance Statements".
- [11] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [12] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [13] ITU-T Recommendation I.112: "Vocabulary of terms for ISDNs".
- [14] ITU-T Recommendation I.210: "Principles of telecommunication services supported by an ISDN and the means to describe them".
- [15] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".

---

## 3 Definitions and abbreviations

### 3.1 Definitions

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

#### 3.1.1 Definitions related to conformance testing

**abstract test case:** refer to ISO/IEC 9646-1 [8].

**Abstract Test Suite (ATS):** refer to ISO/IEC 9646-1 [8].

**active test:** a test case where the IUT is required to send a particular message, but not in reaction to a received message. This would usually involve the use of PIXIT information to see how this message can be generated and quite often is specified in an ATS using an implicit send event.

**Implementation Under Test (IUT):** refer to ISO/IEC 9646-1 [8].

**implicit send event:** refer to ISO/IEC 9646-3 [16].

**lower tester:** refer to ISO/IEC 9646-1 [8].

**passive test:** a test case where the IUT is required to respond to a protocol event (e.g. received message) with another protocol event (e.g. send message) which normally does not require any special operator intervention as associated with the implicit send event.

**point of control and observation:** refer to ISO/IEC 9646-1 [8].

**Protocol Implementation Conformance Statement (PICS):** refer to ISO/IEC 9646-1 [8].

**PICS proforma:** refer to ISO/IEC 9646-1 [8].

**Protocol Implementation eXtra Information for Testing (PIXIT):** refer to ISO/IEC 9646-1 [8].

**PIXIT proforma:** refer to ISO/IEC 9646-1 [8].

**system under test:** refer to ISO/IEC 9646-1 [8].

**Test Purpose (TP):** refer to ISO/IEC 9646-1 [8].



### 3.1.2 Definitions related to EN 301 060-1

**Dummy call reference:** see EN 300 403-1 [3], subclause 4.3.

**Integrated Services Digital Network (ISDN):** see ITU-T Recommendation I.112 [13], definition 308.

**ISDN number:** a number conforming to the numbering and structure specified in CCITT Recommendation E.164 [12].

**service; telecommunication service:** see ITU-T Recommendation I.112 [13], definition 201.

**supplementary service:** see ITU-T Recommendation I.210 [14], subclause 2.4.

**T:** the DSS1 protocol entity at the User side of the user-network interface where a T reference point applies (User is a Private ISDN).

## 3.2 Abbreviations

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

ATM	Abstract Test Method
ATS	Abstract Test Suite
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
TP	Test Purpose
TSS	Test Suite Structure
VPN	Virtual Private Network

---

## 4 Test Suite Structure (TSS)

- Null call state U00
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Call Initiated call state U01
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Overlap Sending call state U02
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Outgoing Call Proceeding call state U03
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Call Delivered call state U04
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active

- Call Received call state U07
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Connect Request call state U08
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Incoming Call Proceeding call state U09
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Active call state U10 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Active call state U10 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Disconnect Request call state U11 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Disconnect Request call state U11 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Disconnect Indication call state U12 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Disconnect Indication call state U12 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Release Request call state U19 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
- Release Request call state U19 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid

- Overlap Receiving call state U25
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Restart null call state R00 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Restart null call state R00 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active
- Restart Request call state R01
  - Valid
  - Inopportune
  - Syntactically invalid
- Message segmentation procedure
  - Valid
  - Inopportune
  - Syntactically invalid
  - Active

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

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

Identifier:	<layer iut>_<state>_<group>_<nnn>		
<layer iut>	=	layer + type of IUT:	e.g. "L3U" for layer 3, IUT = user
<state>	=	call state:	e.g. U10 for Active call state
<group>	=	group:	one character field representing the group reference according to TSS
			V: Valid stimulus
			I: Inopportune stimulus
			S: Syntactically invalid stimulus
			A: Active test case
<nnn>	=	sequential number:	(001-999)

#### 5.1.2 Source of TP definition

The TPs are based on EN 300 403-1 [3], ETS 300 403-2 [4], EN 301 060-1 [1], and EN 301 060-2 [2].

### 5.1.3 TP structure

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

**Table 2: Structure of a single TP**

TP part	Text	Example
<b>Header</b>	<b>&lt;Identifier&gt;</b> <i>tab</i> <b>&lt;subclause number in base EN 300 403-1&gt;</b> <i>tab</i> <b>&lt;VPNxxx&gt;</b>	see table 1 subclause 2.3.4, subclause 9.3.1.1 [17] (see note 4) VPNxxx (see note 2)
<b>Stimulus</b>	Ensure that the IUT in the <basic call state> <trigger> <i>see below for message structure</i> or <goal>	U00, U10, etc. on receipt of a XXXX message (see note 3) to request a ...
<b>Reaction</b>	<action> <conditions> <i>if the action is sending</i> <i>see below for message structure</i> <next action>, etc. and remains in the same state or and enters state <state>	sends, saves, does, etc. using en bloc sending, etc.
<b>Message structure</b>	<message type> message a) with a <info element> information element b) indicating in the <field name> <coding of the field> and <i>back to a) or b)</i>	SETUP, FACILITY, CONNECT, etc. (see note 3) Bearer capability, Facility, etc.
NOTE 1: Text in italics will not appear in TPs and text between <> is filled in for each TP and may differ from one TP to the next. NOTE 2: VPNxxx indicates the origin of the test purpose. <b>VPNMOD</b> : indicates that the test purpose was taken from ETS 300 403-5 [6] and modified in accordance with the VPN context. <b>VPNNEW</b> : indicates that the test purpose did not exist in ETS 300 403-5 [6] and was created to cover a VPN specific procedure. No indication is used when the test purpose was directly taken from ETS 300 403-5 [6] without modifications. NOTE 3: All messages shall be considered as "valid and compatible" unless otherwise specified in the test purpose. NOTE 4: the subclause indicated there refers directly to the EN 300 403-1 [3] unless otherwise specified, i.e. subclause 9.3.1.1 [6] refers directly to EN 301 060-1 [6].		

### 5.1.4 Test strategy

As the base standard EN 300 403-1 [3] 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 300 403-3 [5].

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 [7]).

### 5.1.5 Test of call states

Many TPs include a reference to the IUT's final call state after the realization of the TP. In these cases the TP includes the requirement to ensure that the IUT has entered this particular final call state. Ensuring that the IUT is in a particular call state shall be realized by following the procedures described in subclause 5.8.10 of EN 300 403-1 [3]. According to these procedures, the IUT on receipt of a STATUS ENQUIRY message, shall respond with a STATUS message indicating, in the third 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.

The call state being reached by the IUT in the following test purpose is intended for a call in a VPN context.

### 5.1.6 Test of inopportune and syntactically invalid behaviour

In the test groups for inopportune and syntactically invalid behaviour the procedures as described in subclause 5.8 of EN 300 403-1 [3] are tested. This is done in each call state with one message for each of the described error cases. Messages have been chosen that are, if they are received without the inopportune or erroneous coding, expected messages in the call states under test.

Test purposes for inopportune behaviour that is described outside the subclause 5.8 of EN 300 403-1 [3] are found in the valid test groups. This was done, as these procedures are seen more as a part of the basic call procedures than as a part of the error handling procedures.

## 5.2 TPs for the basic call control VPN, layer 3, user

All PICS items referred to in this subclause are as specified in ETS 301 060-2 [2] unless indicated otherwise by another numbered reference.

### 5.2.1 Null call state U00

#### 5.2.1.1 Valid

**Selection:** IUT supports incoming calls. PICS: MCu 2. [18]

#### **L3U\_U00\_V\_001 subclauses 5.2.1, 5.2.4, 5.2.5.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context without the Sending complete information element, sends any of a SETUP ACKNOWLEDGE, CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Overlap Receiving U25, Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**Selection:** IUT supports overlap receiving. PICS: MCu 2.2. [19]

#### **L3U\_U00\_V\_002 subclauses 5.2.1, 5.2.5.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context with the Sending complete information element, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

#### **L3U\_U00\_V\_003 subclause 5.2.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context (delivered via the point-to-point data link) with the Channel identification information element indicating a B-channel that is not available and indicating in the preferred / exclusive bit "indicated channel is preferred", sends any of a SETUP ACKNOWLEDGE, CALL PROCEEDING, ALERTING or CONNECT message with the Channel identification information element indicating a B-channel that is available and indicating in the preferred / exclusive bit "exclusive: only the indicated channel is acceptable" and enters the relevant call state Overlap Receiving U25, Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1.

**L3U\_U00\_V\_004 subclause 5.2.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context (delivered via the point-to-point data link) with the Channel identification information element indicating a B-channel that is not available and indicating in the preferred / exclusive bit "exclusive: only the indicated channel is acceptable", sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 44 "requested circuit / channel / channel not available" and remains in the Null call state.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1.

**L3U\_U00\_V\_005 subclause 5.2.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context (delivered via the point-to-point data link) with the Channel identification information element indicating a B-channel and indicating in the preferred / exclusive bit "indicated channel is preferred", when no B-channel is available, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 34 "no circuit / channel available" and remains in the Null call state.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1.

**L3U\_U00\_V\_006 subclause 5.2.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context (delivered via the point-to-point data link) with the Channel identification information element indicating in the channel selection "any channel", when no B-channel is available, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 34 "no circuit / channel available" and remains in the Null call state.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1.

**L3U\_U00\_V\_008 annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context without the Sending complete information element and with the Called party number information element containing mismatching number digits, sends no message and remains in the Null call state U00.

**L3U\_U00\_V\_009 annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context without the Sending complete information element and with the Called subaddress information element containing mismatching subaddress digits, sends no message and remains in the Null call state U00.

