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*European Standard (Telecommunications series)*

**Integrated Services Digital Network (ISDN);  
User Signalling Bearer Service (USBS);  
Digital Subscriber Signalling System No. one (DSS1) protocol;  
Part 5: Test Suite Structure and Test Purposes (TSS&TP)  
specification for the network**

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Reference

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## Foreword

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

The present document is part 5 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) User Signalling Bearer Service (USBS), as described below:

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

<b>Proposed national transposition dates</b>	
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# 1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for the Network side of the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [9]) of implementations conforming to the stage three standard for the User Signalling Bearer Service (USBS) for the pan-European Integrated Services Digital Network (ISDN) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol, EN 301 142-1 [1].

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

Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the User side of the T reference point or coincident S and T reference point of implementations conforming to EN 301 142-1 [1].

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# 2 References

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

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

- [1] EN 301 142-1 (V1.1): "Integrated Services Digital Network (ISDN); User Signalling Bearer Service (USBS); Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [2] EN 301 142-2 (V1.1): "Integrated Services Digital Network (ISDN); User Signalling Bearer Service (USBS); Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 1: General Concepts".
- [4] ISO/IEC 9646-2: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 2: Abstract Test Suite specification".
- [5] Void.
- [6] ETS 300 196-1 (1993): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [7] Void.
- [8] 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]".
- [9] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".
- [10] ITU-T Recommendation I.112 (1993): "Vocabulary and terms for ISDNs".
- [11] CCITT Recommendation E.164 (1991): "Numbering plan for the ISDN era".

- [12] ETS 300 403-6 (1997) "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 6: Test Suite Structure and Test Purposes (TSS&TPs) specification for the network".

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## 3 Definitions and abbreviations

### 3.1 Definitions

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

#### 3.1.1 Definitions related to conformance testing

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

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

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

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

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

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

**Test Purpose:** Refer to ISO/IEC 9646-1 [3].

#### 3.1.2 Definitions related to EN 300 142-1

**Bearer Service:** See ITU-T Recommendation I.112 [10], definition 202.

**Call Reference (CR):** See EN 300 403-1 [8], subclause 4.3.

**Component:** See EN 300 196-1 [6], subclause 3.1.

**Integrated Services Digital Network (ISDN):** See ITU-T Recommendation I.112 [10], definition 308.

**Invoke component:** See EN 300 196-1 [6], subclause 8.2.2.1. Where reference is made to an "xxxx" invoke component, an invoke component is meant with its operation value set to the value of the operation "xxxx".

**ISDN number:** A number conforming to the numbering and structure specified in CCITT Recommendation E.164 [11].

**Network:** The DSS1 protocol entity at the Network side of the user-network interface where a T reference point or coincident S and T reference point applies.

**Receiving entity:** An entity receiving USER INFORMATION messages.

**Service Data Unit (SDU):** Information whose content is preserved from the sending user to the receiving user; contained in a User-user information element carried by a USER INFORMATION message.

**Sending entity:** an entity sending USER INFORMATION messages.

**Served user:** The served user is the user which invokes the USBS.

**Service; telecommunication service:** See ITU-T Recommendation I.112 [10], definition 201.

**User:** the DSS1 protocol entity at the user side of the user-network interface when a coincident S and T reference point applies.

## 3.2 Abbreviations

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

A	Active test case
ATM	Abstract Test Method
ATS	Abstract Test Suite
CES	Connection Endpoint Suffix
CR	Call Reference
CR1	CR for the first call in a TP
CR2	CR for the second call in a TP
DSS1	Digital Subscriber Signalling System No. one
I	Inopportune test case
ISDN	Integrated Services Digital Network
IUT	Implementation under test
MSN	Multiple Subscriber Number
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
R00	Restart Null call state
S	Syntactically invalid test case
R01	Restart Request call state
SDU	Service Data Unit
TP	Test Purpose
TSS	Test Suite Structure
U00	Null call state
U01	Call Initiated call state
U02	Overlap Sending call state
U03	Outgoing Call Proceeding call state
U04	Call Delivered call state
U06	Call Present call state
U07	Call Received call state
U08	Connect Request call state
U09	Incoming Call Proceeding call state
U10	Active call state
U19	Release Request call state
U25	Overlap Receiving call state
USBS	User Signalling Bearer Service
V	Valid test case



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## 4 Test Suite Structure (TSS)

- Null call state N00
  - Valid
  - Inopportune
  - Syntactically invalid
- Overlap sending call state N02
  - Valid
  - Inopportune
  - Syntactically invalid
- Outgoing Call Proceeding call state N03
  - Valid
  - Inopportune
  - Syntactically invalid
- Call Delivered call state N04
  - Valid
  - Inopportune
  - Syntactically invalid
- Call Present call state N06
  - Valid
  - Inopportune
  - Syntactically invalid
- Call Received call state N07
  - Valid
  - Inopportune
  - Syntactically invalid
- Connect Request call state N08
  - Valid
  - Inopportune
  - Syntactically invalid
- Incoming Call Proceeding call state N09
  - Valid
  - Inopportune
  - Syntactically invalid
- Active call state N10 (Incoming call)
  - Signalling procedures
    - Valid
    - Inopportune
    - Syntactically invalid
  - Information transfer
    - Transfer of SDUs
    - Flow Control
    - Congestion Control
    - Combined Flow Control - Congestion control
- Active call state N10 (Outgoing call)
  - Signalling procedures
    - Valid
    - Inopportune
    - Syntactically invalid
  - Information transfer
    - Transfer of SDUs
    - Flow Control
    - Congestion Control
    - Combined Flow Control - Congestion control
- Release Request call state N19 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid

- Release Request call state N19 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
- Overlap receiving call state N25
  - Valid
  - Inopportune
  - Syntactically invalid
- Restart Null call state R00 (Incoming call)
  - Valid
  - Inopportune
  - Syntactically invalid
- Restart Null call state R00 (Outgoing call)
  - Valid
  - Inopportune
  - Syntactically invalid
- Restart Request call state R01
  - Valid
  - Inopportune
  - Syntactically invalid
- Message segmentation procedures

---

## 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 supplementary service and whether it applies to the network or the user (see table 1).

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

Identifier: <service iut>_<state>_<group>_<nnn>			
<service>	=	basic service:	e.g. "USBS"
<iut>	=	type of IUT:	U      User N      Network
<state>	=	call state	e.g. N10 for Active call state
<group>	=	group	A      Active V      Valid I      Inopportune S      Syntactically invalid
<nnn>	=	sequential number	(001-999)

#### 5.1.2 Source of TP definition

The TPs are based on EN 301 142-1 [1].

### 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 and this is illustrated in table 2. This table should be read in conjunction with any TP, i.e. use a TP as an example to fully understand the table.

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

TP Part	Text	Example
<b>Header</b>	<Identifier> <i>tab</i> <paragraph number in base EN> <i>tab</i> <type of test> <i>tab (only in U10 for Information transfer)</i> <condition> <i>CR. (only in U10 for Information transfer)</i>	see table 1 <b>subclause 0.0.0</b> <b>valid, invalid, inopportune</b> <b>mandatory, optional, conditional</b>
<b>Stimulus</b>	Ensure that the IUT in the <basic call state for CR1> <trigger> <i>see below for message structure</i>  or <goal>	Active call state U10 receiving a XXXX message (see note 2) 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(s) or and (re-)enters state <state>	sends, processes, discards, etc. using en-bloc sending, ...
<b>Message structure</b>	<message type> message a) including (or without) <information element> information element ( <i>optionally with</i> b) a <field name>) indicating <coding of the field> and <i>back to a or b,</i>	SETUP, FACILITY, CONNECT, ...  Bearer capability, Facility, ...  XXXX invoke component, ...  the cause value <i>val</i> , " <i>Argument value</i> ", ...
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: All messages shall be considered as "valid and compatible" unless otherwise specified in the test purpose.		

### 5.1.4 Test strategy

As the base standard EN 301 142-1 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 301 142-2 [2]. The criteria applied include the following:

- only the requirements from the point of view of the T or coincident S and T reference point are considered;
- whether or not a test case can be built from the TP is not considered.

### 5.1.5 Test of call states.

Many TPs include a reference to the IUT's final 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 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 [8] (referenced in subclause 9.7 of EN 301 142-1 [1]). 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.

### 5.1.6 Test of point-to-multipoint configurations

In subclauses 7.2.1, 7.2.5, 7.2.6, 7.2.7 and 7.2.15 (call states Null N00, Call Present N06, Call Received N07, Incoming Call Proceeding N09 and Overlap Receiving) a distinction is made between point-to-point and point-to-multipoint configurations. In the case of point-to-multipoint configuration, several terminals may be attached to a one basic access interface. Each terminal will use a different Connection Endpoint Suffix (CES)> To reflect this in the TPs, the CES for which the message is received or sent is named explicitly where the clarification is needed (e.g. "...on receipt of an ALERTING message for CES1...").

### 5.1.7 Test of inopportune and syntactically invalid behaviour

In the sub-groups for inopportune and syntactically invalid behaviour, the procedures as described in subclause 9.7 of EN 301 142-1 [1] are tested.

Test purposes for inopportune behaviour that is described outside the subclause 9.7 of EN 301 142-1 [1] are found in the valid test groups.

### 5.1.8 Test purposes from ETS 300 403-6

The TPs of the present document cover (particularly for "Inopportune" and "Syntactically Invalid" sub-groups) specific USBS features (EN 301 142-1 [1]). Following features of the basic call procedure specification (EN 300 403-1 [8]) are not covered:

#### **Valid**

See ETS 300 403-6 [12] subclause 6.2.x.1 (x = subclause index for each call state) for relevant TPs.

- Receipt of STATUS ENQUIRY message.

#### **Inopportune**

See ETS 300 403-6 [12] subclause 6.2.x.2 (x = subclause index for each call state) for relevant TPs.

- Receipt of messages in DL-UNIT-DATA-INDICATION;
- Receipt of messages with dummy CR, global CR or CR not recognized as related to a call;
- Receipt of SETUP message with CR which is already in use;
- Receipt of inopportune messages;
- Receipt of messages with duplicated information elements (repetition not permitted);
- Receipt of STATUS message.

#### **Syntactically invalid**

See ETS 300 403-6 [12] subclause 6.2.x.3 (x = subclause index for each call state) for relevant TPs.

- Receipt of messages with protocol discriminator error;
- Receipt of too short messages;
- Receipt of messages with call reference errors.

#### **Call states**

See ETS 300 403-6 [12] subclause 6.2.14 for relevant TPs.

- N22.

#### **Other features**

See ETS 300 403-6 [12] subclause 6.2.19 for relevant TPs

- Segmentation.

NOTE: In the relevant TPs from ETS 300 403-6 [12], replace DISCONNECT messages by RELEASE messages. Consequently, replace each expected RELEASE message sent by the IUT in response to a DISCONNECT by RELEASE COMPLETE message.

## 5.2 Network TPs for USBS

All PICS items referred to in this subclause are as specified in EN 301 142-2 [2] unless indicated otherwise by another numbered reference.

NOTE: Each call state other than N00, has been reached by initializing the call with a SETUP message containing Bearer Capability and Channel identification USBS coded.

