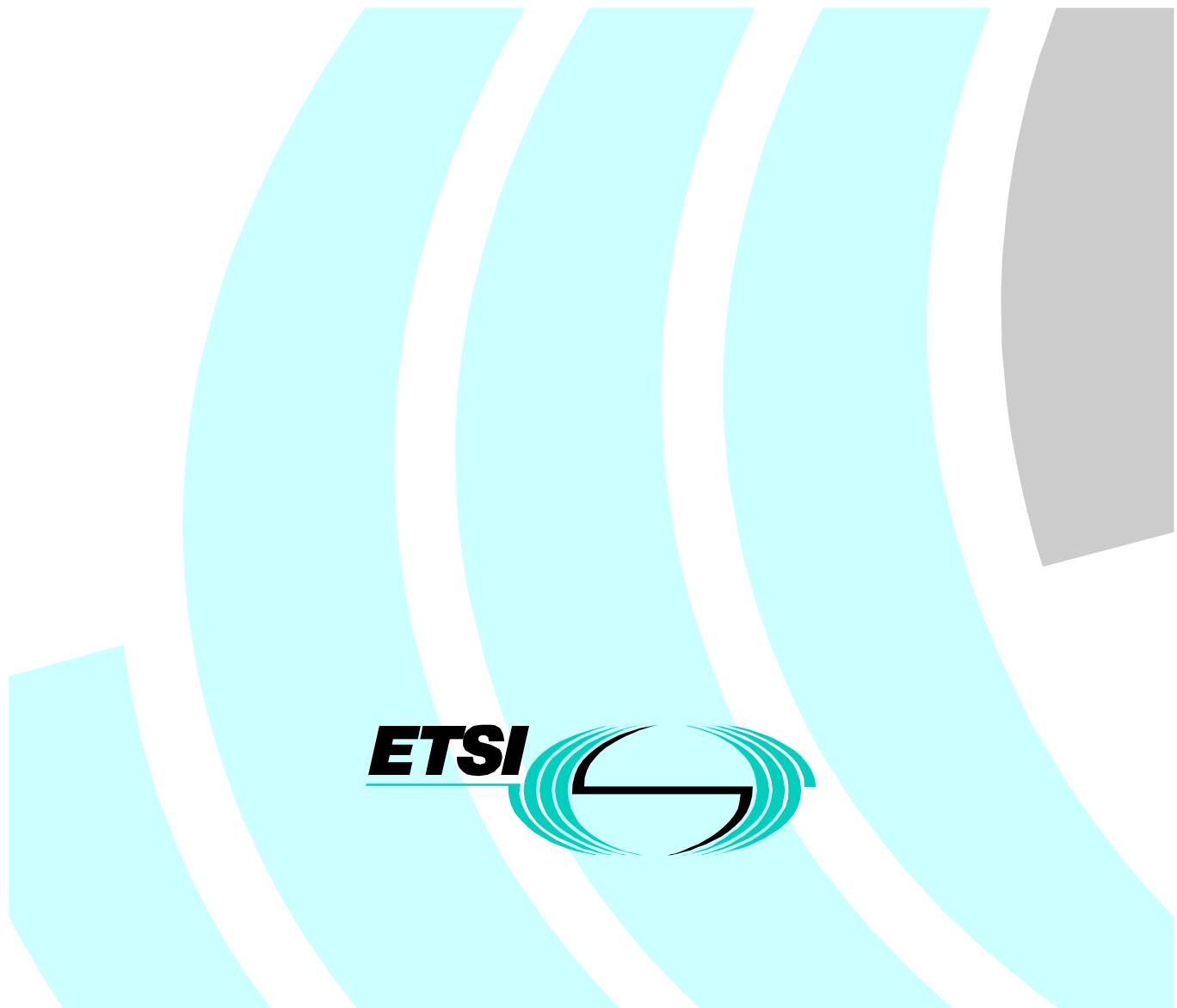


**Broadband Integrated Services Digital Network (B-ISDN);  
AAL Type 2 Signalling Protocol;  
Capability Set 1;  
Part 2: Protocol Implementation Conformance  
Statement (PICS) proforma specification**



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Reference

DEN/SPAN-130211-2

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KeywordsATM, B-ISDN, AAL, UNI, layer 3, basic,  
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650 Route des Lucioles  
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C  
Association à but non lucratif enregistrée à la  
Sous-Préfecture de Grasse (06) N° 7803/88

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## Foreword

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

The present document is part 2 of a multi-part deliverable covering the Broadband Integrated Services Digital Network (B-ISDN); AAL Type 2 Signalling Protocol; Capability Set 1, 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".