**L3U\_U00\_V\_010 subclause 5.2.5.1 VPNMOD**

Ensure that the busy IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with the Sending complete information element, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 17 "user busy" and remains in the Null call state U00.

**L3U\_U00\_V\_011 subclause 5.2.5.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with the Sending Complete information element, to refuse the call, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 21 "call rejected" and remains in the Null call state U00.

**L3U\_U00\_V\_012 subclause 5.2.6, annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a valid SETUP message in a VPN context without High and Low layer compatibility information elements but with a Progress indicator information element indicating the progress description 1 "call is not end-to-end ISDN", modifies its compatibility checking and accepts the call on the basis of a compatible Bearer capability information element.

**Selection:** IUT supports compatibility checking of the higher layers. PICS: SCu 8[20] AND

IUT supports compatibility checking of the lower layers. PICS: SCu 6. [21]

**L3U\_U00\_V\_014 subclauses 5.2.2, 5.2.5.1, annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context (delivered via the point-to-point data link) containing an incompatible Bearer capability information element, sends a RELEASE COMPLETE message with the Cause information element indicating cause value 88 "incompatible destination" and remains in the Null call state U00.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1.

**L3U\_U00\_V\_016 subclauses 5.2.2, 5.2.5.1, annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context (delivered via the point-to-point data link) containing an incompatible High layer compatibility information element, sends a RELEASE COMPLETE message with the Cause information element indicating cause value 88 "incompatible destination" and remains in the Null call state U00.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1 AND

IUT supports compatibility checking of the higher layers. PICS: SCu 8. [22]

**L3U\_U00\_V\_018 subclauses 5.2.2, 5.2.5.1, annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context (delivered via the point-to-point data link) containing a Low layer compatibility information element that is incompatible in the part that provides additional information to the information given in the Bearer capability information element, sends a RELEASE COMPLETE message with the Cause information element indicating cause value 88 "incompatible destination" and remains in the Null call state U00.

**Selection:** IUT supports point-to-point configuration. PICS: R 7.1 AND

IUT supports compatibility checking of the lower layers. PICS: SCu 6. [23]

**L3U\_U00\_V\_019 subclauses 5.2.2, 5.2.5.1, annex B VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP in a VPN context containing a Low layer compatibility information element that is incompatible and that provides no additional information to the information given in the Bearer capability information element, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**Selection:** IUT supports compatibility checking of the lower layers. PICS: SCu 6. [24]

**L3U\_U00\_V\_020 subclause 5.11.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with two Bearer capability information elements, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**Selection:** IUT supports processing of incoming Bearer capability selection request. PICS MCu 21.2[25]

**L3U\_U00\_V\_021 subclause 5.12.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with two High layer compatibility information elements, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**Selection:** IUT supports processing of incoming High layer compatibility selection request.  
PICS MCu 22.2[26]

**5.2.1.2 Inopportune**

**Selection:** IUT supports incoming calls. PICS: MCu 2. [27]

**L3U\_U00\_I\_001 subclause 5.8.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context using the dummy call reference, sends no message and remains in the Null call state U00.

**L3U\_U00\_I\_002 subclause 5.8.3.2 a)**

Ensure that the IUT in the Null call state U00, on receipt of an inopportune message (DISCONNECT, call reference not recognized as relating to a call), sends a RELEASE or a RELEASE COMPLETE message with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00.

**L3U\_U00\_I\_003 subclause 5.8.3.2 b)**

Ensure that the IUT in the Null call state U00, on receipt of a RELEASE message, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00.

**L3U\_U00\_I\_004 subclause 5.8.3.2 c)**

Ensure that the IUT in the Null call state U00, on receipt of a RELEASE COMPLETE message, sends no message and remains in the Null call state U00.

**L3U\_U00\_I\_005 subclause 5.8.3.2 d) VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a call reference flag bit set to 1, sends no message and remains in the Null call state U00.

**L3U\_U00\_I\_006 subclause 5.8.3.2 f) VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00.

**L3U\_U00\_I\_007 subclauses 5.8.3.2 g), 5.8.11**

Ensure that the IUT in the Null call state U00, on receipt of a STATUS message with a Call state information element indicating a call state other than the Null call state, sends a RELEASE or a RELEASE COMPLETE message with a Cause information element indicating the cause value 101 "message not compatible with call state" and enters the Release Request call state U19 or remains in the Null call state U00.

**L3U\_U00\_I\_008 subclauses 5.8.3.2 g), 5.8.11**

Ensure that the IUT in the Null call state U00, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and remains in the Null call state U00.

**L3U\_U00\_I\_009 subclauses 5.8.3.2 g), 5.8.11**

Ensure that the IUT in the Null call state U00, on receipt of a STATUS message using the global call reference and with a Call state information element indicating a call state other than the Null call state, sends no message and remains in the Null call state U00.

**L3U\_U00\_I\_010 subclauses 5.8.3.2 h), 5.8.10**

Ensure that the IUT in the Null call state U00, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Null call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Null call state U00.

**L3U\_U00\_I\_011 subclause 5.8.5.2 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U00\_I\_012 subclause 5.8.8**

Ensure that the IUT in the Null call state U00, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Null call state U00.

**5.2.1.3 Syntactically invalid**

**Selection:** IUT supports incoming calls. PICS: MCu 2. [28]

**L3U\_U00\_S\_001 subclause 5.8.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Null call state U00.

**L3U\_U00\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Null call state U00, on receipt of a message which is too short, sends no message and remains in the Null call state U00.

**L3U\_U00\_S\_003 subclause 5.8.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Null call state U00.

**L3U\_U00\_S\_004 subclause 5.8.3.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Null call state U00.

**L3U\_U00\_S\_005 subclause 5.8.3.2 a)**

Ensure that the IUT in the Null call state U00, on receipt of a message with an unrecognized message type, sends a RELEASE or a RELEASE COMPLETE message with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00.

**L3U\_U00\_S\_006 subclauses 5.8.5.1, 5.8.6.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a mandatory information element out of sequence, processes the message as valid or sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Null call state U00.

**L3U\_U00\_S\_007 subclause 5.8.5.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a non-mandatory information element out of sequence, processes the message as valid.



**L3U\_U00\_S\_008 subclause 5.8.6.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a mandatory information element missing, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Null call state U00.

**L3U\_U00\_S\_009 subclause 5.8.6.2 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a mandatory information element content error, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Null call state U00.

**L3U\_U00\_S\_010 subclauses 5.8.7.1, 5.8.6.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Null call state U00.

**L3U\_U00\_S\_011 subclause 5.8.7.1 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_U00\_S\_012 subclause 5.8.7.2 VPNMOD**

Ensure that the IUT in the Null call state U00, on receipt of a SETUP message in a VPN context with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.1.4 Active****L3U\_U00\_A\_003 subclause 5.1. 1, subclause 9.3.1.1 [29] VPNMOD**

Ensure that the IUT in the Null call state U00, to establish a call, in a VPN context sends a SETUP message with the VPN indicator information element and enters the Call Initiated call state U01.

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [30]

**L3U\_U00\_A\_004 subclause 5.11.1 VPNMOD**

Ensure that the IUT in the Null call state U00, to establish a call with bearer capability selection allowed, sends a SETUP message in a VPN context with two Bearer capability information elements and enters the Call Initiated call state U01.

**Selection:** IUT supports outgoing calls. PICS: MCu 1[31] AND

IUT supports initiation of Bearer capability selection. PICS: MCu 21.1. [32]

**L3U\_U00\_A\_005 subclause 5.12.1 VPNMOD**

Ensure that the IUT in the Null call state U00, to establish a call with high layer compatibility selection allowed, sends a SETUP message in a VPN context with two High layer compatibility information elements and enters the Call Initiated call state U01.

**Selection:** IUT supports outgoing calls. PICS: MCu 1[33] AND

IUT supports initiation of High layer compatibility selection. PICS: MCu 22.1. [34]

IE2.

**L3U\_U00\_A\_006 subclause 9.3.1.1 [35] VPNNEW**

Ensure that the IUT in the Null call state U00, to establish a call, in a VPN context sends a SETUP message with the Called party number information element and enters the Call Initiated call state U01.

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [36]

## 5.2.2 Call Initiated call state U01

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [37]

### 5.2.2.1 Valid

#### L3U\_U01\_V\_001 subclause 5.1.5.1

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message, sends no message and enters the Outgoing Call Proceeding call state U03.

#### L3U\_U01\_V\_002 subclauses 5.1.1, 5.1.2, 5.1.3

Ensure that the IUT in the Call Initiated call state U01, on receipt of a SETUP ACKNOWLEDGE message, sends no message and enters the Overlap sending call state U02.

#### L3U\_U01\_V\_003 subclause 5.2.1

Ensure that the IUT in the Call Initiated call state U01, on the first expiry of the optional timer T303, sends a SETUP message and remains in the Call Initiated call state U01.

**Selection:** IUT supports timer T303. PICS: TMu 3. [38]

#### L3U\_U01\_V\_004 subclauses 5.2.1, 5.3.2 g)

Ensure that the IUT in the Call Initiated call state U01, on the second expiry of the optional timer T303, sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Null call state U00.

**Selection:** IUT supports timer T303. PICS: TMu 3. [39]

#### L3U\_U01\_V\_005 subclause 5.8.10

Ensure that the IUT in the Call Initiated call state U01, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Call Initiated call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Call Initiated call state U01.

### 5.2.2.2 Inopportune

#### L3U\_U01\_I\_001 subclause 5.8

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Call Initiated call state U01 or processes the message as valid.

#### L3U\_U01\_I\_002 subclause 5.8.3.1

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message using the dummy call reference, sends no message and remains in the Call Initiated call state U01.

