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*European Standard (Telecommunications series)*

**Broadband Integrated Services Digital Network (B-ISDN);  
AAL Type 2 Signalling protocol;  
Capability Set 1;  
Part 3: Test Suite Structure and  
Test Purposes (TSS&TP) specification**

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Reference

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## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 3 of a multi-part deliverable covering the User-Network Interface (UNI) and the Network-Network Interface (NNI) signalling protocol specification for the Broadband Integrated Services Digital Network (B-ISDN) for AAL type 2 bearer connection control, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2630.1 (1999), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification";**
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".

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# 1 Scope

The present document provides the Test Suite Structure and Test Purposes (TSS&TP) for the AAL Type 2 Signalling Protocol as specified in EN 301 816-1 [1].

The present document is applicable between AAL type 2 nodes and describes nodal functions that are used to control AAL type 2 point-to-point bearer connections.

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.

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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 and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

- [1] ETSI EN 301 816-1 (V1.1.1): "Broadband Integrated Services Digital Network (B-ISDN); AAL Type 2 Signalling protocol; Capability Set 1; Part 1: Protocol specification [ITU-T Recommendation Q.2630.1 (1999), modified]".
- [2] ETSI EN 301 816-2 (V1.1.1): "Broadband Integrated Services Digital Network (B-ISDN); AAL Type 2 Signalling Protocol; Capability Set 1; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [5] ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

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# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 301 816-1 [1] and the following apply:

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

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

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

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

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

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

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

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

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

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

## 3.2 Abbreviations

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

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

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## 4 Test Suite Structure (TSS)

The test suite structure is a tree. Three test group levels are defined. The TSS is depicted in figure 1. The levels are the following:

**1<sup>st</sup> level:** the name representing the base specification (EN 301 816-1 [1]): AAL2

**2<sup>nd</sup> level:** the phases of the base specification:

- Connection set up (CS);
- Connection release(CR);
- Reset (RE);
- Blocking/Unblocking (BL).

**3<sup>rd</sup> level:** initiator or responder:

- Initiator (I);
- Responder (R).

**4<sup>th</sup> level:** the nature of the test:

- Valid (V);
- Syntactically invalid (SI);
- Inopportune (IO).

**Figure 1**

## 5 Test Purposes (TP)

### 5.1 Introduction

For each test requirement a TP is defined.

#### 5.1.1 TP naming convention

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

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

Identifier: <suite_id>_<group>_<nn>
<suite_id> = layer + type of IUT: "AAL2" for AAL type 2 signalling
<group> = group number (3 digits): 1 <sup>st</sup> digit 1 Connection set up; 2 Connection release; 3 Reset; 4 Blocking/Unblocking
2 <sup>nd</sup> digit 1 Initiator; 2 Responder
3 <sup>rd</sup> digit 1 Valid; 2 Syntactically invalid; 3 Inopportune
<nn> = sequential number: (01-99)

#### 5.1.2 Source of TP definition

The TPs are based on EN 301 816-1 [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
Header	<Identifier> tab <paragraph number in base EN> tab	see table 1 clause 0.0.0
Stimulus	Ensure that the IUT in the <state> Incoming, outgoing or management entity state <trigger> see below for message structure or <goal>	"Idle", "Established" etc. receiving a XXXX message in order to...
Reaction	<action> <conditions> if the action is sending see below for message structure <next action>, etc.	sends, stops, etc. using, ...
Message structure	<Message type> message containing a <field name> encoded as or including <coding of field a>, <coding of field b>	ERQ, ECF, REL, RLC, RES ...  Cause, Connection element identifier...
NOTE:	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.	

## 5.1.4 Test strategy

As the base standard EN 301 816-1 [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 301 816-2 [2]. The criteria applied include the following:

- only the requirements from the point of view of the GST-SAP are considered;
- whether or not a test case can be built from the TP is not considered.

The TPs are only based on conformance requirements related to the externally observable behaviour of the IUT, and are limited to conceivable situations to which a real implementation is likely to be faced (ETS 300 406 [5]).

## 5.1.5 Test of call states

It is not possible to test the final states because no procedures are defined for this.

## 5.2 TPs for AAL type 2 signalling

### 5.2.1 Connection set up

#### 5.2.1.1 Originating side (outgoing protocol entity)

##### 5.2.1.1.1 Valid

###### **AAL2\_111\_01 clauses 8.2.1.1.1.1, 8.2.2.1.1 and 8.3.2.1**

Ensure that the IUT in "Idle" state, in order to establish a new AAL type 2 connection, sends an ERQ message with the destination signalling association identifier field set to "unknown" with all the mandatory parameters.