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

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## Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given protocol. Such a statement is called an Implementation Conformance Statement (ICS). An ICS stating what capabilities and options have been implemented for a particular protocol is called a protocol ICS. This is commonly abbreviated to "PICS".

EN 301 816-1 [1] is derived from ITU-T Recommendation Q.2630.1 [4]. However, no PICS proforma exists for this Recommendation. Therefore, ETSI has created a PICS proforma that is specific to the European environment. This PICS proforma reflects the requirements contained in ITU-T Recommendation Q.2630.1 [4] with the modifications applied by EN 301 816-1 [1]. This has been done to assist understanding of how the European requirements relate to the requirements contained within ITU-T Recommendation Q.2630.1 [4] (and in particular, to the options specified in that recommendation that are selected by the present document). In practical terms, this means that a number of capabilities specified by ITU-T Recommendation Q.2630.1 [4] appear as items in this PICS proforma with a status more akin to the status that would be expected in a profile ICS (i.e. out-of-scope (I), prohibited (X)).

---

## 1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the signalling protocol for ATM AAL Type 2 Signalling Protocol (Capability Set 1) for the Broadband Integrated Services Digital Network (B-ISDN) defined in EN 301 816-1 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3].

The supplier of a protocol implementation that is claimed to conform to EN 301 816-1 [1] is required to complete a copy of the PICS proforma provided in annex A of the present document and is required to provide the information necessary to identify both the supplier and the implementation.

---

## 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] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [3] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [4] ITU-T Recommendation Q.2630.1 (1999): "AAL type 2 signalling protocol (Capability Set 1)".
- [5] ETSI ETS 300 486-1: "Broadband Integrated Services Digital Network (B-ISDN); Meta-signalling protocol; Part 1: Protocol specification [ITU-T Recommendation Q.2120 (1995), modified]".
- [6] ITU-T Recommendation Q.850: "Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN User Part".
- [7] ITU-T Recommendation Q.2610: "Usage of cause and location in B-ISDN user part and DSS2".

## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in ETS 300 486-1 [5], ISO/IEC 9646-1 [2], ISO/IEC 9646-7 [3] and in particular, the following defined in ISO/IEC 9646-1 [2] apply:

**Implementation Conformance Statement (ICS):** statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

NOTE: The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, and information object ICS.

**Protocol Implementation Conformance Statement (PICS):** ICS for an implementation or system claimed to conform to a given protocol specification

**PICS proforma:** document, in the form of a questionnaire, which when completed for an implementation or system becomes a PICS

### 3.2 Abbreviations

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

AAL	ATM Adaptation Layer
ALC	AAL type 2 Link Characteristics
ATM	Asynchronous Transfer Mode
ATS	Abstract Test Suite
B-ISDN	Broadband ISDN
BLC	Block confirm message
BLO	Block request message
CAS	Channel Associated Signalling
CAU	Cause parameter
CEID	AAL type 2 Connection Element Identifier
CFN	Confusion message
CMD	Circuit Mode Data
CPS	(AAL type 2) Common Part Sub-layer
DTMF	Dual Tone Multi-Frequency
ECF	Establish Confirm message
ERQ	Establish Request message
ESEA	destination E.164 Service Endpoint Address parameter
FAX	demodulated Facsimile data
FRM	Frame mode data
ICS	Implementation Conformance Statement
IE	Information Element
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
M	Mandatory
MC	Major Capability
MF-R1	Multi-Frequency R1
MMR	Maintenance Message Receive
MMT	Maintenance layer Message Transmit
NSAP	Network Service Access Point
NSAP	Network layer Service Access Point
NSEA	destination NSAP Service Endpoint Address parameter
O	Optional
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
REL	Release request message
RES	Reset request message