#### L3U\_U01\_I\_003 subclause 5.8.3.2 a)

Ensure that the IUT in the Call Initiated call state U01 for CR1, on receipt of a CALL PROCEEDING message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Call Initiated call state U01 for CR1.

#### L3U\_U01\_I\_004 subclause 5.8.3.2 f)

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Call Initiated call state U01.

#### L3U\_U01\_I\_005 subclause 5.8.4

Ensure that the IUT in the Call Initiated call state U01, on receipt of an inopportune message (CONNECT ACKNOWLEDGE), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Call Initiated call state U01.

#### L3U\_U01\_I\_006 subclause 5.8.4

Ensure that the IUT in the Call Initiated call state U01, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### L3U\_U01\_I\_007 subclause 5.8.4

Ensure that the IUT in the Call Initiated call state U01, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U01\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U01\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Call Initiated call state U01.

**L3U\_U01\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.2.3 Syntactically invalid****L3U\_U01\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a message which is too short, sends no message and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U01\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with a mandatory information element missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with a mandatory information element content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Call Initiated call state U01.

**L3U\_U01\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_U01\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Call Initiated call state U01, on receipt of a CALL PROCEEDING message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

#### 5.2.2.4 Active

##### **L3U\_U01\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Call Initiated call state U01, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

### 5.2.3 Overlap sending call state U02

**Selection:** IUT supports overlap sending. PICS: MCu 1.2[40]

#### 5.2.3.1 Valid

##### **L3U\_U02\_V\_001 subclause 5.1.5.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message, sends no message and enters the Outgoing Call Proceeding call state U03.

##### **L3U\_U02\_V\_002 subclause 5.1.5.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of an ALERTING message, sends no message and enters the Call Delivered call state U04.

##### **L3U\_U02\_V\_003 subclause 5.1.5.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CONNECT message, sends no message or sends a CONNECT ACKNOWLEDGE message and enters the Active call state U10.

##### **L3U\_U02\_V\_004 clause 5**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of an INFORMATION message, sends no message and remains in the Overlap Sending call state U02.

##### **L3U\_U02\_V\_005 subclauses 5.2, 5.1.6**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a PROGRESS message, sends no message and remains in the Overlap Sending call state U02.

##### **L3U\_U02\_V\_006 subclause 5.3.4.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

##### **L3U\_U02\_V\_007 subclause 5.3.4.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

##### **L3U\_U02\_V\_008 subclause 5.1.5.2**

Ensure that the IUT in the Overlap Sending call state U02, on expiry of the optional timer T304, sends a DISCONNECT message with a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Disconnect Request call state U11.

**Selection:** IUT supports timer T304. PICS: TMu 4. [41]

##### **L3U\_U02\_V\_009 subclause 5.8.10**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Overlap Sending call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Overlap Sending call state U02.

#### 5.2.3.2 Inopportune

##### **L3U\_U02\_I\_001 subclause 5.8**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Overlap Sending call state U02 or processes the message as valid.

##### **L3U\_U02\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message using the dummy call reference, sends no message and remains in the Overlap Sending call state U02.

**L3U\_U02\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Overlap Sending call state U02 for CR1, on receipt of a CALL PROCEEDING message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Overlap Sending call state U02 for CR1.

**L3U\_U02\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Overlap Sending call state U02.

**L3U\_U02\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of an inopportune message (SETUP ACKNOWLEDGE), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Overlap Sending call state U02.

**L3U\_U02\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U02\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U02\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U02\_I\_009 subclause 5.8.8 a)**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a DL-ESTABLISH-INDICATION, sends a DISCONNECT message with a Cause information element indicating the cause value 41 "temporary failure" and enters the Disconnect Request call state U11.

**L3U\_U02\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.3.3 Syntactically invalid

**L3U\_U02\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a message which is too short, sends no message and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U02\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U02\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U02\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Overlap Sending call state U02.

**L3U\_U02\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_U02\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Overlap Sending call state U02, on receipt of a CALL PROCEEDING message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.3.4 Active****L3U\_U02\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Overlap Sending call state U02, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U02\_A\_002 subclause 5.1.3**

Ensure that the IUT in the Overlap Sending call state U02, to send the remainder of the call information, sends an INFORMATION message and remains in the Overlap Sending call state U02.

**5.2.4 Outgoing call proceeding call state U03**

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [42]

**5.2.4.1 Valid****L3U\_U03\_V\_001 subclause 5.1.7**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message, sends no message and enters the Call Delivered call state U04.

**L3U\_U03\_V\_002 subclause 5.1.8**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a CONNECT message, sends no message or sends a CONNECT ACKNOWLEDGE message and enters the Active call state U10.

**L3U\_U03\_V\_003 clause 5**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an INFORMATION message, sends no message and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_V\_004 subclause 5.1.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a PROGRESS message sends no message and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_V\_005 subclause 5.3.4.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U03\_V\_006 subclause 5.3.4.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U03\_V\_007 subclause 9.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on expiry of the mandatory timer T310, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U03\_V\_008 subclause 5.8.10**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Outgoing Call Proceeding call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_V\_009 subclause 9.3.1.3 [43] VPNNEW**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a PROGRESS message with a progress description value #1 or #8 shall stop the T310 timer, sends no message and remains in the Outgoing Call Proceeding call state U03.

**5.2.4.2 Inopportune****L3U\_U03\_I\_001 subclause 5.8**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Outgoing Call Proceeding call state U03 or processes the message as valid.

**L3U\_U03\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message using the dummy call reference, sends no message and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Outgoing Call Proceeding call state U03 for CR1, on receipt of an ALERTING message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Outgoing Call Proceeding call state U03 for CR1.

**L3U\_U03\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U03\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U03\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U03\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Outgoing Call Proceeding call state U03.

**L3U\_U03\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.4.3 Syntactically invalid

#### **L3U\_U03\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a message which is too short, sends no message and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U03\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U03\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

#### **L3U\_U03\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Outgoing Call Proceeding call state U03.

#### **L3U\_U03\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

#### **L3U\_U03\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, on receipt of an ALERTING message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.4.4 Active

#### **L3U\_U03\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

#### **L3U\_U03\_A\_002 clause 5**

Ensure that the IUT in the Outgoing Call Proceeding call state U03, to send information, sends an INFORMATION message and remains in the Outgoing Call Proceeding call state U03.



## 5.2.5 Call delivered call state U04

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [44]

### 5.2.5.1 Valid

#### **L3U\_U04\_V\_001 subclause 5.1.8**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message, sends no message or sends a CONNECT ACKNOWLEDGE message and enters the Active call state U10.

#### **L3U\_U04\_V\_002 clause 5**

Ensure that the IUT in the Call Delivered call state U04, on receipt of an INFORMATION message, sends no message and remains in the Call Delivered call state U04.

#### **L3U\_U04\_V\_003 subclause 5.1.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a PROGRESS message, sends no message and remains in the Call Delivered call state U04.

#### **L3U\_U04\_V\_004 subclause 5.3.4.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

#### **L3U\_U04\_V\_005 subclause 5.3.4.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

#### **L3U\_U04\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Call Delivered call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Call Delivered call state U04.

### 5.2.5.2 Inopportune

#### **L3U\_U04\_I\_001 subclause 5.8**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Call Delivered call state U04 or processes the message as valid.

#### **L3U\_U04\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message using the dummy call reference, sends no message and remains in the Call Delivered call state U04.

#### **L3U\_U04\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Call Delivered call state U04 for CR1, on receipt of a CONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Call Delivered call state U04 for CR1.

#### **L3U\_U04\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Call Delivered call state U04.

#### **L3U\_U04\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Call Delivered call state U04, on receipt of an inopportune message (ALERTING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Call Delivered call state U04.

#### **L3U\_U04\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### **L3U\_U04\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U04\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U04\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Call Delivered call state U04.

**L3U\_U04\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.5.3 Syntactically invalid****L3U\_U04\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a message which is too short, sends no message and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U04\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U04\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U04\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Call Delivered call state U04.

**L3U\_U04\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_U04\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Call Delivered call state U04, on receipt of a CONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

#### 5.2.5.4 Active

##### **L3U\_U04\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Call Delivered call state U04, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

##### **L3U\_U04\_A\_002 clause 5**

Ensure that the IUT in the Call Delivered call state U04, to send information, sends an INFORMATION message and remains in the Call Delivered call state U04.

### 5.2.6 Call received call state U07

**Selection:** IUT supports incoming calls. PICS: MCu 2[45] AND

IUT supports sending of an ALERTING message. PICS MTu 1. [46]

#### 5.2.6.1 Valid

##### **L3U\_U07\_V\_001 clause 5**

Ensure that the IUT in the Call Received call state U07, on receipt of an INFORMATION message, sends no message and remains in the Call Received call state U07.

##### **L3U\_U07\_V\_002 subclause 5.3.4.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

##### **L3U\_U07\_V\_003 subclause 5.3.4.2**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

##### **L3U\_U07\_V\_004 subclause 5.8.10**

Ensure that the IUT in the Call Received call state U07, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Call Received call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Call Received call state U07.

#### 5.2.6.2 Inopportune

##### **L3U\_U07\_I\_001 subclause 5.8**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Call Received call state U07 or processes the message as valid.

##### **L3U\_U07\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message using the dummy call reference, sends no message and remains in the Call Received call state U07.

##### **L3U\_U07\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Call Received call state U07 for CR1, on receipt of a DISCONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Call Received call state U07 for CR1.

##### **L3U\_U07\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Call Received call state U07, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Call Received call state U07.

##### **L3U\_U07\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Call Received call state U07.

**L3U\_U07\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Call Received call state U07, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Call Received call state U07.

**L3U\_U07\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Call Received call state U07, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U07\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Call Received call state U07, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U07\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U07\_I\_010 subclause 5.8.8**

Ensure that the IUT in the Call Received call state U07, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Call Received call state U07.