### 5.2.1 Null call state N00

#### 5.2.1.1 Valid

##### 5.2.1.1.1 Outgoing call

**Selection:** IUT supports outgoing calls. PICS: MCn 1

#### **USBSN\_N00\_V\_001** subclauses 9.1.1, 9.1.4

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating the complete number information, and including a Sending complete information element,

sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** maximum number of USBS calls without limitation. PICS: MCn 0.4

Network option is "not preregistered on demand mode". PICS: NOT MCn 1.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

#### **USBSN\_N00\_V\_002** subclauses 9.1.1, 9.1.4

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating the complete number information, and including a Sending complete information element, when the maximum of USBS calls is not reached,

sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** maximum number of USBS calls with limitation. PICS: MCn 0.5

Network option is "not preregistered on demand mode". PICS: NOT MCn 1.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

#### **USBSN\_N00\_V\_003** subclause 9.1.1, 9.1.2

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and without Called party number and without Sending complete information elements,

sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:** maximum number of USBS calls without limitation. PICS: MCn 0.4

IUT supports overlap sending procedures. PICS: MCn 1.2

**USBSN\_N00\_V\_004**            **subclauses 9.1.1, 9.1.2**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and without Called party number and without Sending complete information elements, when the maximum of USBS calls is not reached,  
     sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:**    maximum number of USBS calls with limitation. PICS: MCn 0.5

IUT supports overlap sending procedures. PICS: MCn 1.2

**USBSN\_N00\_V\_005**            **subclauses 9.1.1, 9.1.2**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and including a Called party number information element indicating an incomplete number information and without Sending complete information element,  
     sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:**    maximum number of USBS calls without limitation. PICS: MCn 0.4

IUT supports overlap sending procedures. PICS: MCn 1.2

**USBSN\_N00\_V\_006**            **subclauses 9.1.1, 9.1.2**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and including a Called party number information element indicating an incomplete number information and without Sending complete information element, when the maximum of USBS calls is not reached,  
     sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:**    maximum number of USBS calls with limitation. PICS: MCn 0.5

IUT supports overlap sending procedures. PICS: MCn 1.2

**USBSN\_N00\_V\_007**            **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating an incomplete number information and including a Sending complete information element,  
     sends a RELEASE COMPLETE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and remains in the Null call state N00;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**Selection:**    maximum number of USBS calls without limitation. PICS: MCn 0.4

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_008**            **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating an incomplete number information and including a Sending complete information element, when the maximum of USBS calls is not reached,  
     sends a RELEASE COMPLETE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and remains in the Null call state N00;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**Selection:** maximum number of USBS calls with limitation. PICS: MCn 0.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_009**                    **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element providing invalid called party information and including a Sending complete information element,

sends a RELEASE COMPLETE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and remains in the Null call state N00;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**Selection:** maximum number of USBS calls without limitation. PICS: MCn 0.4

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_010**                    **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element providing invalid called party information and including a Sending complete information element, when the maximum of USBS calls is not reached,

sends a RELEASE COMPLETE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and remains in the Null call state N00;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**Selection:** maximum number of USBS calls with limitation. PICS: MCn 0.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_011**                    **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating complete number information and including a Sending complete information element, when the maximum of USBS calls is reached,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 47 "resource unavailable (unspecified)" and remains in Null call state N00.

**Selection:** maximum number of USBS calls with limitation. PICS: MCn 0.5

Network option is "not preregistered on demand mode". PICS: NOT MCn 1.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_012**                    **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, without Called party number information element and without Sending complete information element, when the maximum of USBS calls is reached,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 47 "resource unavailable (unspecified)" and remains in Null call state N00.

**Selection:** maximum number of USBS calls with limitation. PICS: MCn 0.5

IUT supports overlap sending procedures. PICS: MCn 1.2

**USBSN\_N00\_V\_013**                    **subclauses 9.1.1, 9.1.4**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating complete number information which is preregistered and including a Sending complete information element, , sends a CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** maximum number of USBS calls without limitation. PICS: MCn 0.4

Network option is "preregistered on demand mode". PICS: MCn 1.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_014**                    **subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating complete number information which is not preregistered and including a Sending complete information element, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 1 "unassigned (unallocated )" and remains in Null call state N00.

**Selection:** maximum number of USBS calls without limitation. PICS: MCn 0.4

Network option is "preregistered on demand mode". PICS: MCn 1.5

IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N00\_V\_015**                    **subclauses 9.1.1, 9.1.3, 9.1.4**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating complete number information and including a Sending complete information element, and without Calling party number information element, when MSN is not provided to the access, sends a CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** IUT supports en-bloc sending procedures. PICS: MCn 1.1

Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_016**                    **subclauses 9.1.1, 9.1.2, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, without Called party number and without Sending complete information elements, and without Calling party number information element, when MSN is not provided to the access, sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:** IUT supports overlap sending procedures. PICS: MCn 1.2

Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_017**                    **subclauses 9.1.1, 9.1.3, 9.1.4**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Called party number information element indicating complete number information, including a Sending complete information element, and including a Calling party number information element indication a Calling party number for which subscription applies, when MSN is provided to the access,



sends a CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** IUT supports en-bloc sending procedures. PICS: MCn 1.1

Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_018 subclauses 9.1.2**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, without Called party number and without Sending complete information elements, and including a Calling party number information element indicating a Calling party number for which subscription applies, when MSN is provided to the access,

sends SETUP ACKNOWLEDGE message without Channel identification information element and enters the Overlap Sending call state N02.

**Selection:** IUT supports overlap sending procedures. PICS: MCn 1.2

Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_019 subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, including a Calling party number information element indicating a Calling party number for which subscription does not apply, when MSN is provided to the access,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 57 "bearer capability not authorized" and remains the Null call state N00.

**Selection:** Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_020 subclauses 9.1.1, 9.1.3**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, and without Calling party number information element, when MSN is provided to the access,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 57 "bearer capability not authorized" and remains the Null call state N00.

**Selection:** Provision applicability set to "number basis" or set to "both" and "subscribed provision" is set to "number basis". PICS: MCn 0.1 OR MCn 0.3

**USBSN\_N00\_V\_021 subclauses 9.1.1, 9.4.1, 11**

Ensure that the IUT in Null call state N00, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded, and including a Called party number information element indicating a number information which is not in an ISDN network and including a Sending Complete information element,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 65 "bearer service not implemented" and remains the Null call state N00.

**5.2.1.1.2 Incoming call point-to-point configuration**

**Selection:** IUT supports incoming calls. PICS: MCn 2

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

**USBSN\_N00\_V\_022 subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call, sends a SETUP message, including a Bearer capability information element USBS coded and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**USBSN\_N00\_V\_023 subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call,

sends a SETUP message, including a Bearer capability information element USBS coded, including a Called party number information element providing the complete number information, and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**Selection:** IUT supports en-bloc receiving procedures. PICS: MCn 2.1

**USBSN\_N00\_V\_024** **subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call, sends a SETUP message, including a Bearer capability information element USBS coded, without Sending complete and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**Selection:** IUT supports overlap receiving procedures. PICS: MCn 2.2

**USBSN\_N00\_V\_025** **subclause 9.2.1 b)**

Ensure that the IUT in the Null call state N00, to indicate the arrival (maximum USBS calls reached) of a USBS call, sends no message and remains in the Null call state N00.

**Selection:** IUT supports overlap receiving procedures. PICS: MCn 2.2

### 5.2.1.1.3 Incoming call point-to-multipoint configuration

**Selection:** IUT supports incoming calls. PICS: MCn 2

IUT supports point-to-multipoint configuration. PICS: R.7.2

**USBSN\_N00\_V\_026** **subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call, sends a SETUP message using the broadcast data link, including a Bearer capability information element USBS coded and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**USBSN\_N00\_V\_027** **subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call, sends a SETUP message using the broadcast data link, including a Bearer capability information element USBS coded, including a Called party number information element providing the complete number information, and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**Selection:** IUT supports en-bloc receiving procedures. PICS: MCn 2.1

**USBSN\_N00\_V\_028** **subclause 9.2.1**

Ensure that the IUT in the Null call state N00, to indicate the arrival (call accepted) of a USBS call, sends a SETUP message using the broadcast data link, including a Bearer capability information element USBS coded, without Sending complete and without Channel identification information element, using the point-to-point data link and enters Call Present call state N06.

**Selection:** IUT supports overlap receiving procedures. PICS: MCn 2.2

**USBSN\_N00\_V\_029** **subclause 9.2.1 b)**

Ensure that the IUT in the Null call state N00, to indicate the arrival of a USBS call, when the maximum number of USBS calls has been reached, sends no message and remains in the Null call state N00.

### 5.2.1.2 Inopportune.

**USBSN\_N00\_I\_001** **subclause 9.7**

Ensure that the IUT in the Null call state N00, on receipt of a RELEASE COMPLETE message, sends no message and remains in the Null call state N00.

**USBSN\_N00\_I\_002** **subclause 9.7**

Ensure that the IUT in the Null call state N00, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Null call state N00.

### 5.2.1.3 Syntactically invalid

#### **USBSN\_N00\_S\_001**                    **subclause 9.7 a)**

Ensure that the IUT in the Null call state N00, on receipt of an excluded message DISCONNECT, sends a RELEASE or a RELEASE COMPLETE message including a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state N19 or remains in the Null call state N00.

#### **USBSN\_N00\_S\_002**                    **subclause 9.7 a)**

Ensure that the IUT in the Null call state N00, on receipt of an excluded message PROGRESS, sends a RELEASE or a RELEASE COMPLETE message including a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state N19 or remains in the Null call state N00.

#### **USBSN\_N00\_S\_003**                    **subclause 9.7 a)**

Ensure that the IUT in the Null call state N00, when no suspended call exists, on receipt of a RESUME message, sends a RELEASE or a RELEASE COMPLETE message including a Cause information element indicating the cause value 81 "invalid call reference value" and enters the Release Request call state N19 or remains in the Null call state N00,

or,

sends a RESUME REJECT including a Cause information element indicating the cause value 85 "no call suspended" and remains in the Null call state N00.

#### **USBSN\_N00\_S\_004**                    **subclause 9.7 b)**

Ensure that the IUT in the Null call state N00, on receipt of a SETUP message including a Bearer Capability and a Channel identification information elements USBS coded and including a Progress indicator information element, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

#### **USBSN\_N00\_S\_005**                    **subclause 9.7 b)**

Ensure that the IUT in the Null call state N00, on receipt of a SETUP message including a Bearer Capability and a Channel identification information elements USBS coded and including a Low Layer compatibility information element, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

## 5.2.2 Overlap Sending call state N02

**Selection:** IUT supports outgoing calls. PICS: MCn 1

### 5.2.2.1 Valid

#### **USBSN\_N02\_V\_001**                    **subclauses 9.1.2, 9.1.4**

Ensure that the IUT in the Null call state N02, on receipt of an INFORMATION message including a Called party number indicating the complete number information, and including a Sending complete information element, sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** Network option is "not preregistered on demand mode". PICS: NOT MCn 1.5

#### **USBSN\_N02\_V\_002**                    **subclauses 9.1.2, 9.1.4**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number indicating the complete number information, and without Sending complete information element, sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** Network option is "not preregistered on demand mode". PICS: NOT MCn 1.5

**NOTE:** The IUT may wait on the expiry of T302 before sending the CALL PROCEEDING message.

**USBSN\_N02\_V\_003**            **subclause 9.1.2**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number indicating an incomplete number information and without Sending complete information element, sends no message and remains in the Overlap Sending call state N02.

**USBSN\_N02\_V\_004**            **subclauses 9.1.2, 9.1.3**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number indicating an incomplete number information and including a Sending complete information element,

sends a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**USBSN\_N02\_V\_005**            **subclauses 9.1.2, 9.1.3**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number information element providing invalid called party information,

sends a RELEASE message including a Cause information element indicating one of the cause values 1 "unassigned (unallocated number)", 3 "no route to destination", 22 "number changed" or 28 "invalid number format (incomplete number)" and enters the Release Request call state N19;

**USBSN\_N02\_V\_006**            **subclauses 9.1.2, 9.1.3, 14.1.3**

Ensure that the IUT in the Overlap Sending call state N02, when the complete called party information has not yet been received, on the expiry of timer T302,

sends a RELEASE message including a Cause information element indicating the cause value 28 "invalid number format (incomplete number)" and enters the Release Request call state N19;

or

sends CALL PROCEEDING message followed by a RELEASE message including a Cause information element indicating the cause value 28 "invalid number format (incomplete number)" and enters the Release Request call state N19.

**USBSN\_N02\_V\_007**            **subclauses 9.1.2, 9.1.4**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number information element indicating complete number information which is preregistered and including a Sending complete information element, ,

sends a CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements and enters the Outgoing Call proceeding call state N03.