RLC	Release Confirm message
RSC	Reset Confirm message
SAR	Segmentation and Reassembly (Sub-layer)
SC	Subsidiary Capability
SCS	System Conformance Statement
SDU	Service Data Unit
SMR	Signalling Message Received
SMT	Signalling Message Transmit
SSCOP	Service Specific Connection-Oriented Protocol
SSIA	Service Specific Information (Audio) parameter
SSIM	Service Specific Information (Multirate) parameter
SSISA	Service Specific Information (SAR-assured) parameter
SSISU	Service Specific Information (SAR-unassured) parameter
SSSAR	Segmentation and Reassembly Service Specific Convergence Sub-layer
SUGR	Served User Generated Reference
SUT	Served User Transport
SUT	System Under Test
TCI	Test Connection Indication
TED	Transmission Error Detection
TSS&TP	Test Suite Structure and Test Purposes
UBC	Unblock Confirm message
UBL	Unblock Request message
UNI	User-Network Interface
UU	User-User
VCC	Virtual Channel Connection

## 4 Conformance

A PICS proforma that conforms to this PICS proforma specification shall be technically equivalent to annex A, and shall preserve the numbering and ordering of the items in annex A.

A PICS that conforms to this PICS proforma specification shall:

- a) describe an implementation which conforms to EN 301 816-1 [1];
- b) be a conforming PICS proforma, which has been completed in accordance with the instructions for completion given in clause A.1;
- c) include the information necessary to uniquely identify both the supplier and the implementation.

---

## Annex A (normative): PICS proforma for EN 301 816-1

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed PICS.

---

### A.1 Guidance for completing the PICS proforma

#### A.1.1 Purpose and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in EN 301 816-1 may provide information in a standardized manner.

The PICS proforma is subdivided into clauses as follows:

- A.1: guidance for completing the various parts of the PICS proforma;
- A.2: identification of the implementation;
- A.3: identification of the protocol to which this PICS proforma applies;
- A.4: explanation of the PICS proforma tables;
- A.5: global statement of conformance;
- A.6: questions to determine roles;
- A.7: questions for the signalling entity role.

#### A.1.2 Abbreviations and conventions

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7.

##### Item column

The item column contains a number, which identifies the item in the table.

##### Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means, "is <item description> supported by the implementation?".

## Status column

The following notations, defined in ISO/IEC 9646-7 are used for the status column:

- m mandatory - the capability is required to be supported.
- o optional - the capability may be supported or not.
- n/a not applicable - in the given context, it is impossible to use the capability.
- x prohibited (excluded) - there is a requirement not to use this capability in the given context.
- o.i qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.
- ci conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table.
- i irrelevant (out-of-scope) - capability outside the scope of the reference specification. No answer is requested from the supplier.

NOTE 1: This use of "i" status is not to be confused with the suffix "i" to the "o" and "c" statuses above.

## Reference column

The reference column makes reference to ETS <reference specification id>, except where explicitly stated otherwise.

## Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7, are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A, n/a or - no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status).

If this ICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (e.g. ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE 1: ?3: IF prof1 THEN Y ELSE N.

NOTE 2: As stated in ISO/IEC 9646-7, support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

### Values allowed column

The values allowed column contains the type, the list, the range, or the length of values allowed. The following notations are used:

- range of values: <min value> .. <max value>;  
example: 5 .. 20.
- list of values: <value1>, <value2>, ..., <valueN>;  
example: 2, 4, 6, 8, 9;  
example: '1101'B, '1011'B, '1111'B;  
example: '0A'H, '34'H, '2FH.
- list of named values: <name1>(<val1>), <name2>(<val2>), ..., <nameN>(<valN>);  
example: reject(1), accept(2);
- length: size (<min size> .. <max size>);  
example: size (1 .. 8).

### Values supported column

The values supported column shall be filled in by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.

### References to items

For each possible item answer (answer in the support column) within the ICS proforma a unique reference exists, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solids character "/", followed by the item number in the table. If there is more than one support column in a table, the columns are discriminated by letters (a, b, etc.), respectively.

EXAMPLE 2: A.5/4 is the reference to the answer of item 4 in table 5 of annex A.

EXAMPLE 3: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table 6 of annex A.

### Prerequisite line

A prerequisite line takes the form: Prerequisite: <predicate>.

A prerequisite line after a clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

## A.1.3 Instructions for completing the PICS proforma

The supplier of the implementation shall complete the PICS proforma. For each row in each PICS proforma table the supplier shall enter an explicit answer (i.e. by ticking the appropriate "Yes", "No", or "N/A" in each of the support column boxes provided). Where a support column box is left blank, or where it is marked "N/A" without any tick box, no answer is required.

If necessary, the supplier may enter additional comments at the end of each table, or separately.

More detailed instructions may be found at the beginning of each clause of the proforma.