**L3U\_U07\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Call Received call state U07, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.6.3 Syntactically invalid****L3U\_U07\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Call Received call state U07.

**L3U\_U07\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Call Received call state U07, on receipt of a message which is too short, sends no message and remains in the Call Received call state U07.

**L3U\_U07\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Call Received call state U07.

**L3U\_U07\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Call Received call state U07.

**L3U\_U07\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Call Received call state U07, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Received call state U07.

**L3U\_U07\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U07\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U07\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U07\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension required), sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U07\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension not required), sends a RELEASE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Release Request call state U19.

**L3U\_U07\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Call Received call state U07, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.6.4 Active****L3U\_U07\_A\_001 subclause 5.2.7**

Ensure that the IUT in the Call Received call state U07, to accept the call, sends a CONNECT message and enters the Connect Request call state U08.

**L3U\_U07\_A\_002 clause 5**

Ensure that the IUT in the Call Received call state U07, to send information, sends an INFORMATION message and remains in the Call Received call state U07.

**L3U\_U07\_A\_003 subclause 5.2.6**

Ensure that the IUT in the Call Received call state U07, to give a progress indication, sends a PROGRESS message and remains in the Call Received call state U07.

**L3U\_U07\_A\_004 subclause 5.3.3**

Ensure that the IUT in the Call Received call state U07, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**5.2.7 Connect request call state U08**

**Selection:** IUT supports incoming calls. PICS: MCu 2. [47]

**5.2.7.1 Valid****L3U\_U08\_V\_001 subclause 5.2.8**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message, sends no message and enters the Active call state U10.

**L3U\_U08\_V\_002 clause 5**

Ensure that the IUT in the Connect Request call state U08, on receipt of an INFORMATION message, sends no message and remains in the Connect Request call state U08.

**L3U\_U08\_V\_003 subclause 5.3.4.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U08\_V\_004 subclause 5.3.4.2**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U08\_V\_005 subclauses 5.2.7, 5.2.8, 9.2**

Ensure that the IUT in the Connect Request call state U08, on expiry of the mandatory timer T313, sends a DISCONNECT message with a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Disconnect Request call state U11.

**L3U\_U08\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Connect Request call state U08, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Connect Request call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Connect Request call state U08.

### 5.2.7.2 Inopportune

#### **L3U\_U08\_I\_001 subclause 5.8**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Connect Request call state U08 or processes the message as valid.

#### **L3U\_U08\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message using the dummy call reference, sends no message and remains in the Connect Request call state U08.

#### **L3U\_U08\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Connect Request call state U08 for CR1, on receipt of a CONNECT ACKNOWLEDGE message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Connect Request call state U08 for CR1.

#### **L3U\_U08\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Connect Request call state U08, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Connect Request call state U08.

#### **L3U\_U08\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Connect Request call state U08.

#### **L3U\_U08\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Connect Request call state U08, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Connect Request call state U08.

#### **L3U\_U08\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Connect Request call state U08, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### **L3U\_U08\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Connect Request call state U08, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U08\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

#### **L3U\_U08\_I\_010 subclause 5.8.8**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Connect Request call state U08.

#### **L3U\_U08\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Connect Request call state U08, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.7.3 Syntactically invalid

#### **L3U\_U08\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Connect Request call state U08.

#### **L3U\_U08\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Connect Request call state U08, on receipt of a message which is too short, sends no message and remains in the Connect Request call state U08.

#### **L3U\_U08\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Connect Request call state U08.

**L3U\_U08\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Connect Request call state U08.

**L3U\_U08\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Connect Request call state U08, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Connect Request call state U08.

**L3U\_U08\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U08\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U08\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U08\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Connect Request call state U08.

**L3U\_U08\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_U08\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Connect Request call state U08, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.7.4 Active****L3U\_U08\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Connect Request call state U08, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U08\_A\_002 clause 5**

Ensure that the IUT in the Connect Request call state U08, to send information, sends an INFORMATION message and remains in the Connect Request call state U08.

**5.2.8 Incoming call proceeding call state U09**

**Selection:** IUT supports incoming calls. PICS: MCu 2 [48]AND

IUT supports sending of a CALL PROCEEDING message. PICS MTu 2. [49]

**5.2.8.1 Valid****L3U\_U09\_V\_001 clause 5**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of an INFORMATION message, sends no message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_V\_002 subclause 5.3.4.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U09\_V\_003 subclause 5.3.4.2**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U09\_V\_004 subclause 5.8.10**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Incoming Call Proceeding call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Incoming Call Proceeding call state U09.

**5.2.8.2 Inopportune****L3U\_U09\_I\_001 subclause 5.8**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Incoming Call Proceeding call state U09 or processes the message as valid.

**L3U\_U09\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message using the dummy call reference, sends no message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Incoming Call Proceeding call state U09 for CR1, on receipt of a DISCONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Incoming Call Proceeding call state U09 for CR1.

**L3U\_U09\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U09\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U09\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U09\_I\_010 subclause 5.8.8**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.



### 5.2.8.3 Syntactically invalid

#### **L3U\_U09\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Incoming Call Proceeding call state U09.

#### **L3U\_U09\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a message which is too short, sends no message and remains in the Incoming Call Proceeding call state U09.

#### **L3U\_U09\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Incoming Call Proceeding call state U09.

#### **L3U\_U09\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Incoming Call Proceeding call state U09.

#### **L3U\_U09\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state U09.

#### **L3U\_U09\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U09\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U09\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

#### **L3U\_U09\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension required), sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U09\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension not required), sends a RELEASE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Release Request call state U19.

#### **L3U\_U09\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Incoming Call Proceeding call state U09, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.8.4 Active

#### **L3U\_U09\_A\_001 subclauses 5.2.4, 5.2.5.1**

Ensure that the IUT in the Incoming Call Proceeding call state U09, to indicate that the alerting phase has started, sends an ALERTING message and enters the Call Received call state U07.

#### **L3U\_U09\_A\_002 subclause 5.2.7**

Ensure that the IUT in the Incoming Call Proceeding call state U09, to accept the call, sends a CONNECT message and enters the Connect Request call state U08.

#### **L3U\_U09\_A\_003 subclause 5.3.3**

Ensure that the IUT in the Incoming Call Proceeding call state U09, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U09\_A\_004 clause 5**

Ensure that the IUT in the Incoming Call Proceeding call state U09, to send information, sends an INFORMATION message and remains in the Incoming Call Proceeding call state U09.

**L3U\_U09\_A\_005 subclause 5.2.6**

Ensure that the IUT in the Incoming Call Proceeding call state U09, to give a progress indication, sends a PROGRESS message and remains in the Incoming Call Proceeding call state U09.

**5.2.9 Active call state U10 (incoming call)**

**Selection:** IUT supports incoming calls. PICS: MCu 2. [50]

**5.2.9.1 Valid****L3U\_U10I\_V\_001 subclause 5.3.4.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U10I\_V\_002 subclause 5.3.4.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U10I\_V\_003 clause 5**

Ensure that the IUT in the Active call state U10, on receipt of an INFORMATION message, sends no message and remains in the Active call state U10.

**L3U\_U10I\_V\_004 subclauses 5.6.2, 5.6.4, 5.9**

Ensure that the IUT in the Active call state U10, on receipt of a NOTIFY message, sends no message and remains in the Active call state U10.

**L3U\_U10I\_V\_005 subclause 5.8.10**

Ensure that the IUT in the Active call state U10, on the first expiry of the mandatory (if status enquiry procedures are implemented) timer T322, sends a STATUS ENQUIRY message and remains in the Active call state U10.

**Selection:** IUT supports initiation of status enquiry procedure. PICS: MCu 7.2. [51]

**L3U\_U10I\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Active call state U10, on expiry of the mandatory (if status enquiry procedures are implemented) timer T322 after the maximum number of retransmissions of STATUS ENQUIRY messages, sends a RELEASE message with a Cause information element indicating the cause value 41 "temporary failure" and enters the Release Request call state U19.

**Selection:** IUT supports initiation of status enquiry procedure. PICS: MCu 7.2. [52]

**L3U\_U10I\_V\_007 subclause 5.8.10**

Ensure that the IUT in the Active call state U10, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Active call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Active call state U10.

**L3U\_U10I\_V\_008 subclauses 2, 5.2**

Ensure that the IUT in the Active call state U10 for CR1 and in the Null call state U00 for CR2, on receipt of a SETUP message with the Sending complete information element for CR2, sends any of a CALL PROCEEDING, ALERTING or CONNECT message using CR2, enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08 for CR2 and remains in the Active call state U10 for CR1.

**L3U\_U10I\_V\_009 subclauses 2, 5.2**

Ensure that the IUT in the Active call state U10 for CR1 and in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message for CR2, sends no message using CR2, enters the Active call state U10 for CR2 and remains in the Active call state U10 for CR1.

**L3U\_U10I\_V\_010 subclauses 2, 5.1**

Ensure that the IUT in the Active call state U10 for CR1 and in the Null call state U00 for CR2, to establish a call, sends a SETUP message using CR2, enters the Call Initiated call state U01 for CR2 and remains in the Active call state U10 for CR1.

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [53]

**L3U\_U10I\_V\_011 subclauses 2, 5.1**

Ensure that the IUT in the Active call state U10 for CR1 and in the Call Delivered call state U04 for CR2, on receipt of a CONNECT message for CR2, sends no message or a CONNECT ACKNOWLEDGE message using CR2, enters the Active call state U10 for CR2 and remains in the Active call state U10 for CR1.

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [54]

**5.2.9.2 Inopportune****L3U\_U10I\_I\_001 subclause 5.8**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Active call state U10 or processes the message as valid.