**Selection:** Network option is "preregistered on demand mode" PICS: MCn 1.5

**USBSN\_N02\_V\_008**            **subclauses 9.1.2, 9.1.3**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFORMATION message including a Called party number information element indicating complete number information which is not preregistered and including a Sending complete information element,

sends a RELEASE message including a Cause information element indicating the cause value 1 "unassigned (unallocated )" and enters the Release Request call state N19.

**Selection:** Network option is "preregistered on demand mode" PICS: MCn 1.5

**USBSN\_N02\_V\_009**            **subclauses 9.1.2, 9.1.5**

Ensure that the IUT in the Overlap Sending call state N02, to indicate that remote user alerting has been initiated,

sends an ALERTING message without Bearer capability, Channel identification and High Layer compatibility information elements and enters the Call Delivered call state N04.

**USBSN\_N02\_V\_010**            **subclauses 9.1.2, 9.1.6**

Ensure that the IUT in the Overlap Sending call state N02, to indicate that remote user has answered the call, sends a CONNECT message without Bearer capability, Channel identification and High Layer compatibility information elements and enters the Active call state N10.

**USBSN\_N02\_V\_011**            **subclause 9.1.2**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N02\_V\_012**            **subclauses 9.1.2, 9.4.3**

Ensure that the IUT in the Overlap Sending call state N02, to indicate that the remote user has sent an invitation to clear the call, sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N02\_V\_013**            **clause 9**

Ensure that the IUT in the Overlap Sending call state N02, to provide additional information, sends an INFORMATION message and remains in the Overlap Sending call state N02.

**USBSN\_N02\_V\_014**            **subclauses 9.1.2, 9.4.1, 11**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an INFRMATION message including a Called party number information element indicating a number information which is not in an ISDN network and including a Sending Complete information element, sends a RELEASE message including a Cause information element indicating the cause value 65 "bearer service not implemented" and enters the Release Request call state N19

**Selection:** Network option is "not preregistered on demand mode". PICS: MCn 1.5

**5.2.2.2**            **Inopportune****USBSN\_N02\_I\_001**            **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N02\_I\_002**            **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N02.

**USBSN\_N02\_I\_003**            **subclauses 9.7, 14.1.3**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a DL-ESTABLISH-INDICATION, sends a RELEASE message including a Cause information element indicating the cause value 41 "temporary failure" and enters the Release Request call state N19.

**5.2.2.3**            **Syntactically invalid.****USBSN\_N02\_S\_001**            **subclause 9.7 a)**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Overlap Sending call state N02.

**USBSN\_N02\_S\_002**            **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message including mandatory information element (Cause) missing, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N02\_S\_003**            **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message including a mandatory information element (Cause) content error,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

**USBSN\_N02\_S\_004**                    **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension required),  
sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N02\_S\_005**                    **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension not required),  
sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state N00.

**USBSN\_N02\_S\_006**                    **subclause 9.7**

Ensure that the IUT in the Overlap Sending call state N02, on receipt of a RELEASE message including a non-mandatory information element content error,  
processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

## 5.2.3      **Outgoing Call Proceeding call state N03**

**Selection:**    IUT supports outgoing calls. PICS: MCn 1

### 5.2.3.1      **Valid**

**USBSN\_N03\_V\_001**                    **subclause 9.1.5**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, to indicate that remote user alerting has been initiated,  
sends an ALERTING message without Bearer capability, Channel identification and High Layer compatibility information elements and enters the Call Delivered call state N04.

**USBSN\_N03\_V\_002**                    **subclause 9.1.6**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, to indicate that remote user has answered the call,  
sends a CONNECT message without Bearer capability, Channel identification and High Layer compatibility information elements and enters the Active call state N10.

**USBSN\_N03\_V\_003**                    **subclause 9.4.3**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, to indicate that remote user has sent an invitation to clear the call,  
sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N03\_V\_004**                    **subclauses 9.1.4, 9.4.3**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, to indicate that remote user does not respond,  
sends a RELEASE message including a Cause information element indicating the cause value 18 "no user responding" and enters the Release Request call state N19.

**USBSN\_N03\_V\_005**                    **subclause 9.4.2**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message,  
sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N03\_V\_006**                    **subclause 9.1**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of an INFORMATION message,  
sends no message and remains in the Outgoing Call Proceeding call state N03.

**USBSN\_N03\_V\_007**                    **clause 9**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, to provide additional information,  
sends an INFORMATION message and remains in the Outgoing Call Proceeding call state N03.

### 5.2.3.2 Inopportune

**USBSN\_N03\_I\_001**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N03\_I\_002**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N03.

**USBSN\_N03\_I\_003**                    **subclauses 9.7, 14.1.4**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Outgoing Call Proceeding call state N03.

### 5.2.3.3 Syntactically invalid.

**USBSN\_N03\_S\_001**                    **subclause 9.7 a)**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Outgoing Call Proceeding call state N03.

**USBSN\_N03\_S\_002**                    **subclause 9.7 a)**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Outgoing Call Proceeding call state N03.

**USBSN\_N03\_S\_003**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message including mandatory information element (Cause) missing, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N03\_S\_004**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message including a mandatory information element (Cause) content error, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

**USBSN\_N03\_S\_005**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N03\_S\_006**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state N00.

**USBSN\_N03\_S\_007**                    **subclause 9.7**

Ensure that the IUT in the Outgoing Call Proceeding call state N03, on receipt of a RELEASE message including a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

## 5.2.4 Call Delivered call state N04

**Selection:** IUT supports outgoing calls. PICS: MCn 1

### 5.2.4.1 Valid

**USBSN\_N04\_V\_001**                    **subclause 9.1.6**

Ensure that the IUT in the Call Delivered call state N04, to indicate that remote user has answered the call, sends a CONNECT message without Bearer capability, Channel identification and High Layer compatibility information elements and enters the Active call state N10.

**USBSN\_N04\_V\_002**                    **subclause 9.4.3**

Ensure that the IUT in the Call Delivered call state N04, to indicate that remote user has sent an invitation to clear the call, sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N04\_V\_003**                    **subclauses 9.1.5, 9.4.2**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N04\_V\_004**                    **subclause 9.1**

Ensure that the IUT in the Call Delivered call state N04, on receipt of an INFORMATION message, sends no message and remains in the Call Delivered call state N04.

**USBSN\_N04\_V\_005**                    **clause 9**

Ensure that the IUT in the Call Delivered call state N04, to provide additional information, sends an INFORMATION message and remains in the Call Delivered call state N04.

### 5.2.4.2 Inopportune

**USBSN\_N04\_I\_001**                    **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N04\_I\_002**                    **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N04.

**USBSN\_N04\_I\_003**                    **subclauses 9.7, 14.1.5**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Call Delivered call state N04.

### 5.2.4.3 Syntactically invalid.

**USBSN\_N04\_S\_001**                    **subclause 9.7 a)**

Ensure that the IUT in the Call Delivered call state N04, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Delivered call state N04.

**USBSN\_N04\_S\_002**                    **subclause 9.7 a)**

Ensure that the IUT in the Call Delivered call state N04, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Delivered call state N04.



**USBSN\_N04\_S\_003**            **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message including mandatory information element (Cause) missing,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N04\_S\_004**            **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message including a mandatory information element (Cause) content error,

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

**USBSN\_N04\_S\_005**            **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension required),

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N04\_S\_006**            **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension not required),

sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state N00.

**USBSN\_N04\_S\_007**            **subclause 9.7**

Ensure that the IUT in the Call Delivered call state N04, on receipt of a RELEASE message including a non-mandatory information element content error,

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

## 5.2.5 Call Present call state N06

**Selection:** IUT supports incoming calls. PICS: MCn 2

### 5.2.5.1 Valid

#### 5.2.5.1.1 Point-to-point configuration

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

**USBSN\_N06\_V\_001**            **subclauses 9.2.1, 9.2.3**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a SETUP ACKNOWLEDGE message without Channel identification information element,

sends no message and enters the Overlap Receiving call state N25.

**USBSN\_N06\_V\_002**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a CALL PROCEEDING message without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and enters the Incoming Call Proceeding call state N09.

**USBSN\_N06\_V\_003**            **subclauses 9.2.1, 9.2.5**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a ALERTING message without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and enters the Call Received call state N07.

**USBSN\_N06\_V\_004**            **subclauses 9.2.1, 9.2.6**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends a CONNECT ACKNOWLEDGE message and enters the Active call state N10.

**USBSN\_N06\_V\_005**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N06\_V\_006**            **subclause 9.4.3**

Ensure that the IUT in the Call Present call state N06, to indicate that the remote user has sent an invitation to clear the call, sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N06\_V\_007**            **subclause 9.2.1**

Ensure that the IUT in the Call Present call state N06, on the first expiry of the mandatory timer T303, sends a SETUP message including Bearer Capability and Channel identification information elements USBS coded using the point-to-point data link and remains in the Call present call state N06.

**USBSN\_N06\_V\_008**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, on the second expiry of the mandatory timer T303, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Null call state N00.

**5.2.5.1.2**            **Point-to-multipoint configuration**

**Selection:** IUT supports point-to-multipoint configuration. PICS: R.7.2

**USBSN\_N06\_V\_009**            **subclauses 9.2.1, 9.2.3**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a SETUP ACKNOWLEDGE message without Channel identification information element, sends no message and enters the Overlap Receiving call state N25.

**USBSN\_N06\_V\_010**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a CALL PROCEEDING message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends no message and enters the Incoming Call Proceeding call state N09.

**USBSN\_N06\_V\_011**            **subclauses 9.2.1, 9.2.5**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a ALERTING message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends no message and enters the Call Received call state N07.

**USBSN\_N06\_V\_012**            **subclauses 9.2.1, 9.2.6**

Ensure that the IUT in the Call Present call state N06, reached by sending a SETUP message including a Bearer Capability and the Channel identification information elements USBS coded, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends a CONNECT ACKNOWLEDGE message and enters the Active call state N10.

**USBSN\_N06\_V\_013**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, on receipt of a RELEASE COMPLETE message, sends no message and remains in the Call Present call state N06.

**USBSN\_N06\_V\_014**            **subclause 9.4.3**

Ensure that the IUT in the Call Present call state N06, to indicate that the remote user has sent an invitation to clear the call, sends no message and enters the Call Abort call state N22.

**USBSN\_N06\_V\_015**            **subclause 9.2.1**

Ensure that the IUT in the Call Present call state N06, on the first expiry of the mandatory timer T303, sends a SETUP message including Bearer Capability and Channel identification information elements USBS coded using the broadcast data link and remains in the Call Present call state N06.

**USBSN\_N06\_V\_016**            **subclause 9.2.1**

Ensure that the IUT in the Call Present call state N06, after the receipt of a RELEASE COMPLETE message, on the first expiry of the mandatory timer T303, sends no message and enters Call Abort call state N22.

**USBSN\_N06\_V\_017**            **subclauses 9.2.1, 9.2.4**

Ensure that the IUT in the Call Present call state N06, on the second expiry of the mandatory timer T303, sends no message and enters the Call Abort call state N22.

**5.2.5.2**            **Inopportune****USBSN\_N06\_I\_001**            **subclause 9.7**

Ensure that the IUT in the Call Present call state N06, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

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

**USBSN\_N06\_I\_002**            **subclause 9.7**

Ensure that the IUT in the Call Present call state N06, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and remains in the Call Present call state N06.

**Selection:** IUT supports the point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N06\_I\_003**            **subclause 9.7**

Ensure that the IUT in the Call Present call state N06, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 Present call state N06.

**USBSN\_N06\_I\_004**            **subclauses 9.7, 14.1.6**

Ensure that the IUT in the Call Present call state N06, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Call Present call state N06.

**5.2.5.3**            **Syntactically invalid****USBSN\_N06\_S\_001**            **subclause 9.7 a)**

Ensure that the IUT in the Call Present call state N06, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Present call state N06.

**USBSN\_N06\_S\_002**            **subclause 9.7 a)**

Ensure that the IUT in the Call Present call state N06, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Present call state N06.