###### **AAL2\_111\_02 clauses 8.2.1.1.1.1, 8.2.2.1.1 and 8.3.2.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an ECF message, will not send RES message (as a result of Timer\_ERQ expiry).

###### **AAL2\_111\_03 clauses 8.2.1.1.2.1, 8.2.2.1.2 and 8.3.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an RLC message, will not send RES message (as a result of Timer\_ERQ expiry).

###### **AAL2\_111\_04 clauses 8.2.1.1.2.1, 8.2.1.2.1, 8.2.2.1.2 and 8.3.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, on Timer\_ERQ expiry, send a RES message (with the appropriate path and channel identifier).

##### 5.2.1.1.2 Syntactically invalid

###### **AAL2\_112\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an ECF message without Message compatibility field and no parameters, sends RES message at Timer\_ERQ expiry.

###### **AAL2\_112\_02 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving ECF message with a parameter, which length point to beyond the end of the message, sends RES message at Timer\_ERQ expiry.

###### **AAL2\_112\_03 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an ECF message, with illegal/invalid DSAID value (not the value "unknown"), sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_04 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an ECF message, without mandatory OSAID value,  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_05 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an ECF message, with "zero" OSAID value,  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_06 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an RLC message without Message compatibility field and no parameters,  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_07 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving RLC message with a parameter, which length point to beyond the end of the message,  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_08 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving RLC message with a field, which length point to beyond the end of the parameter,  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_09 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an RLC message, with illegal/invalid DSAID value (not the value "unknown"),  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_10 clause 8.1.2.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter",  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_11 clauses 8.1.2.1 and 8.3.2.6**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_12 clause 8.1.2.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_13 clause 8.1.2.1**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Release connection",  
sends RES message at Timer\_ERQ expiry.

**AAL2\_112\_14 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Pass on message or parameter",  
will not send RES message (as a result of Timer\_ERQ expiry).

**AAL2\_112\_15 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification",  
will not send RES message (as a result of Timer\_ERQ expiry).

**AA2\_112\_16 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Send notification",

sends back CFN message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers and not send RES message (as a result of Timer\_ERQ expiry).

**AA2\_112\_17 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",

sends RES message at Timer\_ERQ expiry.

**AA2\_112\_18 clauses 8.1.2.2 and 8.3.2.6**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",

sends RES message at Timer\_ERQ expiry.

**AA2\_112\_19 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the Instruction indicator coded as "Release connection",

sends back REL message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_112\_20 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving an unrecognized parameter in an ECF message, with the "pass on not possible" Instruction indicator coded as "pass on message or parameter" and not able to pass on this parameter,

sends back REL message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_112\_21 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving a ECF message with two unrecognized parameter with different Instruction indicator, one coded as "Discard message" with send notification indicator set to "Do not send notification" and the other code as "Pass on message or parameter",

sends RES message at Timer\_ERQ expiry.

**AA2\_112\_22 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving a ECF message with two unrecognized parameter with different Instruction indicator, one coded as "Discard message" with send notification indicator set to "Send notification" and the other code as "Pass on message or parameter",

sends RES message at Timer\_ERQ expiry.

**AA2\_112\_23 clause 8.1.2.2**

Ensure that the IUT in "Outgoing establishment pending" state, receiving a ECF message with two unrecognized parameter with different Instruction indicator, one coded as "Release the connection" and the other code as "Pass on message or parameter",

sends back REL message with the cause "Information element/parameter non-existent or not implemented" and the diagnostic field containing the first detected unrecognized parameter which caused the connection to be released.

**5.2.1.1.3 Inopportune****AA2\_113\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing establishment pending" state, upon receipt of an unexpected (*e.g. REL*) message, sends RES message at Timer\_ERQ expiry.

**AA2\_113\_02 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving an unexpected message, sends no message.

## 5.2.1.2 Destination side

### 5.2.1.2.1 Valid

#### **AAL2\_121\_01 clauses 8.2.1.1.1.2, 8.2.2.1.1 and 8.3.3.1**

Ensure that the IUT in "Idle" state, receiving an acceptable ERQ message, sends an ECF message.