**L3U\_U10I\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message using the dummy call reference, sends no message and remains in the Active call state U10.

**L3U\_U10I\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Active call state U10 for CR1, on receipt of a DISCONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Active call state U10 for CR1.

**L3U\_U10I\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Active call state U10, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Active call state U10.

**L3U\_U10I\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Active call state U10.

**L3U\_U10I\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Active call state U10.

**L3U\_U10I\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U10I\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U10I\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U10I\_I\_010 subclause 5.8.8**

Ensure that the IUT in the Active call state U10, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Active call state U10.

**L3U\_U10I\_I\_011 subclause 5.8.9**

Ensure that the IUT in the Active call state U10, after having sent a DL-ESTABLISH-REQUEST in response to a DL-RELEASE-INDICATION, on receipt of a DL-ESTABLISH-CONFIRM, sends a STATUS message with a Cause information element indicating the cause value 31 "normal, unspecified" or a STATUS ENQUIRY message and remains in the Active call state U10.

**L3U\_U10I\_I\_012 subclause 5.8.11**

Ensure that the IUT in the Active call state U10, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.9.3 Syntactically invalid

#### **L3U\_U10I\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Active call state U10.

#### **L3U\_U10I\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Active call state U10, on receipt of a message which is too short, sends no message and remains in the Active call state U10.

#### **L3U\_U10I\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Active call state U10.

#### **L3U\_U10I\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Active call state U10.

#### **L3U\_U10I\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state U10.

#### **L3U\_U10I\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U10I\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U10I\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

#### **L3U\_U10I\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension required), sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U10I\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension not required), sends a RELEASE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Release Request call state U19.

#### **L3U\_U10I\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.9.4 Active

#### **L3U\_U10I\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Active call state U10, to release the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

#### **L3U\_U10I\_A\_002 clause 5**

Ensure that the IUT in the Active call state U10, to send information, sends an INFORMATION message and remains in the Active call state U10.

#### **L3U\_U10I\_A\_003 subclause 5.9**

Ensure that the IUT in the Active call state U10, to send notifications, sends a NOTIFY message and remains in the Active call state U10.

## 5.2.10 Active call state U10 (outgoing call)

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [55]

### 5.2.10.1 Valid

#### L3U\_U100\_V\_001 subclause 5.3.4.1

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

#### L3U\_U100\_V\_002 subclause 5.3.4.2

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

#### L3U\_U100\_V\_003 clause 5

Ensure that the IUT in the Active call state U10, on receipt of an INFORMATION message, sends no message and remains in the Active call state U10.

#### L3U\_U100\_V\_004 subclauses 5.6.2, 5.6.4, 5.9

Ensure that the IUT in the Active call state U10, on receipt of a NOTIFY message, sends no message and remains in the Active call state U10.

#### L3U\_U100\_V\_005 subclause 5.8.10

Ensure that the IUT in the Active call state U10, on the first expiry of the mandatory (if status enquiry procedures are implemented) timer T322, sends a STATUS ENQUIRY message and remains in the Active call state U10.

**Selection:** IUT supports initiation of status enquiry procedure. PICS: MCu 7.2. [56]

#### L3U\_U100\_V\_006 subclause 5.8.10

Ensure that the IUT in the Active call state U10, on expiry of the mandatory (if status enquiry procedures are implemented) timer T322 after the maximum number of retransmissions of STATUS ENQUIRY messages, sends a RELEASE message with a Cause information element indicating the cause value 41 "temporary failure" and enters the Release Request call state U19.

**Selection:** IUT supports initiation of status enquiry procedure. PICS: MCu 7.2. [57]

#### L3U\_U100\_V\_007 subclause 5.8.10

Ensure that the IUT in the Active call state U10, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Active call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Active call state U10.

#### L3U\_U100\_V\_008 subclauses 2, 5.2

Ensure that the IUT in the Active call state U10 for CR1 and in the Null call state U00 for CR2, on receipt of a SETUP message with the Sending complete information element for CR2, sends any of a CALL PROCEEDING, ALERTING or CONNECT message using CR2, enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08 for CR2 and remains in the Active call state U10 for CR1.

**Selection:** IUT supports incoming calls. PICS: MCu 2. [58]

#### L3U\_U100\_V\_009 subclauses 2, 5.2

Ensure that the IUT in the Active call state U10 for CR1 and in the Connect Request call state U08, on receipt of a CONNECT ACKNOWLEDGE message for CR2, sends no message using CR2, enters the Active call state U10 for CR2 and remains in the Active call state U10 for CR1.

**Selection:** IUT supports incoming calls. PICS: MCu 2. [59]

#### L3U\_U100\_V\_010 subclauses 2, 5.1

Ensure that the IUT in the Active call state U10 for CR1 and in the Null call state U00 for CR2, to establish a call, sends a SETUP message using CR2, enters the Call Initiated call state U01 for CR2 and remains in the Active call state U10 for CR1.

#### L3U\_U100\_V\_011 subclauses 2, 5.1

Ensure that the IUT in the Active call state U10 for CR1 and in the Call Delivered call state U04 for CR2, on receipt of a CONNECT message for CR2, sends no message or a CONNECT ACKNOWLEDGE message using CR2, enters the Active call state U10 for CR2 and remains in the Active call state U10 for CR1.

**L3U\_U100\_V\_012 subclauses 2, 5.1**

Ensure that the IUT in the Active call state U10, on receipt of a SETUP message using the same call reference value with the Sending complete information element, accepts the incoming call and remains in the Active call state U10 for the outgoing call.

**Selection:** IUT supports incoming calls. PICS: MCu 2. [60]

**5.2.10.2 Inopportune****L3U\_U100\_I\_001 subclause 5.8**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Active call state U10 or processes the message as valid.

**L3U\_U100\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message using the dummy call reference, sends no message and remains in the Active call state U10.

**L3U\_U100\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Active call state U10 for CR1, on receipt of a DISCONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Active call state U10 for CR1.

**L3U\_U100\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Active call state U10.

**L3U\_U100\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Active call state U10.

**L3U\_U100\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U100\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U100\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U100\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Active call state U10, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Active call state U10.

**L3U\_U100\_I\_010 subclause 5.8.9**

Ensure that the IUT in the Active call state U10, after having sent a DL-ESTABLISH-REQUEST in response to a DL-RELEASE-INDICATION, on receipt of a DL-ESTABLISH-CONFIRM, sends a STATUS message with a Cause information element indicating the cause value 31 "normal, unspecified" or a STATUS ENQUIRY message and remains in the Active call state U10.

**L3U\_U100\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Active call state U10, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.10.3 Syntactically invalid****L3U\_U100\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Active call state U10.

**L3U\_U100\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Active call state U10, on receipt of a message which is too short, sends no message and remains in the Active call state U10.

**L3U\_U100\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Active call state U10.

**L3U\_U100\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Active call state U10.

**L3U\_U100\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Active call state U10, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state U10.

**L3U\_U100\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U100\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U100\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U100\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension required), sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U100\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension not required), sends a RELEASE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Release Request call state U19.

**L3U\_U100\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Active call state U10, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.10.4 Active****L3U\_U100\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Active call state U10, to release the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U100\_A\_002 clause 5**

Ensure that the IUT in the Active call state U10, to send information, sends an INFORMATION message and remains in the Active call state U10.

**L3U\_U100\_A\_003 subclause 5.9**

Ensure that the IUT in the Active call state U10, to send notifications, sends a NOTIFY message and remains in the Active call state U10.

**5.2.11 Disconnect request call state U11 (incoming call)**

**Selection:** IUT supports incoming calls. PICS: MCu 2. [61]

**5.2.11.1 Valid****L3U\_U11I\_V\_001 subclause 5.3.3**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U11I\_V\_002 subclause 5.3.6**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U11I\_V\_003 clause 5**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of an INFORMATION message, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_V\_004 subclauses 5.6.2, 5.6.4, 5.9**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a NOTIFY message, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_V\_005 subclauses 5.3.3, 5.3.5**

Ensure that the IUT in the Disconnect Request call state U11, on expiry of the mandatory timer T305, sends a RELEASE message with a Cause information element indicating the same cause value as in the previously sent DISCONNECT message and enters the Release Request call state U19.

**L3U\_U11I\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Disconnect Request call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Disconnect Request call state U11.

**5.2.11.2 Inopportune****L3U\_U11I\_I\_001 subclause 5.8**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Disconnect Request call state U11 or processes the message as valid.

**L3U\_U11I\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message using the dummy call reference, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_I\_003 subclause 5.8.3.2 b)**

Ensure that the IUT in the Disconnect Request call state U11 for CR1, on receipt of a RELEASE message for CR2 which is not recognized as relating to a call, sends a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00 for CR2 and remains in the Disconnect Request call state U11 for CR1.

**L3U\_U11I\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Disconnect Request call state U11.

**L3U\_U11I\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U11I\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U11I\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11I\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.



### 5.2.11.3 Syntactically invalid

#### **L3U\_U11I\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11I\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a message which is too short, sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11I\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11I\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11I\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Disconnect Request call state U11.

#### **L3U\_U11I\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U11I\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

#### **L3U\_U11I\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

#### **L3U\_U11I\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state U00.

#### **L3U\_U11I\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state U00.

#### **L3U\_U11I\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.11.4 Active

#### **L3U\_U11I\_A\_001 clause 5**

Ensure that the IUT in the Disconnect Request call state U11, to send information, sends an INFORMATION message and remains in the Disconnect Request call state U11.

## 5.2.12 Disconnect request call state U11 (outgoing call)

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [62]

### 5.2.12.1 Valid

#### **L3U\_U11O\_V\_001 subclause 5.3.3**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### **L3U\_U11O\_V\_002 subclause 5.3.6**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message, sends a RELEASE message and enters the Release Request call state U19.