## A.1.4 Support for received message parameters

In the message parameter tables, the PICS proforma asks questions about the parameters (parameters) supported in messages received by the IUT. This clause explains what "to support a received PDU parameter" means.

The requirement that an IUT is able to parse a parameter in a received message is already implied by claiming support for the receipt of that received message. This means that "to support a received message parameter" implies more.

Parameters in received messages are regarded as either transparent or non-transparent.

A non-transparent parameter is one that causes the protocol control entity to vary its behaviour in accordance with the content of the parameter. To support a non-transparent parameter means an IUT can process the received parameter and behave according to the procedures described in EN 301 816-1.

An parameter is transparent if the actions taken according to its contents are not detectable in the subsequent behaviour of the protocol (i.e. EN 301 816-1 does not specify the protocol behaviour). To support a transparent parameter means an IUT can receive the parameter concerned and pass it to an appropriate processing entity (e.g. call control); the parameter is not discarded by the protocol control entity. Non-support of a transparent parameter means the IUT discards it.

---

## A.2 Identification of the implementation

Identification of the Implementation Under Test (IUT) and the system in which it resides (the System Under Test (SUT)) should be filled in to provide as much detail as possible regarding version numbers and configuration options.

The product supplier and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the PICS should be named as the contact person.

### A.2.1 Date of the statement

---

### A.2.2 Implementation Under Test (IUT) identification

IUT name:

.....  
.....

IUT version:

.....

### A.2.3 System Under Test (SUT) identification

SUT name:

.....  
.....

Hardware configuration:

.....  
.....

Operating system:

#### A.2.4 Product supplier

Name:

Address:

Telephone number:

Facsimile number:

E-mail address:

Additional information:

#### A.2.5 Client (if different from product supplier)

Name:

Address:

Telephone number:

Facsimile number:

E-mail address:

Additional information:

.....  
.....  
.....

### A.2.6 PICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....  
.....  
.....

---

## A.3 Identification of the protocol to which this PICS proforma applies

This PICS proforma applies to the following standard:

**EN 301 816-1:** "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]".

---

## A.4 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No).

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the ICS, with an explanation of why the implementation is non-conforming, on pages attached to the ICS proforma.

---

## A.5 Roles

**Table A.1: Roles**

Item	Role: Does the implementation support...	Reference	Status	Support
R.1	AAL Type 2 Signalling Entity Role		M	[ ] Yes [ ] No
R.1.1	End Entity Role		O.1	[ ] Yes [ ] No
R.1.2	Transit Entity Role		O.1	[ ] Yes [ ] No
O.1: At least one of the roles must be supported.				

---

## A.6 AAL Type 2 signalling entity capabilities

This clause contains the PICS proforma tables related to the AAL Type 2 Signalling Entity role.

### A.6.1 Major capabilities

Each question in table A.2 refers to a major function of the protocol. Answering "Yes" to a particular question states that the implementation supports all the mandatory procedures for that function defined in the referenced clauses and clauses of ITU-T Recommendation Q.2630.1 as modified by EN 301 816-1. Answering "No" to a particular question states that the implementation does not support that function of the protocol.

**Table A.2: Major capabilities**

Item	Major capabilities: Does the implementation support...	Reference	Status	Support
MC.1	Connection control	5	M if R.1.2 o.2 if R.1.1	[ ] Yes [ ] No [ ] Yes [ ] No
MC.2	Maintenance control	5	M if R.1.2 o.2 if R.1.1	[ ] Yes [ ] No [ ] Yes [ ] No
o.2: It is mandatory to support at least one of these two items.				

NOTE: AAL Type 2 signalling is symmetrical between two peers. This EN does not distinguish between a signalling entity belonging to an AAL type 2 service end point and an AAL type 2 switch.

### A.6.2 Subsidiary capabilities

Indicating support for an item in table A.3 states that the implementation supports special cases or options within a major capability.

**Table A.3: Subsidiary capabilities**

Item	Subsidiary capabilities: Does the implementation support...	Reference	Status	Support
SC.1	Outgoing protocol procedure	5	M if R.1.2 o.3 if not R.1.2	[ ] Yes [ ] No [ ] Yes [ ] No
SC.2	Incoming protocol procedure	5	M if R.1.2 o.3 if not R.1.2	[ ] Yes [ ] No [ ] Yes [ ] No
SC.3	Non-switched	Annex A	o.3	[ ] Yes [ ] No
o.3: It is mandatory to support at least one of these items.				