**USBSN\_N06\_S\_003**            **subclauses 9.2.3, 9.7 c)**

Ensure that the IUT in the Call Present call state N06, on receipt of a SETUP ACKNOWLEDGE message including a Channel identification information element, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_004**            **subclauses 9.2.4, 9.7 c)**

Ensure that the IUT in the Call Present call state N06, on receipt of a CALL PROCEEDING message including a Channel identification information element,

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_005**            **subclauses 9.2.5, 9.7 c)**

Ensure that the IUT in the Call Present call state N06, on receipt of a ALERTING message including a Channel identification information element,

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_006**            **subclauses 9.2.6, 9.7 c)**

Ensure that the IUT in the Call Present call state N06, on receipt of a CONNECT message including a Channel identification information element,

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_007**            **subclauses 9.2.4, 9.7, 7.1.2**

Ensure that the IUT in the Call Present call state N06, on receipt of a CALL PROCEEDING message including a Bearer Capability information element (encoded comprehension required),

sends a STATUS message including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Call Present call state N06.

**USBSN\_N06\_S\_008**            **subclauses 9.2.4, 9.7, 7.1.2**

Ensure that the IUT in the Call Present call state N06, on receipt of a CALL PROCEEDING message including a High Layer compatibility information element (encoded comprehension not required),

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_009**            **subclauses 9.2.4, 9.7 b)**

Ensure that the IUT in the Call Present call state N06, on receipt of a CALL PROCEEDING message including an excluded information element (Progress Indicator),

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N06\_S\_010**            **subclause 9.7**

Ensure that the IUT in the Call Present call state N06, on receipt of a CALL PROCEEDING message including a non-mandatory information element content error,

processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**USBSN\_N06\_S\_011**            **subclause 9.7**

Ensure that the IUT in the Call Present call state N06, on receipt of a CONNECT message including a non-mandatory information element out of sequence,

processes the message as valid.

## 5.2.6 Call received call state N07

**Selection:** IUT supports incoming calls. PICS: MCn 2

### 5.2.6.1 Valid

#### 5.2.6.1.1 Point-to-point configuration

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

**USBSN\_N07\_V\_001**            **subclauses 9.2.5, 9.2.6**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends a CONNECT ACKNOWLEDGE message and enters the Active call state N10.

**USBSN\_N07\_V\_002**            **subclauses 9.2.5, 9.2.6**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements followed by a USER INFORMATION message including a User-user information element,

sends a CONNECT ACKNOWLEDGE message, accepts the second message (resulting in the sending, after the CONNECT message, of the USER INFORMATION message including User-user information element to the remote user) and enters the Active call state N10.

**Selection:** IUT supports transfer of SDUs. PICS: MCn 3

**USBSN\_N07\_V\_003**            **subclause 9.2**

Ensure that the IUT in the Call Received call state N07, on receipt of an INFORMATION message, sends no message and remains in the Call Received call state N07.

**USBSN\_N07\_V\_004**            **subclause 9.4.2**

Ensure that the IUT in the Call Received call state N07, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N07\_V\_005**            **subclause 9.4.3**

Ensure that the IUT in the Call Received call state N07, to indicate that the remote user has sent an invitation to clear the call,

sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N07\_V\_006**            **clause 9**

Ensure that the IUT in the Call Received call state N07, to provide additional information, sends an INFORMATION message and remains in the Call Received call state N07.

**USBSN\_N07\_V\_007**            **subclauses 9.2.5, 9.4.3, 14.1.7**

Ensure that the IUT in the Call Received call state N07, on expiry of the optional timer T301, sends a RELEASE message including a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Release Request call state N19.

**Selection:** IUT supports timer T301. PICS: TMn 1

**5.2.6.1.2**            **Point-to-multipoint configuration**

**Selection:** IUT supports point-to-multipoint configuration. PICS: R.7.2

**USBSN\_N07\_V\_008**            **subclause 9.2.3**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a SETUP ACKNOWLEDGE message for CES2 without Channel identification information element,

sends no message and remains in the Call Received call state N07 for CES1 and enters the Overlap Receiving call state N25 for CES2.

**USBSN\_N07\_V\_009**            **subclause 9.2.4**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a CALL PROCEEDING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and remains in the Call Received call state N07 for CES1 and enters the Incoming Call Proceeding call state N09 for CES2.

**USBSN\_N07\_V\_010**            **subclause 9.2.5**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of an ALERTING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and remains in the Call Received call state N07 for CES1 and enters the Call Received call state N07 for CES2.

**USBSN\_N07\_V\_011**            **subclauses 9.2.6, 9.2.7**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a CONNECT message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends a CONNECT ACKNOWLEDGE message for CES2 and a RELEASE message for CES1 including a Cause information element indicating the cause value 26 "non-selected user clearing" and enters the Release Request call state N19 for CES1 and enters the Active call state N10 for CES2.

**USBSN\_N07\_V\_012**            **subclauses 9.2.5, 9.2.6**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a CONNECT message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements followed by a USER INFORMATION message for CES2 including a User-user information element,

sends a CONNECT ACKNOWLEDGE message for CES2 and a RELEASE message for CES1 including a Cause information element indicating the cause value 26 "non-selected user clearing", accepts the second message (resulting in the sending, after the CONNECT message, of the USER INFORMATION message including User-user information element to the remote user) " and enters the Release Request call state N19 for CES1 and enters the Active call state N10 for CES2.

**Selection:** IUT supports transfer of SDUs. PICS: MCn 3

**USBSN\_N07\_V\_013**            **subclauses 9.2.4, 9.4.2**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a RELEASE message for CES1,

sends a RELEASE COMPLETE message for CES1.

**USBSN\_N07\_V\_014**            **subclauses 9.2.4, 9.4.2**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1 and CES2, after expiry of the mandatory timer T312, on receipt of a RELEASE message for CES1,

sends a RELEASE COMPLETE message for CES1 and remains in the Call Received call state N07 for CES2.

**USBSN\_N07\_V\_015**            **subclause 9.4.3**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, to indicate that the remote user has sent an invitation to clear the call,

sends a RELEASE message for CES1 and enters the Release Request call state N19.

**USBSN\_N07\_V\_016**            **clause 9**

Ensure that the IUT in the Call Received call state N07, to provide additional information,

sends an INFORMATION message and remains in the Call Received call state N07.

**USBSN\_N07\_V\_017**            **subclauses 9.2.4, 9.4.3**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on expiry of optional timer T301,

sends a RELEASE message for CES1 including a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Release Request call state N19.

**Selection:** IUT supports timer T301. PICS: TMn 1

**5.2.6.2**            **Inopportune****USBSN\_N07\_I\_001**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a RELEASE message for CES2,

sends a RELEASE COMPLETE message for CES2 and remains in the Call Received call state N07 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N07\_I\_002**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a RELEASE COMPLETE message,

sends no message and enters the Null call state N00.

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

**USBSN\_N07\_I\_003**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, on receipt of a RELEASE COMPLETE message for CES2,  
sends no message and remains in the Call Received call state N07 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N07\_I\_004**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1 and CES2, on receipt of a RELEASE COMPLETE message for CES1,  
sends no message and remains in the Call Received call state N07 for CES2.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N07\_I\_005**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, having received an ALERTING message for CES1, after expiry of the mandatory timer T312, on receipt of a RELEASE COMPLETE message for CES1,  
sends no message and enters the Null call state N00.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N07\_I\_006**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a USER INFORMATION message,  
sends either a STATUS message including 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 N07.

**USBSN\_N07\_I\_007**            **subclauses 9.7, 14.1.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a DL-ESTABLISH-INDICATION,  
sends no message and remains in the Call Received call state N07.

**5.2.6.3**            **Syntactically invalid****USBSN\_N07\_S\_001**            **subclause 9.7 a)**

Ensure that the IUT in the Call Received call state N07, on receipt of an excluded message DISCONNECT,  
sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Received call state N07.

**USBSN\_N07\_S\_002**            **subclause 9.7 a)**

Ensure that the IUT in the Call Received call state N07, on receipt of an excluded message PROGRESS,  
sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Call Received call state N07.

**USBSN\_N07\_S\_003**            **subclause 9.7 c)**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including a Channel identification information element,  
processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N07\_S\_004**            **subclauses 9.7, 7.1.3**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including a Bearer Capability information element (encoded comprehension required),  
sends a STATUS message including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Call Received call state N07.

**USBSN\_N07\_S\_005**            **subclauses 9.7, 7.1.3**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including a High Layer compatibility information element (encoded comprehension not required),  
processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N07\_S\_006**            **subclause 9.7 b)**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including an excluded information element (Progress Indicator),  
 processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N07\_S\_007**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including a non-mandatory information element content error,  
 processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**USBSN\_N07\_S\_008**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a CONNECT message including a non-mandatory information element out of sequence,  
 processes the message as valid.

**USBSN\_N07\_S\_009**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a RELEASE message including mandatory information element (Cause) missing,  
 sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N07\_S\_010**            **subclause 9.7**

Ensure that the IUT in the Call Received call state N07, on receipt of a RELEASE message including a mandatory information element (Cause) content error,  
 sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

## 5.2.7 Incoming Call Proceeding call state N09

**Selection:** IUT supports incoming calls. PICS: MCn 2

### 5.2.7.1 Valid

#### 5.2.7.1.1 Point-to-point configuration

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

**USBSN\_N09\_V\_001**            **subclause 9.2.5**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message without Bearer Capability, Channel identification and High Layer compatibility information elements,  
 sends no message and enters the Call Received call state N07.

**USBSN\_N09\_V\_002**            **subclause 9.2.6**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements,  
 sends a CONNECT ACKNOWLEDGE message and enters the Active call state N10.

**USBSN\_N09\_V\_003**            **subclause 9.2**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an INFORMATION message,  
 sends no message and remains in the Incoming Call Proceeding call state N09.

**USBSN\_N09\_V\_004**            **subclauses 9.2.4, 9.4.2**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE message,  
 sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N09\_V\_005**            **subclause 9.4.3**

Ensure that the IUT in the Incoming Call Proceeding call state N09, to indicate that the remote user has sent an invitation to clear the call,  
 sends a RELEASE message and enters the Release Request call state N19.



**USBSN\_N09\_V\_006**            **clause 9**

Ensure that the IUT in the Incoming Call Proceeding call state N09, to provide additional information, sends an INFORMATION message and remains in the Incoming Call Proceeding call state N09.

**5.2.7.1.2**            **Point-to-multipoint configuration**

**Selection:** IUT supports point-to-multipoint configuration. PICS: R.7.2

**USBSN\_N09\_V\_008**            **subclause 9.2.3**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a SETUP ACKNOWLEDGE message for CES2 without Channel identification information element,

sends no message and remains in the Incoming Call Proceeding call state N09 for CES1 and enters the Overlap Receiving call state N25 for CES2.

**USBSN\_N09\_V\_009**            **subclause 9.2.4**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a CALL PROCEEDING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and remains in the Incoming Call Proceeding call state N09 for CES1 and enters the Incoming Call Proceeding call state N09 for CES2.

**USBSN\_N09\_V\_010**            **subclause 9.2.5**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of an ALERTING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends no message and remains in the Incoming Call Proceeding call state N09 for CES1 and enters the Call Received call state N07 for CES2.

**USBSN\_N09\_V\_011**            **subclauses 9.2.6, 9.2.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a CONNECT message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,

sends a CONNECT ACKNOWLEDGE message for CES2 and a RELEASE message for CES1 including a Cause information element indicating the cause value 26 "non-selected user clearing" and enters the Release Request call state N19 for CES1 and enters the Active call state N10 for CES2.

**USBSN\_N09\_V\_012**            **subclause 9.2.4**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a RELEASE message for CES1,

sends a RELEASE COMPLETE message.

**USBSN\_N09\_V\_013**            **subclause 9.2.4**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1 and CES2, after expiry of the mandatory timer T312, on receipt of a RELEASE message for CES1,

sends a RELEASE COMPLETE message for CES1 and remains in the Incoming Call Proceeding call state N09 for CES2.