#### **L3U\_U11O\_V\_003 clause 5**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of an INFORMATION message, sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11O\_V\_004 subclauses 5.6.2, 5.6.4, 5.9**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a NOTIFY message, sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11O\_V\_005 subclauses 5.3.3, 5.3.5**

Ensure that the IUT in the Disconnect Request call state U11, on expiry of the mandatory timer T305, sends a RELEASE message with a Cause information element indicating the same cause value as in the previously sent DISCONNECT message and enters the Release Request call state U19.

#### **L3U\_U11O\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Disconnect Request call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Disconnect Request call state U11.

### 5.2.12.2 Inopportune

#### **L3U\_U11O\_I\_001 subclause 5.8**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Disconnect Request call state U11 or processes the message as valid.

#### **L3U\_U11O\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message using the dummy call reference, sends no message and remains in the Disconnect Request call state U11.

#### **L3U\_U11O\_I\_003 subclause 5.8.3.2 b)**

Ensure that the IUT in the Disconnect Request call state U11 for CR1, on receipt of a RELEASE message for CR2 which is not recognized as relating to a call, sends a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00 for CR2 and remains in the Disconnect Request call state U11 for CR1.

#### **L3U\_U11O\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Disconnect Request call state U11.

#### **L3U\_U11O\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Disconnect Request call state U11.

#### **L3U\_U11O\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U11O\_I\_007 subclause 5.8.5.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U11O\_I\_008 subclause 5.8.8**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_I\_009 subclause 5.8.11**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.12.3 Syntactically invalid****L3U\_U11O\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a message which is too short, sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Disconnect Request call state U11.

**L3U\_U11O\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U11O\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U11O\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U11O\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state U00.

**L3U\_U11O\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state U00.

**L3U\_U11O\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Disconnect Request call state U11, on receipt of a RELEASE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.12.4 Active****L3U\_U11O\_A\_001 clause 5**

Ensure that the IUT in the Disconnect Request call state U11, to send information, sends an INFORMATION message and remains in the Disconnect Request call state U11.

## 5.2.13 Disconnect indication call state U12 (incoming call)

**Selection:** IUT supports incoming calls. PICS: MCu 2. [63]

### 5.2.13.1 Valid

#### **L3U\_U12I\_V\_001 clause 5**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of an INFORMATION message, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_V\_002 subclause 5.8.10**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Disconnect Indication call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Disconnect Indication call state U12.

### 5.2.13.2 Inopportune

#### **L3U\_U12I\_I\_001 subclause 5.8**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Disconnect Indication call state U12 or processes the message as valid.

#### **L3U\_U12I\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message using the dummy call reference, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_I\_003 subclause 5.8.3.2 b)**

Ensure that the IUT in the Disconnect Indication call state U12 for CR1, on receipt of a RELEASE message for CR2 which is not recognized as relating to a call, sends a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00 for CR2 and remains in the Disconnect Indication call state U12 for CR1.

#### **L3U\_U12I\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### **L3U\_U12I\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U12I\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

#### **L3U\_U12I\_I\_010 subclause 5.8.8**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.13.3 Syntactically invalid

#### **L3U\_U12I\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a message which is too short, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12I\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U12I\_S\_007 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state U00.

#### **L3U\_U12I\_S\_008 subclause 5.8.7.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state U00.

#### **L3U\_U12I\_S\_009 subclause 5.8.7.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.13.4 Active

#### **L3U\_U12I\_A\_001 subclause 5.3.4**

Ensure that the IUT in the Disconnect Indication call state U12, to release the call, sends a RELEASE message and enters the Release Request call state U19.

#### **L3U\_U12I\_A\_002 clause 5**

Ensure that the IUT in the Disconnect Indication call state U12, to send information, sends an INFORMATION message and remains in the Disconnect Indication call state U12.

## 5.2.14 Disconnect indication call state U12 (outgoing call)

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [64]

### 5.2.14.1 Valid

#### **L3U\_U12O\_V\_001 clause 5**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of an INFORMATION message, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_V\_002 subclause 5.8.10**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Disconnect Indication call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Disconnect Indication call state U12.

### 5.2.14.2 Inopportune

#### **L3U\_U12O\_I\_001 subclause 5.8**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Disconnect Indication call state U12 or processes the message as valid.

#### **L3U\_U12O\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message using the dummy call reference, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_I\_003 subclause 5.8.3.2 b)**

Ensure that the IUT in the Disconnect Indication call state U12 for CR1, on receipt of a RELEASE message for CR2 which is not recognized as relating to a call, sends a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Null call state U00 for CR2 and remains in the Disconnect Indication call state U12 for CR1.

#### **L3U\_U12O\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

#### **L3U\_U12O\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U12O\_I\_008 subclause 5.8.5.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

#### **L3U\_U12O\_I\_009 subclause 5.8.8**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

### 5.2.14.3 Syntactically invalid

#### **L3U\_U12O\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a message which is too short, sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Disconnect Indication call state U12.

#### **L3U\_U12O\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U12O\_S\_007 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state U00.

#### **L3U\_U12O\_S\_008 subclause 5.8.7.1**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state U00.

#### **L3U\_U12O\_S\_009 subclause 5.8.7.2**

Ensure that the IUT in the Disconnect Indication call state U12, on receipt of a RELEASE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.14.4 Active

#### **L3U\_U12O\_A\_001 subclause 5.3.4**

Ensure that the IUT in the Disconnect Indication call state U12, to release the call, sends a RELEASE message and enters the Release Request call state U19.

#### **L3U\_U12O\_A\_002 clause 5**

Ensure that the IUT in the Disconnect Indication call state U12, to send information, sends an INFORMATION message and remains in the Disconnect Indication call state U12.

## 5.2.15 Release request call state U19 (incoming call)

**Selection:** IUT supports incoming calls. PICS: MCu 2. [65]

### 5.2.15.1 Valid

#### **L3U\_U19I\_V\_001 subclause 5.3.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U19I\_V\_002 subclause 5.3.6**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE message, sends no message and enters the Null call state U00.

**L3U\_U19I\_V\_003 subclauses 5.3.6, 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a DISCONNECT message, sends no message and remains in the Release Request call state U19.

**L3U\_U19I\_V\_004 subclause 5.3.5**

Ensure that the IUT in the Release Request call state U19, on the first expiry of the mandatory timer T308, sends a RELEASE message and remains in the Release Request call state U19.

**L3U\_U19I\_V\_005 subclause 5.3.5**

Ensure that the IUT in the Release Request call state U19, on the second expiry of the mandatory timer T308, sends no message and enters the Null call state U00.

**L3U\_U19I\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Release Request call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Release Request call state U19.

**5.2.15.2 Inopportune****L3U\_U19I\_I\_001 subclause 5.8**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Release Request call state U19 or processes the message as valid.

**L3U\_U19I\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message using the dummy call reference, sends no message and remains in the Release Request call state U19.

**L3U\_U19I\_I\_003 subclause 5.8.3.2 c)**

Ensure that the IUT in the Release Request call state U19 for CR1, on receipt of a RELEASE COMPLETE message for CR2 which is not recognized as relating to a call, sends no message for CR2 and remains in the Null call state U00 for CR2 and remains in the Release Request call state U19 for CR1.

**L3U\_U19I\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Release Request call state U19, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Release Request call state U19.

**L3U\_U19I\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Release Request call state U19.

**L3U\_U19I\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Release Request call state U19.

**L3U\_U19I\_I\_007 subclause 5.8.5.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U19I\_I\_008 subclause 5.8.8**

Ensure that the IUT in the Release Request call state U19, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Release Request call state U19.

**L3U\_U19I\_I\_009 subclause 5.8.11**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**L3U\_U19I\_I\_010 subclause 5.8.11**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS message with a Call state information element indicating a call state other than the Null call state, sends no message and remains in the Release Request call state U19.



### 5.2.15.3 Syntactically invalid

#### **L3U\_U19I\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Release Request call state U19.

#### **L3U\_U19I\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a message which is too short, sends no message and remains in the Release Request call state U19.

#### **L3U\_U19I\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Release Request call state U19.

#### **L3U\_U19I\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Release Request call state U19.

#### **L3U\_U19I\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Release Request call state U19.

#### **L3U\_U19I\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_U19I\_S\_007 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an unrecognized information element (encoded comprehension required), sends no message and enters the Null call state U00.

#### **L3U\_U19I\_S\_008 subclause 5.8.7.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an unrecognized information element (encoded comprehension not required), sends no message and enters the Null call state U00.

#### **L3U\_U19I\_S\_009 subclause 5.8.7.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.15.4 Active

No active TPs for this call state.

## 5.2.16 Release request call state U19 (outgoing call)

**Selection:** IUT supports outgoing calls. PICS: MCu 1. [66]

### 5.2.16.1 Valid

#### **L3U\_U19O\_V\_001 subclause 5.3.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

#### **L3U\_U19O\_V\_002 subclause 5.3.6**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE message, sends no message and enters the Null call state U00.

#### **L3U\_U19O\_V\_003 subclauses 5.3.6, 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a DISCONNECT message, sends no message and remains in the Release Request call state U19.

#### **L3U\_U19O\_V\_004 subclause 5.3.5**

Ensure that the IUT in the Release Request call state U19, on the first expiry of the mandatory timer T308, sends a RELEASE message and remains in the Release Request call state U19.

**L3U\_U19O\_V\_005 subclause 5.3.5**

Ensure that the IUT in the Release Request call state U19, on the second expiry of the mandatory timer T308, sends no message and enters the Null call state U00.

**L3U\_U19O\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Release Request call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Release Request call state U19.