#### **AAL2\_121\_02 clauses 8.2.1.1.1.2, 8.2.2.1.1 and 8.3.3.1**

Ensure that the IUT in "Idle" state, receiving an ERQ message with TCI parameter requesting a "locally blocked" AAL type 2 path, sends an ECF message.

#### **AAL2\_121\_03 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message, but resources of AAL type 2 path are not available, sends a RES message with the cause either "Resource unavailable, unspecified" or "Requested circuit/channel not available".

#### **AAL2\_121\_04 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message, but the SAID allocation fails, sends a RES message with the cause either "Resource unavailable, unspecified".

#### **AAL2\_121\_05 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message with unsupported SSCS parameters, sends a RES message with the cause either "AAL parameters cannot be supported".

#### **AAL2\_121\_06 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message without TCI parameter requesting a "locally blocked" AAL type 2 path, sends a BLO message (with the appropriate path and channel identifier).

#### **AAL2\_121\_07 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message without TCI parameter requesting a "remotely blocked" AAL type 2 path, sends an ECF message.

#### **AAL2\_121\_08 clauses 8.2.1.1.2.2, 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Idle" state, receiving an ERQ message, but internal resources are not available, sends a RES message with the cause "Switching equipment congestion".

#### **AAL2\_121\_09 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of the destination number is not allocated, sends a RLC message with the cause "Unallocated number".

#### **Selection: Not SC.3 Non switched**

#### **AAL2\_121\_10 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of there is no selectable route, sends a RLC message with the cause "No route to destination".

#### **AAL2\_121\_11 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of no resource to select a channel, sends a RLC message with the cause "No circuit/channel available".

#### **AAL2\_121\_12 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of no resources are available, sends a RLC message with the cause "Resource unavailable, unspecified".

**AAL2\_121\_13 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of network is out of order,

sends a RLC message with the cause "Network out of order".

**AAL2\_121\_14 clauses 8.2.2.1.2 and 8.3.3.2**

Ensure that the IUT in "Incoming establishment pending" state, in order to indicate unsuccessful establishment, because of temporary failure,

sends a RLC message with the cause "Temporary failure".

**AAL2\_121\_15 clauses 8.2.2.1.2 and 8.3.2.2**

Ensure that the IUT in "Incoming establishment pending" state, on expiry of destination side Timer\_ERQ,

send a RES message with the cause "Recovery on timer expiry" (with the appropriate path and channel identifier).

**Selection: R1.2 Transit Entity Role****5.2.1.2.2 Syntactically invalid****AAL2\_122\_01 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an ERQ message without Message compatibility field and no parameters, sends no message.

**AAL2\_122\_02 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving ERQ message with a parameter, which length point to beyond the end of the message,

sends no message.

**AAL2\_122\_03 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving ERQ message with a field, which length point to beyond the end of the parameter,

sends no message.

**AAL2\_122\_04 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an unrecognized message, with "unknown" DSAID value,

sends no message.

**AAL2\_122\_05 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an ERQ message, with illegal/invalid DSAID value (not the value "unknown"),

sends no message.

**AAL2\_122\_06 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an ERQ message, without mandatory OSAID value,

sends no message.

**AAL2\_122\_07 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an ERQ message, with "zero" OSAID value,

sends no message.

**AAL2\_122\_08 clause 8.1.2.1**

Ensure that the IUT in "Idle" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter",

sends no message.

**AAL2\_122\_09 clause 8.1.2.1**

Ensure that the IUT in "Idle" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",

sends no message.

**AAL2\_122\_10 clause 8.1.2.1**

Ensure that the IUT in "Idle" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",

sends no message.

**AA2\_122\_11 clause 8.1.2.1**

Ensure that the IUT in "Idle" state, receiving an unrecognized message, with the Instruction indicator coded as "Release connection",  
sends no message.

**AA2\_122\_12 clause 8.1.2.2 a)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an acceptable ERQ message, with the Instruction indicator coded as "Pass on message or parameter",  
sends an ECF message.

**AA2\_122\_13 clause 8.1.2.2 b)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an acceptable ERQ message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification",  
sends an ECF message.

**AA2\_122\_14 clause 8.1.2.2 c)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an ERQ message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Send notification",  
sends back CFN message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_122\_15 clause 8.1.2.2 d)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an ERQ message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",  
sends no message.