**USBSN\_N09\_V\_014**            **subclause 9.4.3**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, to indicate that the remote user has sent an invitation to clear the call,

sends a RELEASE message for CES1 and enters the Release Request call state N19.

**USBSN\_N09\_V\_015**            **clause 9**

Ensure that the IUT in the Incoming Call Proceeding call state N09, to provide additional information, sends an INFORMATION message and remains in the Incoming Call Proceeding call state N09.

### 5.2.7.2 Inopportune

#### **USBSN\_N09\_I\_001**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a RELEASE message for CES2,

sends a RELEASE COMPLETE message for CES2 and remains in the Incoming Call Proceeding call state N09 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

#### **USBSN\_N09\_I\_002**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

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

#### **USBSN\_N09\_I\_003**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, on receipt of a RELEASE COMPLETE message for CES2,

sends no message and remains in the Incoming Call Proceeding call state N09 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

#### **USBSN\_N09\_I\_004**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1 and CES2, on receipt of a RELEASE COMPLETE message for CES1,

sends no message and remains in the Incoming Call Proceeding call state N09 for CES2.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

#### **USBSN\_N09\_I\_005**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a CALL PROCEEDING message for CES1, after expiry of the mandatory timer T312, on receipt of a RELEASE COMPLETE message for CES1,

sends no message and enters the Null call state N00.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

#### **USBSN\_N09\_I\_006**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N09.

#### **USBSN\_N09\_I\_007**      **subclauses 9.7, 14.1.11**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Incoming Call Proceeding call state N09.

### 5.2.7.3 Syntactically invalid

#### **USBSN\_N09\_S\_001**      **subclause 9.7 a)**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state N09.

#### **USBSN\_N09\_S\_002**      **subclause 9.7 a)**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state N09.

**USBSN\_N09\_S\_003**            **subclause 9.7 c)**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message including a Channel identification information element,  
     processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N09\_S\_004**            **subclauses 9.7, 7.1.1**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message including a Bearer Capability information element (encoded comprehension required),  
     sends a STATUS message including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Incoming Call proceeding call state N09.

**USBSN\_N09\_S\_005**            **subclauses 9.7, 7.1.1**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message including a High Layer compatibility information element (encoded comprehension not required),  
     processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N09\_S\_006**            **subclause 9.7 b)**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message including an excluded information element (Progress Indicator),  
     processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N09\_S\_007**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of an ALERTING message including a non-mandatory information element content error,  
     processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**USBSN\_N09\_S\_008**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a CONNECT message including a non-mandatory information element out of sequence,  
     processes the message as valid.

**USBSN\_N09\_S\_009**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE message including mandatory information element (Cause) missing,  
     sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N09\_S\_010**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE message including a mandatory information element (Cause) content error,  
     sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

## 5.2.8 Active call state N10 (Incoming call)

**Selection:** IUT supports incoming calls. PICS: MCn 2

### 5.2.8.1 Signalling procedures

#### 5.2.8.1.1 Valid

**USBSN\_N10I\_V\_001**            **subclause 9.2.6**

Ensure that the IUT in the Active call state N10, on receipt of a CONNECT ACKNOWLEDGE message,  
     sends no message and remains in the Active call state N10.

**USBSN\_N10I\_V\_002**      **clause 9**

Ensure that the IUT in the Active call state N10, on receipt of an INFORMATION message, sends no message and remains in the Active call state N10.

**USBSN\_N10I\_V\_003**      **subclause 9.4.2**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N10I\_V\_004**      **clause 9**

Ensure that the IUT in the Active call state N10, to provide additional information, sends an INFORMATION message and remains in the Active call state N10.

**USBSN\_N10I\_V\_005**      **subclause 9.4.3**

Ensure that the IUT in the Active call state N10, to indicate that the remote user has sent an invitation to clear the call, sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N10I\_V\_006**      **subclauses 9.1.1**

Ensure that the IUT in the Active call state N10 for CR1 and in the Null call state N00 for CR2, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and including a Called party number indicating the complete number information, and including a Sending complete information element for CR2,

sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements using CR2, enters the Outgoing Call proceeding call state N03 for CR2 and remains in the Active call state N10 for CR1.

**Selection:** IUT supports en-bloc sending procedures. PICS: MCn 1.1

IUT supports outgoing calls. PICS: MCn 1

**USBSN\_N10I\_V\_007**      **subclauses 9.1.6**

Ensure that the IUT in the Active call state N10 for CR1 and in the Call Delivered call state N04 for CR2, to indicate that the remote user has answered the call,

sends a CONNECT message without Bearer capability, Channel identification and High Layer Compatibility information elements using CR2, enters the Active call state N10 for CR2 and remains in the Active call state N10 for CR1.

**USBSN\_N10I\_V\_008**      **subclause 9.2.1**

Ensure that the IUT in the Active call state for CR1 and in the Null call state N00 for CR2, to indicate the arrival (call accepted) of a USBS call,

sends a SETUP message, including a Bearer capability information element USBS coded and without Channel identification information element, enters Call Present call state N06 using CR2 and remains in the Active call state N10 for CR1.

**USBSN\_N10I\_V\_009**      **subclause 9.2.6**

Ensure that the IUT in the Active call state for CR1 and in the Call Received call state N07 for CR2, on receipt of a CONNECT message for CR2,

sends a CONNECT ACKNOWLEDGE message using CR2, enters Active call state N10 for CR2 and remains in the Active call state N10 for CR1.

**USBSN\_N10I\_V\_010**      **subclauses 9.1.1**

Ensure that the IUT in the Active call state N10, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and including a Called party number indicating the complete number information, and including a Sending complete information element using the same call reference value, accepts the outgoing call and remains in the Active call state N10 for CR1.

**Selection:** IUT supports en-bloc sending procedures. PICS: MCn 1.1

IUT supports outgoing calls. PICS: MCn

### 5.2.8.1.2 Inopportune

#### **USBSN\_N10I\_I\_001** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

#### **USBSN\_N10I\_I\_002** subclauses 9.7, 14.1.13

Ensure that the IUT in the Active call state N10, on receipt of a DL-ESTABLISH-INDICATION, sends a STATUS ENQUIRY message and remains in the Active call state N10

### 5.2.8.2 Syntactically invalid

#### **USBSN\_N10I\_S\_001** subclause 9.7 a)

Ensure that the IUT in the Active call state N10, on receipt of an excluded SUSPEND message, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state N10

#### **USBSN\_N10I\_S\_002** subclause 9.7 a)

Ensure that the IUT in the Active call state N10, on receipt of an excluded DISCONNECT message, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state N10.

#### **USBSN\_N10I\_S\_003** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including mandatory information element (Cause) missing, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

#### **USBSN\_N10I\_S\_004** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including a mandatory information element (Cause) content error, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

#### **USBSN\_N10I\_S\_005** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

#### **USBSN\_N10I\_S\_006** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state N00.

#### **USBSN\_N10I\_S\_007** subclause 9.7

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

### 5.2.8.3 Information transfer

#### 5.2.8.3.1 Transfer of SDUs - subclause 9.3.1

**Selection:** IUT supports transfer of SDUs. PICS: MCn 3

**USBSN\_N10I\_T\_001**            **subclause 9.3.1.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element and no More data information element,  
 accepts the message (resulting in the sending of USER INFORMATION including User-user information element and no More data information element to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N10I\_T\_002**            **subclause 9.3.1.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element and a More data information element,  
 accepts the message (resulting in the sending of USER INFORMATION including User-user information element and a More data information element to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N10I\_T\_003**            **subclause 9.3.1.2**            **syntactically invalid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element with an overall length exceeding 255 octets,  
 discards the message, sends a STATUS message including a Cause information element indicating the cause value 43 "access information discarded" and remains in the Active call state N10.

#### 5.2.8.3.2            Flow Control - subclause 9.3.2

**Selection:**    IUT supports flow control. PICS: MCn 3.1

**USBSN\_N10I\_TF\_001**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), on receipt of N (16) USER INFORMATION messages,  
 accepts all messages (by sending N (16) USER INFORMATION messages to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TF\_002**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), having already received N (16) USER INFORMATION messages, on receipt of a USER INFORMATION message,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.

**USBSN\_N10I\_TF\_003**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a USER INFORMATION message,  
 discards the last received message, sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TF\_004**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of T3-USBS,  
 sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.

**USBSN\_N10I\_TF\_005**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted", on receipt of Y (8) USER INFORMATION messages within the period T3-USBS,  
 sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TF\_006**            **subclause 9.3.2.1**            **valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted", and having received Y (8) USER INFORMATION messages, on receipt of a USER INFORMATION message within the period T3-USBS,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.

**USBSN\_N10I\_TF\_007**                    **subclause 9.3.2.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having received no message within the period T3-USBS, on expiry of timer T3-USBS, on receipt of N (16) USER INFORMATION message within the new period T3-USBS, sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TF\_008**                    **subclause 9.3.2.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having received no message within the period T3-USBS, on expiry of timer T3-USBS, having received N (16) USER INFORMATION message within the new period T3-USBS, on receipt of a USER INFORMATION message,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.

**USBSN\_N10I\_TF\_009**                    **subclauses 9.3.1.1, 9.3.2.1** **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", to indicate that the remote user has required an information transfer (by sending a USER INFORMATION),  
 sends a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N10I\_TF\_010**                    **subclause 9.3.2.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, on expiry of T3-USBS (10s), having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a FACILITY message including a Facility information element with a FlowControl reject component,  
 discards the message, sends no message and remains in the Active call state N10.

#### 5.2.8.3.3                    Congestion control - subclause 9.3.3

**Selection:**    IUT supports congestion control. PICS: MCn 3.2

**USBSN\_N10I\_TC\_001**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, to indicate that local congestion has been encountered,  
 sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.

**USBSN\_N10I\_TC\_002**                    **subclauses 9.1.1.1, 9.3.3.1** **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate that the remote user has required an information transfer (by sending USER INFORMATION),  
 send a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_003**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, to indicate recovering from local congestion,  
 sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.

**USBSN\_N10I\_TC\_004**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion",  
 accepts the message (resulting in sending a FACILITY message to the remote user including Facility information element with a CongestionControl invoke component indicating a "Congestion"), sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_005**                    **subclauses 9.1.1.1, 9.3.3.1** **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message,  
 accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends no message and remains in the Active call state N10.

- USBSN\_N10I\_TC\_006**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",  
     accepts the message (resulting in sending a FACILITY message to the remote user including Facility information element with a CongestionControl invoke component indicating a "CongestionRecovered"), sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_007**                    **subclause 9.3.3.1**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having received no message, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",  
     discards the message, sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_008**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on receipt of a USER INFORMATION message before expiry of timer T1-USBS,  
     accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_009**                    **subclause 9.3.3.1**                    **valid**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on expiry of timer T1-USBS,  
     sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_010**                    **subclause 9.3.3.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message within the period T1-USBS,  
     retains the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N10I\_TC\_011**                    **subclause 9.3.3.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and having received a USER INFORMATION message, on receipt of a USER INFORMATION message within the period T1-USBS,  
     discards the message, sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_012**                    **subclause 9.3.3.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and having received a USER INFORMATION (retained), to indicate recovering from local congestion,  
     sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" , sends the retained USER INFORMATION message to the remote user and remains in the Active call state N10.
- USBSN\_N10I\_TC\_013**                    **subclause 9.3.3.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T1-USBS,  
     sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TC\_014**                    **subclause 9.3.3.2**                    **inopportune**                    **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion still exists),  
     retains the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.



**USBSN\_N10I\_TC\_015**                      **subclause 9.3.3.2**                      **inopportune**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", and having received a USER INFORMATION message, on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion still exists),

discards the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.

**USBSN\_N10I\_TC\_016**                      **subclause 9.3.3.2**                      **inopportune**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion no longer exists),

accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.