## A.6.3 Messages

The tables in this clause ask questions related to the supported PDUs in the signalling entity role. In the B-ISDN protocol, PDUs are known by the term "messages".

### A.6.3.1 Message, parameter and field formats

Indicating support for an item in table A.4 states that the implementation has the ability to either recognize or to transmit the message listed in that item. Support for the receipt of a particular type of PDU means support for recognizing and acting upon all valid instances of that PDU type, including all valid PDU parameters, to the extent required by EN 301 816-1.

NOTE: M.x stands for Message Number x.

**Table A.4: Message, parameter and field formats**

Item	Message, parameter and field formats. Does the implementation...	Reference	Status	Support
<b>M.1</b>	Support coding conventions and content of reserved fields	7.1.1	M	[ ] Yes [ ] No
<b>M.2</b>	Support AAL type 2 message format	7.1.2	M	[ ] Yes [ ] No
<b>M.3</b>	Support AAL type 2 parameter format	7.1.3	M	[ ] Yes [ ] No
<b>M.4</b>	Support AAL type 2 field-fixed length format	7.1.4	M	[ ] Yes [ ] No
<b>M.5</b>	Support AAL type 2 field-variable length format	7.1.5	M	[ ] Yes [ ] No

### A.6.3.2 AAL type 2 messages

#### A.6.3.2.1 AAL Type 2 Signalling messages

##### A.6.3.2.1.1 Messages received by the signalling entity

Indicating support of an item in table A.5 states that the implementation has the ability to recognize the message listed in that item associated to signalling.

**Table A.5: AAL Type 2 Signalling messages received by the signalling entity**

Item	AAL2 signalling messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>SMR.1</b>	Establish Confirm (ECF)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.2</b>	Establish Request (ERQ)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.3</b>	Release Request (REL)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.4</b>	Release Confirm (RLC)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A

#### A.6.3.2.1.2 Messages transmitted by the signalling entity

Indicating support of an item in table A.6 states that the implementation has the ability to transmit the message listed in that item associated to signalling.

**Table A.6: AAL Type 2 Signalling messages transmitted by the signalling entity**

Item	AAL2 signalling messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>SMT.1</b>	Establish Confirm (ECF)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.2</b>	Establish Request (ERQ)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.3</b>	Release Confirm (RLC)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.4</b>	Release Request (REL)	7.2.1	MC.1 Not MC.1	M N/A	[ ] Yes [ ] No [ ] N/A

#### A.6.3.2.2 AAL Type 2 Maintenance messages

##### A.6.3.2.2.1 Messages received by the maintenance entity

Indicating support of an item in table A.7 states that the implementation has the ability to recognize the message listed in that item associated to maintenance.

**Table A.7: AAL Type 2 Maintenance messages received by the maintenance entity**

Item	AAL2 Maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.1</b>	Block confirm (BLC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.2</b>	Block request (BLO)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.3</b>	Confusion (CFN)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.4</b>	Reset confirm (RSC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.5</b>	Reset request (RES)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.6</b>	Unblock confirm (UBC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.7</b>	Unblock request (UBL)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A

### A.6.3.2.2.2 Messages transmitted by the maintenance entity

Indicating support of an item in table A.8 states that the implementation has the ability to transmit the message listed in that item associated to maintenance.

**Table A.8: AAL Type 2 Maintenance messages transmitted by the signalling entity**

Item	AAL2 Maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMT.1</b>	Block confirm (BLC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.2</b>	Block request (BLO)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.3</b>	Confusion (CFN)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.4</b>	Reset confirm (REL)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.5</b>	Reset request (RSC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.6</b>	Unblock confirm (UBC)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.7</b>	Unblock request (UBL)	7.2.1	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A

### A.6.3.3 Parameters of the AAL type 2 signalling protocol messages received by the signalling entity

The tables in this clause ask questions related to the support of PDU parameters in messages received by the IUT in the signalling entity role. In the B-ISDN, protocol PDU parameters are known by the term "parameters".

Tables A.9, A.10, A.11 and A.12 deal with the parameters that appear in all messages that are received by the IUT in the signalling entity role associated to signalling.

NOTE: IE stands for Parameter.