**AA2\_122\_16 clause 8.1.2.2 e)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an ERQ message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",  
sends back CFN message with the cause "Message with unrecognized parameter, discarded" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_122\_17 clause 8.1.2.2 f)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an ERQ message, with the Instruction indicator coded as "Release connection",  
sends back RLC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_122\_18 clause 8.1.2.2 f)**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in an ERQ message, with the "pass on not possible" Instruction indicator coded as "pass on message or parameter" and not able to pass on this parameter,  
sends back RLC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**AA2\_122\_19 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving a ERQ message with two unrecognized parameter with different Instruction indicator, one coded as "Discard message" with send notification indicator set to "Do not send notification" and the other code as "Pass on message or parameter",  
sends no message.

**AA2\_122\_20 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving a ERQ message with two unrecognized parameter with different Instruction indicator, one coded as "Discard message" with send notification indicator set to "Send notification" and the other code as "Pass on message or parameter",  
sends back CFN message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the first detected unrecognized parameter which caused message to be discarded.

**AA2\_122\_21 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving a ERQ message with two unrecognized parameter with different Instruction indicator, one coded as "Release the connection" and the other code as "Pass on message or parameter",  
sends back RLC message with the cause "Information element/parameter non-existent or not implemented" and the diagnostic field containing the first detected unrecognized parameter which caused the connection to be released.

### 5.2.1.2.3 Inopportune

#### **AAL2\_123\_01 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving an unexpected message, sends no message.

## 5.2.2 Connection release

### 5.2.2.1 Originating side

#### 5.2.2.1.1 Valid

##### **AAL2\_211\_01 clauses 8.2.1.1.3.1, 8.2.2.1.3 and 8.3.2.3**

Ensure that the IUT in "Established" state, in order to release an existing connection, sends an REL message with the cause "Normal, unspecified".

##### **AAL2\_211\_02 clauses 8.2.1.1.3.1 and 8.3.2.3**

Ensure that the IUT in "Established" state, in order to release an existing connection, because SSCS parameters can not be supported, sends an REL message with the cause "AAL parameters cannot be supported".

##### **AAL2\_211\_03 clauses 8.2.1.1.3.1, 8.2.2.1.3 and 8.3.2.3**

Ensure that the IUT in "Outgoing release pending" state, receiving an RLC message, will not send RES message (as a result of Timer\_REL expiry).

##### **AAL2\_211\_04 clauses 8.2.1.1.3.1 and 8.3.2.4**

Ensure that the IUT in "Outgoing release pending" state, receiving an REL message, sends a RLC message without any cause.

##### **AAL2\_211\_05 clauses 8.2.1.1.3.1 and 8.3.2.4**

Ensure that the IUT in "Release collision" state, receiving an RLC message, will not send RES message (as a result of Timer\_REL expiry).

##### **AAL2\_211\_06 clauses 8.2.1.1.4, 8.2.1.2.1, 8.2.2.1.4 and 8.3.2.5**

Ensure that the IUT in "Outgoing release pending" state, on Timer\_REL expiry, send a RES message (with the appropriate path and channel identifier).

##### **AAL2\_211\_07 clauses 8.2.1.1.4, 8.2.1.2.1, 8.2.2.1.4 and 8.3.2.5**

Ensure that the IUT in "Release collision" state, on Timer\_REL expiry, send a RES message (with the appropriate path and channel identifier).

#### 5.2.2.1.2 Syntactically invalid

##### **AAL2\_212\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving RLC message without Message compatibility field and no parameters, sends RES message at Timer\_REL expiry.

##### **AAL2\_212\_02 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving RLC message with a parameter, which length point to beyond the end of the message, sends RES message at Timer\_REL expiry.

##### **AAL2\_212\_03 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving RLC message with a field, which length point to beyond the end of the parameter, sends RES message at Timer\_REL expiry.

##### **AAL2\_212\_04 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving RLC message with illegal/invalid DSAID value (a value "unknown"), sends RES message at Timer\_REL expiry.

**AAL2\_212\_05 clause 8.1.2.1**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter",  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_06 clause 8.1.2.1**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_07 clause 8.1.2.1**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",  
sends back CFN message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier and sends RES message at Timer\_REL expiry.

**AAL2\_212\_08 clause 8.1.2.1**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Release connection",  
sends back REL message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier.

**AAL2\_212\_09 clause 8.1.2.2**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized parameter in a RLC message,  
will not send RES message (as a result of Timer\_REL expiry).