**USBSN\_N10I\_TC\_017**                      **subclause 9.3.3.2**                      **inopportune**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T2-USBS, sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_018**                      **subclause 9.3.3.2**                      **inopportune**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate information transfer within the period T2-USBS, sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_019**                      **subclause 9.3.3.2**                      **inopportune**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate information transfer after expiry of timer T2-USBS, sends a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_020**                      **subclause 9.3.3.1**                      **valid**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion"), sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TC\_021**                      **subclause 9.3.3.1**                      **valid**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate that local congestion has been encountered, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.

#### 5.2.8.3.4                      Combined Flow Control - Congestion Control - subclauses 9.3.2, 9.3.3

**Selection:**    IUT supports flow control. PICS: MCn 3.1

IUT supports congestion control. PICS: MCn 3.2

**USBSN\_N10I\_TFC\_001**                      **subclauses 9.3.3.1, 9.3.2.1**                      **valid**                      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having received a USER INFORMATION message within the period T3-USBS, on receipt of N (16) USER INFORMATION messages within the period T3-USBS, discards all messages, sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.

- USBSN\_N10I\_TFC\_002**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of T3-USBS,  
     sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_003**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", to indicate the recovery of local congestion,  
     sends a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_004**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of N (16) USER INFORMATION messages within the period T3-USBS,  
     accepts all messages (by sending N (16) USER INFORMATION messages to the remote user) and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_005**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", within the period T3-USBS (10s), having already received N (16) USER INFORMATION messages, on receipt of a USER INFORMATION message,  
     discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_006**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",  
     accepts the message (by sending a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" to the remote user), sends no message and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_007**            **subclauses 9.3.3.1, 9.3.2.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of timer T3-USBS,  
     sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_008**            **subclauses 9.3.2.1, 9.3.3.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", within the period T3-USBS, to indicate that a local congestion has been encountered,  
     sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N10I\_TFC\_009**            **subclauses 9.3.2.1, 9.3.3.1 valid**            **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message,  
     sends no message and remains in the Active call state N10.

**USBSN\_N10I\_TFC\_010**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T3-USBS,

sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" message and remains in the Active call state N10.

**USBSN\_N10I\_TFC\_011**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate the recovery of the local congestion,

sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" message and remains in the Active call state N10.

**USBSN\_N10I\_TFC\_012**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", within the period T3-USBS, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion",

accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" to the remote user), send no message and remains in the Active call state N10.

**USBSN\_N10I\_TFC\_013**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T3-USBS,

sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" message and remains in the Active call state N10.

**USBSN\_N10I\_TFC\_014**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",

accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" to the remote user), sends no message and remains in the Active call state N10.

## 5.2.9 Active call state N10 (Outgoing call)

**Selection:** IUT supports outgoing calls. PICS: MCn 2

### 5.2.9.1 Signalling procedures

#### 5.2.9.1.1 Valid

**USBSN\_N100\_V\_001**      **subclause 9.2.6**  
 Ensure that the IUT in the Active call state N10, on receipt of a CONNECT ACKNOWLEDGE message, sends no message and remains in the Active call state N10.

**USBSN\_N100\_V\_002**      **clause 9**  
 Ensure that the IUT in the Active call state N10, on receipt of an INFORMATION message, sends no message and remains in the Active call state N10.

**USBSN\_N100\_V\_003**                    **subclause 9.4.2**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message, sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N100\_V\_004**                    **clause 9**

Ensure that the IUT in the Active call state N10, to provide additional information, sends an INFORMATION message and remains in the Active call state N10.

**USBSN\_N100\_V\_005**                    **subclause 9.4.3**

Ensure that the IUT in the Active call state N10, to indicate that the remote user has sent an invitation to clear the call, sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N100\_V\_006**                    **subclauses 9.1.1**

Ensure that the IUT in the Active call state N10 for CR1 and in the Null call state N00 for CR2, on receipt of a SETUP message including Bearer capability and Channel identification information elements USBS coded and including a Called party number indicating the complete number information, and including a Sending complete information element for CR2,

sends CALL PROCEEDING message without Bearer capability, Channel identification and High Layer Compatibility information elements using CR2, enters the Outgoing Call proceeding call state N03 for CR2 and remains in the Active call state N10 for CR1.

**Selection:** IUT supports en-bloc sending procedures. PICS: MCn 1.1

**USBSN\_N100\_V\_007**                    **subclauses 9.1.6**

Ensure that the IUT in the Active call state N10 for CR1 and in the Call Delivered call state N04 for CR2, to indicate that the remote user has answered the call,

sends a CONNECT message without Bearer capability, Channel identification and High Layer Compatibility information elements using CR2, enters the Active call state N10 for CR2 and remains in the Active call state N10 for CR1.

**USBSN\_N100\_V\_008**                    **subclause 9.2.1**

Ensure that the IUT in the Active call state for CR1 and in the Null call state N00 for CR2, to indicate the arrival (call accepted) of a USBS call,

sends a SETUP message, including a Bearer capability information element USBS coded and without Channel identification information element, enters Call Present call state N06 using CR2 and remains in the Active call state N10 for CR1.

**USBSN\_N100\_V\_009**                    **subclause 9.2.6**

Ensure that the IUT in the Active call state for CR1 and in the Call Received call state N07 for CR2, on receipt of a CONNECT message for CR2,

sends a CONNECT ACKNOWLEDGE message using CR2, enters Active call state N10 for CR2 and remains in the Active call state N10 for CR1.

**5.2.9.1.2**                    **Inopportune****USBSN\_N100\_I\_001**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N100\_I\_002**                    **subclauses 9.7, 14.1.13**

Ensure that the IUT in the Active call state N10, on receipt of a DL-ESTABLISH-INDICATION, sends a STATUS ENQUIRY message and remains in the Active call state N10.

**5.2.9.1.3**                    **Syntactically invalid****USBSN\_N100\_S\_001**                    **subclause 9.7 a)**

Ensure that the IUT in the Active call state N10, on receipt of an excluded SUSPEND message, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state N10.

**USBSN\_N100\_S\_002**                    **subclause 9.7 a)**

Ensure that the IUT in the Active call state N10, on receipt of an excluded DISCONNECT message, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Active call state N10.

**USBSN\_N100\_S\_003**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including mandatory information element (Cause) missing, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N100\_S\_004**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including a mandatory information element (Cause) content error, sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

**USBSN\_N100\_S\_005**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N100\_S\_006**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including an unrecognized information element (encoded comprehension not required), sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented" and enters the Null call state N00.

**USBSN\_N100\_S\_007**                    **subclause 9.7**

Ensure that the IUT in the Active call state N10, on receipt of a RELEASE message including a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.9.2**                    **Information transfer**

**Selection:** IUT supports transfer of SDUs. PICS: MCn 3

**5.2.9.2.1**                    **Transfer of SDUs - subclause 9.3.1****USBSN\_N100\_T\_001**                    **subclause 9.3.1.1**                    **valid**                    **mandatory**

Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element and no More data information element, accepts the message (resulting in the sending of USER INFORMATION including User-user information element and no More data information element to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N100\_T\_002**                    **subclause 9.3.1.1**                    **valid**                    **mandatory**

Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element and a More data information element, accepts the message (resulting in the sending of USER INFORMATION including User-user information element and a More data information element to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N100\_T\_003**                    **subclause 9.3.1.2**                    **syntactically invalid**                    **mandatory**

Ensure that the IUT in the Active call state N10, on receipt of a USER INFORMATION message including a User-user information element with an overall length exceeding 255 octets, discards the message, sends a STATUS message including a Cause information element indicating the cause value 43 "access information discarded" and remains in the Active call state N10.

## 5.2.9.2.2 Flow Control - subclause 9.3.2

**Selection:** IUT supports flow control. PICS: MCn 3.1

- USBSN\_N100\_TF\_001**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), on receipt of N (16) USER INFORMATION messages,  
 accepts all messages (by sending N (16) USER INFORMATION messages to the remote user), sends no message and remains in the Active call state N10.
- USBSN\_N100\_TF\_002**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), having already received N (16) USER INFORMATION messages, on receipt of a USER INFORMATION message,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.
- USBSN\_N100\_TF\_003**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, within the period T3-USBS (10s), having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a USER INFORMATION message,  
 discards the last received message, sends no message and remains in the Active call state N10.
- USBSN\_N100\_TF\_004**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of T3-USBS,  
 sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.
- USBSN\_N100\_TF\_005**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted", on receipt of Y (8) USER INFORMATION messages within the period T3-USBS,  
 sends no message and remains in the Active call state N10.
- USBSN\_N100\_TF\_006**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted", and having received Y (8) USER INFORMATION messages, on receipt of a USER INFORMATION message within the period T3-USBS,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.
- USBSN\_N100\_TF\_007**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received no message within the period T3-USBS, on expiry of timer T3-USBS, on receipt of N (16) USER INFORMATION message within the new period T3-USBS,  
 sends no message and remains in the Active call state N10.
- USBSN\_N100\_TF\_008**      **subclause 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received no message within the period T3-USBS, on expiry of timer T3-USBS, having received N (16) USER INFORMATION message within the new period T3-USBS, on receipt of a USER INFORMATION message,  
 discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.
- USBSN\_N100\_TF\_009**      **subclauses 9.3.1.1, 9.3.2.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", to indicate that the remote user has required an information transfer (by sending a USER INFORMATION),  
 sends a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N100\_TF\_010**      **subclause 9.3.2.2**      **inopportune**      **mandatory**

Ensure that the IUT in the Active call state N10, on expiry of T3-USBS (10s), having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a FACILITY message including a Facility information element with a FlowControl reject component, discards the message, sends no message and remains in the Active call state N10.

5.2.9.2.3      **Congestion control - subclause 9.3.3**

**Selection:** IUT supports congestion control. PICS: MCn 3.2

**USBSN\_N100\_TC\_001**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, to indicate that local congestion has been encountered, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.

**USBSN\_N100\_TC\_002**      **subclauses 9.1.1.1, 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate that the remote user has required an information transfer (by sending USER INFORMATION), send a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N100\_TC\_003**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, to indicate recovering from local congestion, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.

**USBSN\_N100\_TC\_004**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", accepts the message (resulting in sending a FACILITY message to the remote user including Facility information element with a CongestionControl invoke component indicating a "Congestion"), sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_005**      **subclauses 9.1.1.1, 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message, accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_006**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", accepts the message (resulting in sending a FACILITY message to the remote user including Facility information element with a CongestionControl invoke component indicating a "CongestionRecovered"), sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_007**      **subclause 9.3.3.1**      **inopportune**      **mandatory**

Ensure that the IUT in the Active call state N10, having received no message, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", discards the message, sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_008**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on receipt of a USER INFORMATION message before expiry of timer T1-USBS, accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends no message and remains in the Active call state N10.

- USBSN\_N100\_TC\_009**      **subclause 9.3.3.1**      **valid**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on expiry of timer T1-USBS, sends no message and remains in the Active call state N10.
- USBSN\_N100\_TC\_010**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message within the period T1-USBS,  
 retains the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N100\_TC\_011**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and having received a USER INFORMATION message, on receipt of a USER INFORMATION message within the period T1-USBS,  
 discards the message, sends no message and remains in the Active call state N10.
- USBSN\_N100\_TC\_012**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and having received a USER INFORMATION (retained), to indicate recovering from local congestion,  
 sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", sends the retained USER INFORMATION message to the remote user and remains in the Active call state N10.
- USBSN\_N100\_TC\_013**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T1-USBS,  
 sends no message and remains in the Active call state N10.
- USBSN\_N100\_TC\_014**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion still exists),  
 retains the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N100\_TC\_015**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", and having received a USER INFORMATION message, on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion still exists),  
 discards the message, sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N100\_TC\_016**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered", on receipt of a USER INFORMATION message after expiry of timer T1-USBS (congestion no longer exists),  
 accepts the message (resulting in sending a USER INFORMATION message to the remote user), sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.
- USBSN\_N100\_TC\_017**      **subclause 9.3.3.2**      **inopportune**      **mandatory**  
 Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T2-USBS,  
 sends no message and remains in the Active call state N10.