**5.2.16.2 Inopportune****L3U\_U19O\_I\_001 subclause 5.8**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Release Request call state U19 or processes the message as valid.

**L3U\_U19O\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message using the dummy call reference, sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_I\_003 subclause 5.8.3.2 c)**

Ensure that the IUT in the Release Request call state U19 for CR1, on receipt of a RELEASE COMPLETE message for CR2 which is not recognized as relating to a call, sends no message for CR2 and remains in the Null call state U00 for CR2 and remains in the Release Request call state U19 for CR1.

**L3U\_U19O\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Release Request call state U19.

**L3U\_U19O\_I\_005 subclause 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of an inopportune message (CALL PROCEEDING), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Release Request call state U19.

**L3U\_U19O\_I\_006 subclause 5.8.5.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U19O\_I\_007 subclause 5.8.8**

Ensure that the IUT in the Release Request call state U19, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_I\_008 subclause 5.8.11**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**L3U\_U19O\_I\_009 subclause 5.8.11**

Ensure that the IUT in the Release Request call state U19, on receipt of a STATUS message with a Call state information element indicating a call state other than the Null call state, sends no message and remains in the Release Request call state U19.

**5.2.16.3 Syntactically invalid****L3U\_U19O\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a message which is too short, sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Release Request call state U19.

**L3U\_U19O\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Release Request call state U19, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Release Request call state U19.

**L3U\_U19O\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U19O\_S\_007 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an unrecognized information element (encoded comprehension required), sends no message and enters the Null call state U00.

**L3U\_U19O\_S\_008 subclause 5.8.7.1**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with an unrecognized information element (encoded comprehension not required), sends no message and enters the Null call state U00.

**L3U\_U19O\_S\_009 subclause 5.8.7.2**

Ensure that the IUT in the Release Request call state U19, on receipt of a RELEASE COMPLETE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.16.4 Active**

No active TPs for this call state.

**5.2.17 Overlap receiving call state U25**

**Selection:** IUT supports incoming calls. PICS: MCu 2[67]AND

IUT supports overlap receiving. PICS: MCu 2.2. [68]

**5.2.17.1 Valid****L3U\_U25\_V\_001 subclause 5.2.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of an INFORMATION message without sufficient called number information, sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_V\_002 subclause 5.2.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of an INFORMATION message with sufficient called number information, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08.

**L3U\_U25\_V\_003 subclause 5.3.4.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a Progress indicator information element indicating the progress description value 8 "in-band information or appropriate pattern now available", sends no message and enters the Disconnect Indication call state U12 or sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U25\_V\_004 subclause 5.3.4.2**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message without Progress indicator information element, sends a RELEASE message and enters the Release Request call state U19.

**L3U\_U25\_V\_005 subclause 5.2.4**

Ensure that the IUT in the Overlap Receiving call state U25, on expiry of the mandatory (if overlap receiving is implemented) timer T302, sends any of a CALL PROCEEDING, ALERTING or CONNECT message and enters the relevant call state Incoming Call Proceeding U09, Call Received U07 or Connect Request U08 or sends a DISCONNECT message with a Cause information element indicating the cause value 28 "invalid number format (incomplete number)" and enters the Disconnect Request call state U11.

**L3U\_U25\_V\_006 subclause 5.8.10**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a STATUS ENQUIRY message, sends a STATUS message with a Call state information element indicating the Overlap Receiving call state and a Cause information element indicating the cause value 30 "response to STATUS ENQUIRY", 97 "message type non-existent or not implemented" or 98 "message not compatible with call state" and remains in the Overlap Receiving call state U25.

**5.2.17.2 Inopportune****L3U\_U25\_I\_001 subclause 5.8**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Overlap Receiving call state U25 or processes the message as valid.

**L3U\_U25\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message using the dummy call reference, sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_I\_003 subclause 5.8.3.2 a)**

Ensure that the IUT in the Overlap Receiving call state U25 for CR1, on receipt of a DISCONNECT message for CR2 which is not recognized as relating to a call, sends a RELEASE or a RELEASE COMPLETE message for CR2 with a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state U19 or remains in the Null call state U00 for CR2 and remains in the Overlap Receiving call state U25 for CR1.

**L3U\_U25\_I\_004 subclause 5.8.3.2 e)**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a SETUP message with a call reference that is already in use, sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_I\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Overlap Receiving call state U25.

**L3U\_U25\_I\_006 subclause 5.8.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of an inopportune message (CONNECT), sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" or a STATUS ENQUIRY message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_I\_007 subclause 5.8.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state U00.

**L3U\_U25\_I\_008 subclause 5.8.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state U00.

**L3U\_U25\_I\_009 subclause 5.8.5.2**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_U25\_I\_010 subclause 5.8.8 a)**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DL-ESTABLISH-INDICATION, sends a DISCONNECT message with a Cause information element indicating the cause value 41 "temporary failure" and enters the Disconnect Request call state U25.

**L3U\_U25\_I\_011 subclause 5.8.11**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a STATUS message with a Call state information element indicating the Null call state, sends no message and enters the Null call state U00.

**5.2.17.3 Syntactically invalid****L3U\_U25\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a message which is too short, sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_S\_005 subclause 5.8.4**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a message with an unrecognized message type, sends either a STATUS message with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_U25\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a mandatory information element missing, sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U25\_S\_008 subclause 5.8.6.2**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a mandatory information element content error, sends a RELEASE message with a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Release Request call state U19.

**L3U\_U25\_S\_009 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension required), sends a RELEASE message with a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Release Request call state U19.

**L3U\_U25\_S\_010 subclause 5.8.7.1**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with an unrecognized information element (encoded comprehension not required), sends a RELEASE message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Release Request call state U19.

**L3U\_U25\_S\_011 subclause 5.8.7.2**

Ensure that the IUT in the Overlap Receiving call state U25, on receipt of a DISCONNECT message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.17.4 Active****L3U\_U25\_A\_001 subclause 5.3.3**

Ensure that the IUT in the Overlap Receiving call state U25, to clear the call, sends a DISCONNECT message and enters the Disconnect Request call state U11.

**L3U\_U25\_A\_002 subclause 5.2.6**

Ensure that the IUT in the Overlap Receiving call state U25, to give a progress indication, sends a PROGRESS message and remains in the Overlap Receiving call state U25.

**L3U\_U25\_A\_003 clause 5**

Ensure that the IUT in the Overlap Receiving call state U25, to send information, sends an INFORMATION message and remains in the Overlap Receiving call state U25.

## 5.2.18 Restart null call state R00 (incoming call)

**Selection:** IUT supports restart procedure (incoming RESTART message). PICS: MCu 5.1. [69]

### 5.2.18.1 Valid

#### L3U\_R00I\_V\_001 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message, sends a RESTART ACKNOWLEDGE message and re-enters the Restart Null call state R00 and enters the Null call state U00.

#### L3U\_R00I\_V\_002 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "All interfaces", sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "All interfaces" and re-enters the Restart Null call state R00.

#### L3U\_R00I\_V\_003 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Single interfaces", sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Single interfaces" and re-enters the Restart Null call state R00.

#### L3U\_R00I\_V\_004 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating a single B-channel, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating the same B-channel and re-enters the Restart Null call state R00.

#### L3U\_R00I\_V\_005 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating two B-channels, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in one or two Channel identification information elements and re-enters the Restart Null call state R00.

**Selection:** IUT supports the primary rate access. PICS: R 6.2.

#### L3U\_R00I\_V\_006 subclause 5.5.2

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in two Channel identification information elements, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in one or two Channel identification information elements and re-enters the Restart Null call state R00.

**Selection:** IUT supports the primary rate access. PICS: R 6.2.

#### L3U\_R00I\_V\_007 subclause 5.5.3

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART ACKNOWLEDGE message, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

### 5.2.18.2 Inopportune

#### L3U\_R00I\_I\_001 subclause 5.8

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Restart Null call state R00 and the Active call state U10 or processes the message as valid.

#### L3U\_R00I\_I\_002 subclause 5.8.3.1

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message using the dummy call reference, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### L3U\_R00I\_I\_003 subclause 5.8.5.2

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

### 5.2.18.3 Syntactically invalid

#### **L3U\_R00I\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a message using the global call reference which is too short, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a message using the global call reference with an unrecognized message type, sends a STATUS message using the global call reference with a Call state information element indicating the Restart null call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_R00I\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Restart indicator) missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_008 subclauses 5.5.2, 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_009 subclause 5.8.6.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Restart indicator) content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_010 subclause 5.8.6.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_011 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R00I\_S\_012 subclause 5.8.7.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_R00I\_S\_013 subclause 5.8.7.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**L3U\_R00I\_S\_014 subclauses 5.5.2, 5.8.7.3, 5.8.7.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an information element (Channel identification, Restart indicator indicating "all interfaces") that is not defined to be contained in that message, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.18.4 Active****L3U\_R00I\_A\_001 subclause 5.5.1**

Ensure that the IUT in the Restart Null call state R00 to return channels to an idle condition, sends a RESTART message and enters the Restart Request call state R01 and the Null call state U00.

**5.2.19 Restart null call state R00 (outgoing call)**

**Selection:** IUT supports restart procedure (incoming RESTART message). PICS: MCu 5.1. [70]

**5.2.19.1 Valid****L3U\_R00O\_V\_001 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message, sends a RESTART ACKNOWLEDGE message and re-enters the Restart Null call state R00 and enters the Null call state U00.

**L3U\_R00O\_V\_002 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "All interfaces", sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "All interfaces" and re-enters the Restart Null call state R00.

**L3U\_R00O\_V\_003 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Single interfaces", sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Single interfaces" and re-enters the Restart Null call state R00.