**AAL2\_212\_10 clause 8.3.1**

Ensure that the IUT in "Release collision" state, receiving RLC message without Message compatibility field and no parameters,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_11 clause 8.3.1**

Ensure that the IUT in "Release collision" state, receiving RLC message with a parameter, which length point to beyond the end of the message,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_12 clause 8.3.1**

Ensure that the IUT in "Release collision" state, receiving RLC message with a field, which length point to beyond the end of the parameter,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_13 clause 8.3.1**

Ensure that the IUT in "Release collision" state, receiving RLC message with illegal/invalid DSAID value (a value "unknown"),  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_14 clause 8.1.2.1**

Ensure that the IUT in "Release collision" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter",  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_15 clause 8.1.2.1**

Ensure that the IUT in "Release collision" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_16 clause 8.1.2.1**

Ensure that the IUT in "Release collision" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",  
sends back CFN message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier and sends RES message at Timer\_REL expiry.

**AAL2\_212\_17 clause 8.1.2.1**

Ensure that the IUT in "Release collision" state, receiving an unrecognized message, with the Instruction indicator coded as "Release connection",  
sends back RLC message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier.

**AAL2\_212\_18 clause 8.1.2.2**

Ensure that the IUT in "Release collision" state, receiving an unrecognized parameter in a RLC message,  
will not send RES message (as a result of Timer\_REL expiry).

**AAL2\_212\_19 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving REL message without Message compatibility field and no parameters,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_20 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving REL message with a parameter, which length point to beyond the end of the message,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_21 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving REL message with a field, which length point to beyond the end of the parameter,  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_22 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving REL message with illegal/invalid DSAID value (a value not "unknown"),  
sends RES message at Timer\_REL expiry.

**AAL2\_212\_23 clause 8.1.2.2**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Pass on message or parameter",  
sends back RLC message without cause.

**AAL2\_212\_24 clause 8.1.2.2**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification",  
sends back RLC message without cause.

**AAL2\_212\_25 clause 8.1.2.2**

Ensure that the IUT in "Outgoing release pending" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Send notification",  
sends back RLC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

**5.2.2.1.3 Inopportune****AAL2\_213\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing release pending" state, receiving an unexpected message,  
sends RES message at Timer\_REL expiry.

**AAL2\_213\_02 clause 8.3.1**

Ensure that the IUT in "Release collision" state, receiving an unexpected message,  
sends RES message at Timer\_REL expiry.

**5.2.2.2 Destination side****5.2.2.2.1 Valid****AAL2\_221\_01 clauses 8.2.1.1.3.2, 8.2.2.1.3 and 8.3.2.3**

Ensure that the IUT in "Established" state, receiving a REL message,  
sends a RLC message without any cause.

#### 5.2.2.2.2 Syntactically invalid

**AAL2\_222\_01 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving REL message without Message compatibility field and no parameters,  
sends no message.

**AAL2\_222\_02 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving REL message with a parameter, which length point to beyond the end of the message,  
sends no message.

**AAL2\_222\_03 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving REL message with a field, which length point to beyond the end of the parameter,  
sends no message.

**AAL2\_222\_04 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving REL message with illegal/invalid DSAID value (a value not "unknown"),  
sends no message.

**AAL2\_222\_05 clause 8.1.2.1**

Ensure that the IUT in "Established" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter",  
sends no message.

**AAL2\_222\_06 clause 8.1.2.1**

Ensure that the IUT in "Established" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification",  
sends no message.

**AAL2\_222\_07 clause 8.1.2.1**

Ensure that the IUT in "Established" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification",  
sends back CFN message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier.

**AAL2\_222\_08 clause 8.1.2.1**

Ensure that the IUT in "Established" state, receiving an unrecognized message, with the Instruction indicator coded as "Release connection",  
sends back REL message with the cause "Message type non-existent or not implemented" followed by a diagnostic field containing only the message identifier.

**AAL2\_222\_09 clause 8.1.2.2**

Ensure that the IUT in "Established" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Pass on message or parameter",  
sends back RLC message without cause.

**AAL2\_222\_10 clause 8.1.2.2**

Ensure that the IUT in "Established" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification",  
sends back RLC message without cause.