**USBSN\_N100\_TC\_018**      **subclause 9.3.3.2**      **inopportune**      **mandatory**

Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate information transfer within the period T2-USBS,

sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_019**      **subclause 9.3.3.2**      **inopportune**      **mandatory**

Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate information transfer after expiry of timer T2-USBS,

sends a USER INFORMATION message and remains in the Active call state N10.

**USBSN\_N100\_TC\_020**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion",

accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion"), sends no message and remains in the Active call state N10.

**USBSN\_N100\_TC\_021**      **subclause 9.3.3.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate that local congestion has been encountered,

sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.

5.2.9.2.4      **Combined Flow Control - Congestion Control - subclauses 9.3.2, 9.3.3**

**Selection:**    IUT supports flow control. PICS: MCn 3.1

                  IUT supports congestion control. PICS: MCn 3.2

**USBSN\_N100\_TFC\_001**      **subclauses 9.3.3.1, 9.3.2.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having received a USER INFORMATION message within the period T3-USBS, on receipt of N (16) USER INFORMATION messages within the period T3-USBS,

discards all messages, sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.

**USBSN\_N100\_TFC\_002**      **subclauses 9.3.3.1, 9.3.2.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of T3-USBS,

sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.

**USBSN\_N100\_TFC\_003**      **subclauses 9.3.3.1, 9.3.2.1**      **valid**      **mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", to indicate the recovery of local congestion,

sends a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" and remains in the Active call state N10.

- USBSN\_N100\_TFC\_004**      **subclauses 9.3.3.1, 9.3.2.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of N (16) USER INFORMATION messages within the period T3-USBS,  
    accepts all messages (by sending N (16) USER INFORMATION messages to the remote user) and remains in the Active call state N10.
- USBSN\_N100\_TFC\_005**      **subclauses 9.3.3.1, 9.3.2.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", within the period T3-USBS (10s), having already received N (16) USER INFORMATION messages, on receipt of a USER INFORMATION message,  
    discards the last received message, sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted" and remains in the Active call state N10.
- USBSN\_N100\_TFC\_006**      **subclauses 9.3.3.1, 9.3.2.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on receipt of a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",  
    accepts the message (by sending a FACILITY message including Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" to the remote user), sends no message and remains in the Active call state N10.
- USBSN\_N100\_TFC\_007**      **subclauses 9.3.3.1, 9.3.2.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", having sent a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowRestricted", on expiry of timer T3-USBS,  
    sends a FACILITY message including Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" and remains in the Active call state N10.
- USBSN\_N100\_TFC\_008**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", within the period T3-USBS, to indicate that a local congestion has been encountered,  
    sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" and remains in the Active call state N10.
- USBSN\_N100\_TFC\_009**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a USER INFORMATION message,  
    sends no message and remains in the Active call state N10.
- USBSN\_N100\_TFC\_010**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T3-USBS,  
    sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" message and remains in the Active call state N10.
- USBSN\_N100\_TFC\_011**      **subclauses 9.3.2.1, 9.3.3.1 valid**      **mandatory**  
Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having sent a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", to indicate the recovery of the local congestion,  
    sends a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" message and remains in the Active call state N10.

**USBSN\_N100\_TFC\_012 subclauses 9.3.2.1, 9.3.3.1 valid mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", within the period T3-USBS, on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion",

accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion" to the remote user), send no message and remains in the Active call state N10.

**USBSN\_N100\_TFC\_013 subclauses 9.3.2.1, 9.3.3.1 valid mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on expiry of timer T3-USBS,

sends a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowUnrestricted" message and remains in the Active call state N10.

**USBSN\_N100\_TFC\_014 subclauses 9.3.2.1, 9.3.3.1 valid mandatory**

Ensure that the IUT in the Active call state N10, having sent a FACILITY message including a Facility information element with a FlowControl invoke component indicating "FlowRestricted", having received a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "Congestion", on receipt of a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered",

accepts the message (by sending a FACILITY message including a Facility information element with a CongestionControl invoke component indicating "CongestionRecovered" to the remote user), sends no message and remains in the Active call state N10.

**5.2.10 Release Request call state N19 (Incoming calls)**

**Selection:** IUT supports incoming calls. PICS: MCn 2

**5.2.10.1 Valid****USBSN\_N19I\_V\_001 subclause 9.4.2**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

**USBSN\_N19I\_V\_002 subclause 9.4.2**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE message, sends no message and enters the Null call state N00.

**USBSN\_N19I\_V\_003 subclause 9.4.4**

Ensure that the IUT in the Release Request call state N19, on the first expiry of the mandatory timer T308, sends a RELEASE message and remains in the Release Request call state N19.

**USBSN\_N19I\_V\_004 subclause 9.4.4**

Ensure that the IUT in the Release Request call state N19, on the second expiry of the mandatory timer T308, sends no message and enters the Null call state N00.

**5.2.10.2 Inopportune.****USBSN\_N19I\_I\_001 subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N19.

**USBSN\_N19I\_I\_002 subclauses 9.7, 14.1.14**

Ensure that the IUT in the Release Request call state N19, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Release Request call state N19.

### 5.2.10.3 Syntactically invalid

#### **USBSN\_N19I\_S\_001**            **subclause 9.7 a)**

Ensure that the IUT in the Release Request call state N19, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state N19.

#### **USBSN\_N19I\_S\_002**            **subclause 9.7 a)**

Ensure that the IUT in the Release Request call state N19, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Release Request call state N19.

#### **USBSN\_N19I\_S\_003**            **subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message including an unrecognized information element (encoded comprehension required), sends no message and enters the Null call state N00.

#### **USBSN\_N19I\_S\_004**            **subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message including an unrecognized information element (encoded comprehension not required), sends no message and enters the Null call state N00.

#### **USBSN\_N19I\_S\_005**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE COMPLETE message including a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

## 5.2.11 Release Request call state N19 (Outgoing calls)

**Selection:** IUT supports outgoing calls. PICS: MCn 1

### 5.2.11.1 Valid

#### **USBSN\_N19O\_V\_001**            **subclause 9.4.2**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

#### **USBSN\_N19O\_V\_002**            **subclause 9.4.2**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE message, sends no message and enters the Null call state N00.

#### **USBSN\_N19O\_V\_003**            **subclause 9.4.4**

Ensure that the IUT in the Release Request call state N19, on the first expiry of the mandatory timer T308, sends a RELEASE message and remains in the Release Request call state N19.

#### **USBSN\_N19O\_V\_004**            **subclause 9.4.4**

Ensure that the IUT in the Release Request call state N19, on the second expiry of the mandatory timer T308, sends no message and enters the Null call state N00.

### 5.2.11.2 Inopportune.

#### **USBSN\_N19O\_I\_001**            **subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N19.

**USBSN\_N190\_I\_002**      **subclauses 9.7, 14.1.14**

Ensure that the IUT in the Release Request call state N19, on receipt of a DL-ESTABLISH-INDICATION, sends no message and remains in the Release Request call state N19.

**5.2.11.3**      **Syntactically invalid****USBSN\_N190\_S\_001**      **subclause 9.7 a)**

Ensure that the IUT in the Release Request call state N19, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Incoming Call Proceeding call state N19.

**USBSN\_N190\_S\_002**      **subclause 9.7 a)**

Ensure that the IUT in the Release Request call state N19, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Release Request call state N19.

**USBSN\_N190\_S\_003**      **subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message including an unrecognized information element (encoded comprehension required), sends no message and enters the Null call state N00.

**USBSN\_N190\_S\_004**      **subclause 9.7**

Ensure that the IUT in the Release Request call state N19, on receipt of a RELEASE COMPLETE message including an unrecognized information element (encoded comprehension not required), sends no message and enters the Null call state N00.

**USBSN\_N190\_S\_005**      **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, on receipt of a RELEASE COMPLETE message including a non-mandatory information element content error, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**5.2.12**      **Call Abort call state N22**

**Selection:** IUT supports point-to-multipoint configuration. PICS: R7.2

No USBS specific TBs for this state.

**5.2.13**      **Overlap Receiving Call state N25**

**Selection:** IUT supports incoming calls. PICS: MCn 2

**5.2.13.1**      **Valid****5.2.13.1.1**      **Point-to-point configuration**

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

**USBSN\_N25\_V\_001**      **subclauses 9.2.3, 9.2.4**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CALL PROCEEDING message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends no message and enters the Incoming Call Proceeding call state N09.

**USBSN\_N25\_V\_002**      **subclauses 9.2.3, 9.2.5**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of an ALERTING message without Bearer Capability, Channel identification and High Layer compatibility information elements, sends no message and enters the Call Received call state N07.

**USBSN\_N25\_V\_003**            **subclauses 9.2.3, 9.2.6**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CONNECT message without Bearer Capability, Channel identification and High Layer compatibility information elements,  
sends a CONNECT ACKNOWLEDGE message and enters the Active call state N10.

**USBSN\_N25\_V\_004**            **subclause 9.2**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of an INFORMATION message,  
sends no message and remains in the Overlap Receiving call state N25.

**USBSN\_N25\_V\_005**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a RELEASE message,  
sends a RELEASE COMPLETE message and enters the Null call state N00.

**USBSN\_N25\_V\_006**            **subclause 9.4.3**

Ensure that the IUT in the Overlap Receiving call state N25, to indicate that the remote user has sent an invitation to clear the call,  
sends a RELEASE message and enters the Release Request call state N19.

**USBSN\_N25\_V\_007**            **subclauses 9.2.3, 14.1.17**

Ensure that the IUT in the Overlap Receiving call state N25, on expiry of the mandatory timer T304 (if overlap receiving is implemented),  
sends a RELEASE message including a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Release Request call state N19.

**USBSN\_N25\_V\_008**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N25, to provide the remainder of the call information,  
sends an INFORMATION message and remains in the Overlap Receiving call state N25.

**5.2.13.1.2**            **Point-to-multipoint configuration**

**Selection:** IUT supports point-to-multipoint configuration. PICS: R.7.2

**USBSN\_N25\_V\_009**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N09, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a SETUP ACKNOWLEDGE message for CES2 without Channel identification information element,  
sends no message and remains in the Overlap Receiving call state N25 for CES1 and enters the Overlap Receiving call state N25 for CES2.

**USBSN\_N25\_V\_010**            **subclause 9.2.4**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a CALL PROCEEDING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,  
sends no message and remains in the Overlap Receiving call state N25 for CES1 and enters the Incoming Call Proceeding call state N09 for CES2.

**USBSN\_N25\_V\_011**            **subclause 9.2.5**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of an ALERTING message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,  
sends no message and remains in the Overlap Receiving call state N25 for CES1 and enters the Call Received call state N07 for CES2.

**USBSN\_N25\_V\_012**            **subclauses 9.2.6, 9.2.7**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a CONNECT message for CES2 without Bearer Capability, Channel identification and High Layer compatibility information elements,  
sends a CONNECT ACKNOWLEDGE message for CES2 and a RELEASE message for CES1 including a Cause information element indicating the cause value 26 "non-selected user clearing" and enters the Release Request call state N19 for CES1 and enters the Active call state N10 for CES2.

**USBSN\_N25\_V\_013**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a RELEASE message for CES1, sends a RELEASE COMPLETE message.

**USBSN\_N25\_V\_014**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1 and CES2, after expiry of the mandatory timer T312, on receipt of a RELEASE message for CES1, sends a RELEASE COMPLETE message for CES1 and remains in the Overlap receiving call state N25 for CES2.

**USBSN\_N25\_V\_015**            **subclause 9.4.3**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, to indicate that the remote user has sent an invitation to clear the call, sends a RELEASE message for CES1 and enters the Release Request call state N19.

**USBSN\_N25\_V\_016**            **subclauses 9.2.3, 9.4**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on expiry of mandatory timer T304 (if overlap receiving is implemented), sends a RELEASE message for CES1 including a Cause information element indicating the cause value 102 "recovery on timer expiry" and enters the Release Request call state N19.