**L3U\_R00O\_V\_004 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating a single B-channel, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating the same B-channel and re-enters the Restart Null call state R00.

**L3U\_R00O\_V\_005 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and the Channel identification information element indicating two B-channels, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in one or two Channel identification information elements and re-enters the Restart Null call state R00.

**Selection:** IUT supports the primary rate access. PICS: R 6.2.

**L3U\_R00O\_V\_006 subclause 5.5.2**

Ensure that the IUT in the Restart Null call state R00, on receipt of a RESTART message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in two Channel identification information elements, sends a RESTART ACKNOWLEDGE message with the Restart indicator information element indicating "Indicated channels" and indicating two B-channels in one or two Channel identification information elements and re-enters the Restart Null call state R00.

**Selection:** IUT supports the primary rate access. PICS: R 6.2.

**L3U\_R00O\_V\_007 subclause 5.5.3**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART ACKNOWLEDGE message, sends no message and remains in the Restart Null call state R00 and the Active call state U10.



### 5.2.19.2 Inopportune

#### **L3U\_R000\_I\_001 subclause 5.8**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Restart Null call state R00 and the Active call state U10 or processes the message as valid.

#### **L3U\_R000\_I\_002 subclause 5.8.3.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message using the dummy call reference, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_I\_003 subclause 5.8.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

### 5.2.19.3 Syntactically invalid

#### **L3U\_R000\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a message using the global call reference which is too short, sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a message using the global call reference with an unrecognized message type, sends a STATUS message using the global call reference with a Call state information element indicating the Restart null call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a non-mandatory information element out of sequence, processes the message as valid.

#### **L3U\_R000\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Restart indicator) missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_008 subclauses 5.5.2, 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

#### **L3U\_R000\_S\_009 subclause 5.8.6.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Restart indicator) content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Null call state R00 and the Active call state U10.

**L3U\_R00O\_S\_010 subclause 5.8.6.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Null call state R00 and the Active call state U10.

**L3U\_R00O\_S\_011 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Null call state R00 and the Active call state U10.

**L3U\_R00O\_S\_012 subclause 5.8.7.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_R00O\_S\_013 subclause 5.8.7.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**L3U\_R00O\_S\_014 subclauses 5.5.2, 5.8.7.3, 5.8.7.1**

Ensure that the IUT in the Restart Null call state R00 and the Active call state U10, on receipt of a RESTART message with an information element (Channel identification, Restart indicator indicating "all interfaces") that is not defined to be contained in that message, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.19.4 Active****L3U\_R00O\_A\_001 subclause 5.5.1**

Ensure that the IUT in the Restart Null call state R00 to return channels to an idle condition, sends a RESTART message and enters the Restart Request call state R01 and the Null call state U00.

**5.2.20 Restart request call state R01**

**Selection:** IUT supports initiation of restart procedure. PICS: MCu 5.2. [71]

**5.2.20.1 Valid****L3U\_R01\_V\_001 subclause 5.5.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message, sends no message, returns the channels / interfaces to an idle condition and enters the Restart Null call state R00.

**L3U\_R01\_V\_002 subclause 5.5.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a SETUP message with the Channel identification information element indicating a B-channel and indicating in the preferred / exclusive bit "exclusive: only the indicated channel is acceptable", when that B-channel is not in an idle condition, sends a RELEASE COMPLETE message and remains in the Restart Request call state R01.

**L3U\_R01\_V\_003 subclause 5.5.1**

Ensure that the IUT in the Restart Request call state R01, on the first expiry of the mandatory (if restart procedures are implemented) timer T316, sends a RESTART message and remains in the Restart Request call state R01.

**5.2.20.2 Inopportune****L3U\_R01\_I\_001 subclauses 5.5.3, 5.8.4**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART message, sends a STATUS message using the global call reference with a Cause information element indicating the cause value 98 "message type not compatible with call state or message type non-existent or not implemented" or 101 "message not compatible with call state" and remains in the Restart Request call state R01.

**L3U\_R01\_I\_002 subclause 5.8**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message delivered in a DL-UNIT-DATA-INDICATION, sends no message and remains in the Restart Request call state R01 or processes the message as valid.

**L3U\_R01\_I\_003 subclause 5.8.3.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message using the dummy call reference, sends no message and remains in the Restart Request call state R01.

**L3U\_R01\_I\_004 subclause 5.8.3.2 f)**

Ensure that the IUT in the Restart Request call state R01, on receipt of an INFORMATION message using the global call reference, sends a STATUS message using the global call reference with a Call state information element indicating the Restart Request call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Restart Request call state R01.

**L3U\_R01\_I\_005 subclause 5.8.5.2**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a duplicated Display information element (repetition not permitted), ignores the second occurrence of that information element and processes the remaining contents of the message as valid.

**L3U\_R01\_I\_006 subclause 5.8.11**

Ensure that the IUT in the Restart Request call state R01, on receipt of a STATUS message using the global call reference with a Call state information element indicating a call state that is incompatible with the Restart Request call state, sends no message and remains in the Restart Request call state R01.

**5.2.20.3 Syntactically invalid****L3U\_R01\_S\_001 subclause 5.8.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with an erroneous protocol discriminator, coded other than '08'H, sends no message and remains in the Restart Request call state R01.

**L3U\_R01\_S\_002 subclause 5.8.2**

Ensure that the IUT in the Restart Request call state R01, on receipt of a message using the global call reference which is too short, sends no message and remains in the Restart Request call state R01.

**L3U\_R01\_S\_003 subclause 5.8.3.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with an invalid call reference format (octet 1, bits 8 to 5  $\neq$  '0000'B), sends no message and remains in the Restart Request call state R01.

**L3U\_R01\_S\_004 subclause 5.8.3.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with an invalid call reference format (octet 1, bits 4 to 1, length value too high), sends no message and remains in the Restart Request call state R01.

**L3U\_R01\_S\_005 subclause 5.8.3.2 f)**

Ensure that the IUT in the Restart Request call state R01, on receipt of a message using the global call reference with an unrecognized message type, sends a STATUS message using the global call reference with a Call state information element indicating the Restart Request call state associated with the global call reference and a Cause information element indicating the cause value 81 "invalid call reference value" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_006 subclause 5.8.5.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a non-mandatory information element out of sequence, processes the message as valid.

**L3U\_R01\_S\_007 subclause 5.8.6.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a mandatory information element (Restart indicator) missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_008 subclause 5.8.6.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") missing, sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_009 subclause 5.8.6.2**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a mandatory information element (Restart indicator) content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_010 subclause 5.8.6.2**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a mandatory information element (Channel identification, Restart indicator indicating "indicated channel") content error, sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_011 subclauses 5.8.7.1, 5.8.6.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with an unrecognized information element (encoded comprehension required), sends a STATUS message with a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Request call state R01.

**L3U\_R01\_S\_012 subclause 5.8.7.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with an unrecognized information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**L3U\_R01\_S\_013 subclause 5.8.7.2**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message with a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message with a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.20.4 Active**

No active TPs for this call state.

**5.2.21 Message segmentation procedure**

**NOTE:** The following TPs are used to test the behaviour of the IUT when using the message segmentation procedures. As an example these procedures are tested in the Active call state U10.

**Selection:** IUT supports message segmentation procedures. PICS: MCu 13. [72]

**5.2.21.1 Valid****L3U\_SEG\_V\_001 clause H.3 a), b), c)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in two consecutive SEGMENT messages, sends a RELEASE message and enters the Release Request call state U19.

**5.2.21.2 Inopportune****L3U\_SEG\_I\_001 clause H.3 d), f)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in two consecutive SEGMENT messages with a time delay between the two SEGMENT messages that is greater than T314, sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_002 clause H.3 e)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in nine consecutive SEGMENT messages, sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_003 clause H.3 g)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in three consecutive SEGMENT messages where the second SEGMENT message indicates in the Segmented message information element that two segments remain to be sent for that particular DISCONNECT message, sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_004 clause H.3 h)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in two consecutive SEGMENT messages where a DL-ESTABLISH-INDICATION primitive is received between the SEGMENT messages, sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_005 clause H.3 i)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in two consecutive SEGMENT messages where the first SEGMENT message indicates in the First segment indicator field of the Segmented message information element the value 0 "consecutive segment to first segment", sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_006 clause H.3 j)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in three consecutive SEGMENT messages where the second SEGMENT message contains no Segmented message information element, sends no message and remains in the Active call state U10.

**L3U\_SEG\_I\_007 clause H.3 k)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in three consecutive SEGMENT messages where the second SEGMENT message contains no octets of the segmented message, sends no message and remains in the Active call state U10.

**5.2.21.3 Syntactically invalid****L3U\_SEG\_S\_001 clause H.3 f)**

Ensure that the IUT in the Active call state U10, on receipt of a valid DISCONNECT message that is segmented and sent in two consecutive SEGMENT messages where the first SEGMENT message does not contain a call reference, sends no message and remains in the Active call state U10.

**5.2.21.4 Active****L3U\_SEG\_A\_001 clause H.2**

Ensure that the IUT in the Active call state U10, to send a DISCONNECT message with a message length exceeding N201, send this DISCONNECT message in two or more consecutive SEGMENT messages and enters the Disconnect Request call state U11.

## 6 Compliance

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

- a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 5;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 6 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
- e) comply with ISO/IEC 9646-2 [5].

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

## 7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [5], shall be used by any organization claiming to provide a comprehensive testing service for user equipment claiming conformance to EN 300 403-1 [3] and ETS 300 403-2 [4].

---

## History

Document history				
V1.1.1	April 1998	Public Enquiry	PE 9833:	1998-04-17 to 1998-08-14
V1.1.2	September 1998	Vote	V 9846:	1998-09-15 to 1998-11-13
V1.1.3	November 1998	Publication		