**AAL2\_222\_11 clause 8.1.2.2**

Ensure that the IUT in "Established" state, receiving an unrecognized parameter in a REL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification",  
sends back RLC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

## 5.2.3 Restart

### 5.2.3.1 Initiator

#### 5.2.3.1.1 Valid

##### **AAL2\_311\_01 clauses 8.2.1.2.1 and 8.3.4.1.1**

Ensure that the IUT, in order to restart all AAL2 path associated with a signalling association, sends a RES message with the destination signalling association identifier field set to "unknown", and the Connection element identifier with a "Null" value.

##### **AAL2\_311\_02 clauses 8.2.1.2.1 and 8.3.4.1.1**

Ensure that the IUT, in order to restart a specific AAL2 path, sends a RES message with the destination signalling association identifier field set to "unknown", and the Channel identifier with a "Null" value.

##### **AAL2\_311\_03 clauses 8.2.1.2.1 and 8.3.4.1.1**

Ensure that the IUT, in order to restart specific channel in an AAL2 path, sends a RES message with the destination signalling association identifier field set to "unknown", and the Connection element identifier with the specific path and channel identifier.

##### **AAL2\_311\_04 clause 8.3.4.1.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving an RSC message, will not send RES message (as a result of Timer\_RES expiry).

##### **AAL2\_311\_05 clause 8.3.4.1.3**

Ensure that the IUT in "Outgoing reset pending" state, on Timer\_RES expiry, sends RES message.

##### **AAL2\_311\_06 clause 8.3.4.1.3**

Ensure that the IUT in "Outgoing reset continuing" state, on Timer\_RES expiry, sends RES message.

##### **AAL2\_311\_07 clause 8.3.4.1.3**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an RSC message, will not send RES message (as a result of Timer\_RES expiry).

#### 5.2.3.1.2 Syntactically invalid

##### **AAL2\_312\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving RSC message without Message compatibility field and no parameters, sends RES message at Timer\_RES expiry.

##### **AAL2\_312\_02 clause 8.3.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving RSC message with a parameter, which length point to beyond the end of the message, sends RES message at Timer\_RES expiry.

##### **AAL2\_312\_03 clause 8.3.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving RSC message with a field, which length point to beyond the end of the parameter, sends RES message at Timer\_RES expiry.

##### **AAL2\_312\_04 clause 8.3.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving RSC message with illegal/invalid DSAID value (a value "unknown"), sends RES message at Timer\_RES expiry.

##### **AAL2\_312\_05 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter", sends RES message at Timer\_RES expiry.

**AAL2\_312\_06 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification", sends RES message at Timer\_RES expiry.

**AAL2\_312\_07 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification", sends RES message at Timer\_RES expiry.

**AAL2\_312\_08 clause 8.1.2.2**

Ensure that the IUT in "Outgoing reset pending" state, receiving an unrecognized parameter in a RSC message, will not send RES message (as a result of Timer\_RES expiry).

**AAL2\_312\_09 clause 8.3.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving RSC message without Message compatibility field and no parameters, sends RES message at Timer\_RES expiry.

**AAL2\_312\_10 clause 8.3.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving RSC message with a parameter, which length point to beyond the end of the message, sends RES message at Timer\_RES expiry.

**AAL2\_312\_11 clause 8.3.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving RSC message with a field, which length point to beyond the end of the parameter, sends RES message at Timer\_RES expiry.

**AAL2\_312\_12 clause 8.3.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving RSC message with illegal/invalid DSAID value (a value "unknown"), sends RES message at Timer\_RES expiry.

**AAL2\_312\_13 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter", sends RES message at Timer\_RES expiry.

**AAL2\_312\_14 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification", sends RES message at Timer\_RES expiry.

**AAL2\_312\_15 clause 8.1.2.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification", sends RES message at Timer\_RES expiry.

**AAL2\_312\_16 clause 8.1.2.2**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an unrecognized parameter in a RSC message, will not send RES message (as a result of Timer\_RES expiry).

**5.2.3.1.3 Inopportune****AAL2\_313\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing reset pending" state, receiving an unexpected message, sends RES message at Timer\_RES expiry.

**AAL2\_313\_02 clause 8.3.1**

Ensure that the IUT in "Outgoing reset continuing" state, receiving an unexpected message, sends RES message at Timer\_RES expiry.

## 5.2.3.2 Responder

### 5.2.3.2.1 Valid

#### **AAL2\_321\_01 clauses 8.2.1.2.1.2 and 8.3.4.1.2**

Ensure that the IUT in "Idle" state, receiving a RES message, with the path identifier field "Null", sends an RSC message.