**USBSN\_N25\_V\_017**            **subclause 9.2.3**

Ensure that the IUT in the Overlap Receiving call state N25, to provide the remainder of the call information, sends an INFORMATION message and remains in the Overlap Receiving call state N25.

**5.2.13.2**      **Inopportune****USBSN\_N25\_I\_001**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of an INFORMATION message for CES2, sends either a STATUS message for CES2 including 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 for CES2 and remains in the Overlap Receiving call state N25 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N25\_I\_002**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a RELEASE message for CES2, sends a RELEASE COMPLETE message for CES2 and remains in the Overlap Receiving call state N25 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N25\_I\_003**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a RELEASE COMPLETE message, sends no message and enters the Null call state N00.

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

**USBSN\_N25\_I\_004**            **subclause 9.7**

Ensure that the IUT in the Incoming Call Proceeding call state N09, having received a SETUP ACKNOWLEDGE message for CES1, on receipt of a RELEASE COMPLETE message for CES2, sends no message and remains in the Overlap Receiving call state N25 for CES1.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N25\_I\_005**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1 and CES2, on receipt of a RELEASE COMPLETE message for CES1, sends no message and remains in the Overlap Receiving call state N25 for CES2.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

IUT supports acceptance of up to 8 SETUP ACKNOWLEDGE messages. PICS: SCn 4.2

**USBSN\_N25\_I\_006**                      **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, having received a SETUP ACKNOWLEDGE message for CES1, after expiry of the mandatory timer T312, on receipt of a RELEASE COMPLETE message for CES1, sends no message and enters the Null call state N00.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

**USBSN\_N25\_I\_007**                      **subclause 9.7**

Ensure that the IUT in the Overlap receiving call state N25, on receipt of a USER INFORMATION message, sends either a STATUS message including 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 N25.

**USBSN\_N25\_I\_008**                      **subclauses 9.7, 14.1.17**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a DL-ESTABLISH-INDICATION, sends a RELEASE message including a Cause information element indicating the cause value 41 "temporary failure" and enters the Release Request call state N19.

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

**USBSN\_N25\_I\_009**                      **subclauses 9.7, 14.1.17**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a DL-ESTABLISH-INDICATION, sends a RELEASE message including a Cause information element indicating the cause value 41 "temporary failure" and enters the Release Request call state N19.

**Selection:** IUT supports point-to-multipoint configuration. PICS: R 7.2

### 5.2.13.3      Syntactically invalid

**USBSN\_N25\_S\_001**                      **subclause 9.7 a)**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of an excluded message DISCONNECT, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Overlap Receiving call state N25.

**USBSN\_N25\_S\_002**                      **subclause 9.7 a)**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of an excluded message PROGRESS, sends either a STATUS message including a Cause information element indicating the cause value 97 "message type non-existent or not implemented" or a STATUS ENQUIRY message and remains in the Overlap Receiving call state N25.

**USBSN\_N25\_S\_003**                      **subclause 9.7 c)**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CALL PROCEEDING message including a Channel identification information element, processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N25\_S\_004**                      **subclauses 9.7, 7.1.2**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CALL PROCEEDING message including a Bearer Capability information element (encoded comprehension required), sends a STATUS message including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Overlap Receiving call state N25.

**USBSN\_N25\_S\_005**                      **subclauses 9.7, 7.1.2**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CALL PROCEEDING message including a High Layer compatibility information element (encoded comprehension not required), processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".



**USBSN\_N25\_S\_006**            **subclause 9.7 b)**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CALL PROCEEDING message including an excluded information element (Progress Indicator),  
processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_N25\_S\_007**            **subclause 9.7**

Ensure that the IUT in the Overlap receiving call state N25, on receipt of a CALL PROCEEDING message including a non-mandatory information element content error,  
processes the message as valid and optionally sends a STATUS message including a Cause information element indicating the cause value 100 "invalid information element contents".

**USBSN\_N25\_S\_008**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a CONNECT message including a non-mandatory information element out of sequence,  
processes the message as valid.

**USBSN\_N25\_S\_009**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a RELEASE message including mandatory information element (Cause) missing,  
sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 96 "mandatory information element missing" and enters the Null call state N00.

**USBSN\_N25\_S\_010**            **subclause 9.7**

Ensure that the IUT in the Overlap Receiving call state N25, on receipt of a RELEASE message including a mandatory information element (Cause) content error,  
sends a RELEASE COMPLETE message including a Cause information element indicating the cause value 100 "invalid information element contents" and enters the Null call state N00.

## 5.2.14 Restart Null call state R00 (Incoming call)

**Selection:** IUT supports restart procedure (incoming RESTART message). PICS: MCn 5.1

### 5.2.14.1 Valid

**USBSN\_R00I\_V\_001**            **subclause 9.5.1**

Ensure that the IUT in the Restart Null call state R00, to return interface to the idle condition,  
sends a RESTART message including a Restart indicator information element indicating "single interface" or "all interfaces" and enters the Restart Request call state R01.

**Selection:** IUT supports initiation of restart procedure. PICS: MCn 5.2

**USBSN\_R00I\_V\_002**            **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "Single interface",  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "single interface", re-enters the Restart Null call state R00 and enters the Null call state N00.

**USBSN\_R00I\_V\_003**            **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "all interfaces",  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "All interfaces", re-enters the Restart Null call state R00 and enters the Null call state N00.

**USBSN\_R00I\_V\_004**            **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "Indicated channels" and a Channel identification information element indicating a B-channel,  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "Indicated channels" and a Channel Identification information element indicating the same B-channel, re-enters the Restart Null call state R00 and remains in the Active call state N10.

**USBSN\_R00I\_V\_005**      **subclause 9.5.3**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART ACKNOWLEDGE message,  
sends no message, remains in the Restart Null call state R00 and remains in the Active call state N10.

**5.2.14.2**      **Inopportune**

No USBS specific TPs for this sub-group.

**5.2.14.3**      **Syntactically invalid****USBSN\_R00I\_S\_001**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of an excluded DISCONNECT message using the global call reference,  
sends a STATUS message using the global call reference including 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 N10.

**USBSN\_R00I\_S\_002**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with a mandatory information element (Restart indicator) missing,  
sends a STATUS message including 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 N10.

**USBSN\_R00I\_S\_003**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with a mandatory information element (Restart indicator) content error,  
sends a STATUS message including a Cause information element indicating the cause value 100 "mandatory information element contents" and remains in the Restart Null call state R00 and the Active call state N10.

**USBSN\_R00I\_S\_004**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension required),  
sends a STATUS message including 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 N10.

**USBSN\_R00I\_S\_005**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, 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 including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_R00I\_S\_006**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, 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 including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**5.2.15**      **Restart Null call state R00 (Outgoing call)**

**Selection:**    IUT supports restart procedure (incoming RESTART message). PICS: MCn 5.1

**5.2.15.1**      **Valid****USBSN\_R00O\_V\_001**      **subclause 9.5.1**

Ensure that the IUT in the Restart Null call state R00, to return interface to the idle condition,  
sends a RESTART message including a Restart indicator information element indicating "single interface" or "all interfaces" and enters the Restart Request call state R01.

**Selection:** IUT supports initiation of restart procedure. PICS: MCn 5.2

**USBSN\_R000\_V\_002**      **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "Single interface",  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "single interface", re-enters in the Restart Null call state R00 and enters the Null call state N00.

**USBSN\_R000\_V\_003**      **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "all interfaces",  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "All interfaces", re-enters the Restart Null call state R00 and enters the Null call state N00.

**USBSN\_R000\_V\_004**      **subclause 9.5.2**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message including a Restart indicator information element indicating "Indicated channels" and a Channel identification information element indicating a B-channel,  
sends a RESTART ACKNOWLEDGE message including a Restart indicator information element indicating "Indicated channels" and a Channel Identification information element indicating the same B-channel, re-enters the Restart Null call state R00 and remains in the Active call state N10.

**USBSN\_R000\_V\_005**      **subclause 9.5.3**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART ACKNOWLEDGE message,  
sends no message, remains in the Restart Null call state R00 and remains in the Active call state N10.

### 5.2.15.2      Inopportune

No USBS specific TPs for this sub-group.

### 5.2.15.3      Syntactically invalid

**USBSN\_R000\_S\_001**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of an excluded DISCONNECT message using the global call reference,  
sends a STATUS message using the global call reference including 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 N10.

**USBSN\_R000\_S\_002**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with a mandatory information element (Restart indicator) missing,  
sends a STATUS message including 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 N10.

**USBSN\_R000\_S\_003**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with a mandatory information element (Restart indicator) content error,  
sends a STATUS message including a Cause information element indicating the cause value 100 "mandatory information element contents" and remains in the Restart Null call state R00 and the Active call state N10.

**USBSN\_R000\_S\_004**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, on receipt of a RESTART message with an unrecognized information element (encoded comprehension required),  
sends a STATUS message including 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 N10.

**USBSN\_R000\_S\_005**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, 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 including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**USBSN\_R000\_S\_006**      **subclause 9.7**

Ensure that the IUT in the Restart Null call state R00 and the Active call state N10, 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 including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

**5.2.16 Restart Request call state R01**

**Selection:** IUT supports initiation of restart procedure. PICS: MCn 5.2

**5.2.16.1 Valid****USBSN\_R01\_V\_001**      **subclause 9.5.1**

Ensure that the IUT in the Restart Request call state R01, on receipt of a RESTART ACKNOWLEDGE message,  
 sends no message, returns the interface to the idle condition, and enters the Restart Null call state R00.

**Selection:** IUT supports restart procedure (incoming RESTART message). PICS: MCn 5.1

**USBSN\_R01\_V\_002**      **subclause 9.5.1**

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 including a Restart indicator information element indicating "Single interface" or "All interfaces", and remains in the Restart Request call state R01.

**5.2.16.2 Inopportune**

No USBS specific TPs for this sub-group.

**5.2.16.3 Syntactically invalid****USBSN\_R01\_S\_001**      **subclause 9.7**

Ensure that the IUT in the Restart Request call state R01, on receipt of an excluded DISCONNECT message using the global call reference,  
 sends a STATUS message using the global call reference including 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 Request call state R01.

**USBSN\_R01\_S\_002**      **subclause 9.7**

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 including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Request call state R01.

**USBSN\_R01\_S\_003**      **subclause 9.7**

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 including a Cause information element indicating the cause value 100 "mandatory information element contents" and remains in the Restart Request call state R01.

**USBSN\_R01\_S\_004**      **subclause 9.7**

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 including a Cause information element indicating the cause value 96 "mandatory information element missing" and remains in the Restart Request call state R01.

**USBSN\_R01\_S\_005**                    **subclause 9.7**

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 including a Cause information element indicating the cause value 99 "information element non-existent or not implemented".

## 5.2.17 Message segmentation procedures

No specific USBS TPs for this feature.

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# 6 Compliance

An ATS which complies with this TSS&TP specification shall:

- a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 5;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 5 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
- e) comply with ISO/IEC 9646-2 [4].

In the case of a) or b) above, a subset shall be used only where a particular Abstract Test Method (ATM) makes some TPs untestable. All testable TPs from clause 5 shall be included in a compliant ATS.

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# 7 Requirements for a comprehensive testing service

As a minimum the Remote test method, as specified in ISO/IEC 9646-2 [4], shall be used by any organization claiming to provide a comprehensive testing service for network equipment claiming conformance to EN 301 142-1 [1].

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## Bibliography

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

- ISO/IEC 9646-3: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 3: The Tree and Tabular Combined Notation".
- ETS 300 286-1 (1996): "Integrated Services Digital Network (ISDN); User-to-User Signalling (UUS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- ITU-T Recommendation I.210 (1993): "Principles of the telecommunication services supported by an ISDN and the means to describe them".
- ETS 300 716: "Integrated Services Digital Network (ISDN): User Signalling Bearer Service (USBS); Service description".

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## History

<b>Document history</b>				
V1.1.2	January 1999	Public Enquiry	PE 9918:	1999-01-01 to 1999-04-30