#### **AAL2\_321\_02 clauses 8.2.1.2.1.2 and 8.3.4.2.1**

Ensure that the IUT in "Idle" state, receiving a RES message, with the path identifier field "Null", when an AAL type 2 path to be restarted is indicated as "locally blocked", sends a BLO message with the path identifier field indicating the "locally blocked" path.

#### **AAL2\_321\_03 clauses 8.2.1.2.1.2 and 8.3.4.1.2**

Ensure that the IUT in "Idle" state, receiving a RES message, with the path identifier field "non-Null", and the channel identifier field "Null", sends an RSC message.

#### **AAL2\_321\_04 clauses 8.2.1.2.1.2 and 8.3.4.2.1**

Ensure that the IUT in "Idle" state, receiving a RES message, with the path identifier field "non-Null", and the channel identifier field "Null", when the indicated AAL type 2 path is "locally blocked", sends a BLO message with the path identifier field indicating the "locally blocked" path.

#### **AAL2\_321\_05 clauses 8.2.1.2.1.2 and 8.3.4.1.2**

Ensure that the IUT in "Idle" state, receiving a RES message, with the Path identifier field "non-Null", and the channel identifier field "non-Null", sends an RSC message.

### 5.2.3.2.2 Syntactically invalid

#### **AAL2\_322\_01 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an RES message without Message compatibility field and no parameters, sends no message.

#### **AAL2\_322\_02 clause 8.3.1**

Ensure that the IUT in "Established" state, receiving RES message with a parameter, which length point to beyond the end of the message, sends no message.

#### **AAL2\_322\_03 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving RES message, with illegal/invalid DSAID value (a value not "unknown"), sends no message.

#### **AAL2\_322\_04 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a RES message, without mandatory OSAID value, sends no message.

#### **AAL2\_322\_05 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a RES message, with "zero" OSAID value, sends no message.

#### **AAL2\_322\_06 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a RES message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification", sends back RSC message without cause.

#### **AAL2\_322\_07 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a RES message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Send notification", sends back RSC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

## 5.2.4 Blocking/unblocking

### 5.2.4.1 Initiator

#### 5.2.4.1.1 Valid

**AAL2\_411\_01** clauses 8.2.1.2.2.1 and 8.3.4.2.1

Ensure that the IUT, in order to block a specific AAL2 path, sends a BLO message with the destination signalling association identifier field set to "unknown", and the Channel identifier with a "Null" value.

**AAL2\_411\_02** clauses 8.2.1.2.2.1 and 8.3.4.2.1

Ensure that the IUT in "Outgoing block pending" state, receiving an BLC message, sends no message.

**AAL2\_411\_03** clauses 8.2.1.2.2.2 and 8.3.4.2.1

Ensure that the IUT, in order to unblock a specific AAL2 path, sends a UBL message with the destination signalling association identifier field set to "unknown", and the Channel identifier with a "Null" value.

**AAL2\_411\_04** clauses 8.2.1.2.2.2 and 8.3.4.2.1

Ensure that the IUT in "Outgoing unblock pending" state, receiving an UBC message, sends no message.

**AAL2\_411\_05** clause 8.3.4.2.3

Ensure that the IUT in "Outgoing block pending" state, on Timer\_BLO expiry, sends no message.

**AAL2\_411\_06** clause 8.3.4.2.3

Ensure that the IUT in "Outgoing unblock pending" state, on Timer\_UBL expiry, sends no message.

#### 5.2.4.1.2 Syntactically invalid

**AAL2\_412\_01** clause 8.3.1

Ensure that the IUT in "Outgoing block pending" state, receiving BLC message without Message compatibility field and no parameters, sends no message.

**AAL2\_412\_02** clause 8.3.1

Ensure that the IUT in "Outgoing block pending" state, receiving BLC message with a parameter, which length point to beyond the end of the message, sends no message.

**AAL2\_412\_03** clause 8.3.1

Ensure that the IUT in "Outgoing block pending" state, receiving BLC message with a field, which length point to beyond the end of the parameter, sends no message.

**AAL2\_412\_04** clause 8.3.1

Ensure that the IUT in "Outgoing block pending" state, receiving BLC message with illegal/invalid DSAID value (a value "unknown"), sends no message.

**AAL2\_412\_05** clause 8.1.2.1

Ensure that the IUT in "Outgoing block pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter", sends no message.

**AAL2\_412\_06** clause 8.1.2.1

Ensure that the IUT in "Outgoing block pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification", sends no message.

**AAL2\_412\_07 clause 8.1.2.1**

Ensure that the IUT in "Outgoing block pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification", sends no message.

**AAL2\_412\_08 clause 8.1.2.2**

Ensure that the IUT in "Outgoing block pending" state, receiving an unrecognized parameter in a BLC message, sends no message.

**AAL2\_412\_09 clause 8.3.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving UBC message without Message compatibility field and no parameters, sends no message and do not stop timer.

**AAL2\_412\_10 clause 8.3.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving UBC message with a parameter, which length point to beyond the end of the message, sends no message.

**AAL2\_412\_11 clause 8.3.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving UBC message with a field, which length point to beyond the end of the parameter, sends no message.

**AAL2\_412\_12 clause 8.3.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving UBC message with illegal/invalid DSAID value (a value "unknown"), sends no message.

**AAL2\_412\_13 clause 8.1.2.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Pass on message or parameter", sends no message.

**AAL2\_412\_14 clause 8.1.2.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Do not send notification", sends no message.

**AAL2\_412\_15 clause 8.1.2.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving an unrecognized message, with the Instruction indicator coded as "Discard message" and send notification indicator set to "Send notification", sends no message.

**AAL2\_412\_16 clause 8.1.2.2**

Ensure that the IUT in "Outgoing unblock pending" state, receiving an unrecognized parameter in a UBC message, sends no message.

**5.2.4.1.3 Inopportune****AAL2\_413\_01 clause 8.3.1**

Ensure that the IUT in "Outgoing block pending" state, receiving an unexpected message, sends no message.

**AAL2\_413\_02 clause 8.3.1**

Ensure that the IUT in "Outgoing unblock pending" state, receiving an unexpected message, sends no message.

## 5.2.4.2 Responder

### 5.2.4.2.1 Valid

#### **AAL2\_421\_01 clauses 8.2.1.2.2.3 and 8.3.4.2.2**

Ensure that the IUT in "Idle" state, receiving a BLO message, with the path identifier field indicated the path to be blocked, and the channel identifier field "Null", sends a BLC message.

#### **AAL2\_421\_02 clauses 8.2.1.2.2.4 and 8.3.4.2.2**

Ensure that the IUT in "Idle" state, receiving a UBL message, with the path identifier field indicated the path to be unblocked, and the channel identifier field "Null", sends a UBC message.

### 5.2.4.2.2 Syntactically invalid

#### **AAL2\_422\_01 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an BLO message without Message compatibility field and no parameters, sends no message.

#### **AAL2\_422\_02 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving BLO message with a parameter, which length point to beyond the end of the message, sends no message.

#### **AAL2\_422\_03 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving BLO message, with illegal/invalid DSAID value (a value not "unknown"), sends no message.

#### **AAL2\_422\_04 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a BLO message, without mandatory OSAID value, sends no message.

#### **AAL2\_422\_05 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a BLO message, with "zero" OSAID value, sends no message.

#### **AAL2\_422\_06 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a BLO message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification", sends back BLC message without cause.

#### **AAL2\_422\_07 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a BLO message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification", sends back BLC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

#### **AAL2\_422\_08 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving an UBL message without Message compatibility field and no parameters, sends no message.

#### **AAL2\_422\_09 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving UBL message with a parameter, which length point to beyond the end of the message, sends no message.

#### **AAL2\_422\_10 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving UBL message, with illegal/invalid DSAID value (a value not "unknown"), sends no message.

**AAL2\_422\_11 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a UBL message, without mandatory OSAID value, sends no message.

**AAL2\_422\_12 clause 8.3.1**

Ensure that the IUT in "Idle" state, receiving a UBL message, with "zero" OSAID value, sends no message.

**AAL2\_422\_13 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a UBL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification", sends back UBC message without cause.

**AAL2\_422\_14 clause 8.1.2.2**

Ensure that the IUT in "Idle" state, receiving an unrecognized parameter in a UBL message, with the Instruction indicator coded as "Discard parameter" and send notification indicator set to "Do not send notification", sends back UBC message with the cause "Information element/parameter non-existent or not implemented" followed by a diagnostic field containing the message identifier and parameter identifiers.

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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 6;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 5;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 6 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
- e) comply with ISO/IEC 9646-2 [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 6 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 EN 301 816-1 [1].

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## History

<b>Document history</b>		
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