**Table A.9: Parameters of the AAL type 2 signalling protocol ERQ (Establish Request) message received by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMR.1-IE.1</b>	Connection element identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.2</b>	Destination E.164 service endpoint address	7.2.2	MC.1 AND NOT SC.3 MC.1 AND SC.3 NOT MC.1	O.4 N/A N/A	[ ] Yes [ ] No [ ] N/A [ ] N/A
<b>SMR.1-IE.3</b>	Destination NSAP service endpoint address	7.2.2	MC.1 AND NOT SC.3 MC.1 AND SC.3 NOT MC.1	O.4 N/A N/A	[ ] Yes [ ] No [ ] N/A [ ] N/A
<b>SMR.1-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.5</b>	Link characteristics	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.6</b>	Originating signalling association identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.7</b>	Served user generated reference	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.8</b>	Served user transport	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.9</b>	Service specific information (audio)	7.2.2	MC.1 NOT MC.1	O.5 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.10</b>	Service specific information (multirate)	7.2.2	MC.1 NOT MC.1	O.5 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.2-IE.11</b>	Service specific information (SAR-assured)	7.2.2	MC.1 NOT MC.1	O.5 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.12</b>	Service specific information (SAR-unassured)	7.2.2	MC.1 NOT MC.1	O.5 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.1-IE.13</b>	Test connection indicator	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
O.4:	At least one of those parameters must be received properly in the instance of one message.				
O.5:	At most one of these parameters is received in an instance of the message.				
NOTE:	Designates the destination signalling association identifier field in the message header and contains the value "unknown".				

**Table A.10: Parameters of the AAL type 2 signalling protocol ECF (Establish Confirm) message received by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMR.2-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.3-IE.6</b>	Originating signalling association identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.11: Parameters of the AAL type 2 signalling protocol REL (Release) message received by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMR.3-IE.14</b>	Cause	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.3-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header.					

**Table A.12: Parameters of the AAL type 2 signalling protocol RLC (Release Confirm) message received by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMR.4-IE.14.1</b>	Cause in RLC used to reject a connection establishment	7.2.2	MC.1 NOT MC.1	O.6 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.4-IE.14.2</b>	Cause in RLC to report unrecognized information received in the REL message	7.2.2	MC.1 NOT MC.1	O.6 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMR.4-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
O.6: One of the cause must appear in the RLC message. NOTE: Designates the destination signalling association identifier field in the message header.					

### A.6.3.4 Parameters of the AAL type 2 signalling protocol messages transmitted by the signalling entity

The tables in this clause ask questions related to the support of PDU parameters in messages transmitted by the IUT in the signalling entity role. In the B-ISDN, protocol PDU parameters are known by the term "parameters".

Tables A.13, A.14, A.15 and A.16 deal with the parameters that appear in all messages that are transmitted by the IUT in the signalling entity role associated to signalling.

NOTE: IE stands for Parameter.

**Table A.13: Parameters of the AAL type 2 signalling protocol ERQ (Establish Request) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMT.1-IE.1</b>	Connection element identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.2</b>	Destination E.164 service endpoint address	7.2.2	MC.1 AND NOT SC.3 MC.1 and SC.3 NOT MC.1	O.7 N/A N/A	[ ] Yes [ ] No [ ] N/A [ ] N/A
<b>SMT.1-IE.3</b>	Destination NSAP service endpoint address	7.2.2	MC.1 AND NOT SC.3 MC.1 and SC.3 NOT MC.1	O.7 N/A N/A	[ ] Yes [ ] No [ ] N/A [ ] N/A
<b>SMT.1-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.5</b>	Link characteristics	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.6</b>	Originating signalling association identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.7</b>	Served user generated reference	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.8</b>	Served user transport	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.9</b>	Service specific information (audio)	7.2.2	MC.1 NOT MC.1	O.8 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.10</b>	Service specific information (multirate)	7.2.2	MC.1 NOT MC.1	O.8 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.2-IE.11</b>	Service specific information (SAR-assured)	7.2.2	MC.1 NOT MC.1	O.8 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.12</b>	Service specific information (SAR-unassured)	7.2.2	MC.1 NOT MC.1	O.8 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.1-IE.13</b>	Test connection indicator	7.2.2	MC.1 NOT MC.1	O N/A	[ ] Yes [ ] No [ ] N/A

O.7: Exactly one of those parameters must be present in the instance of one message.  
O.8: At most one of these parameters is present in an instance of the message.  
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".

**Table A.14: Parameters of the AAL type 2 signalling protocol ECF (Establish Confirm) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMT.2-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.2-IE.6</b>	Originating signalling association identifier	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.15: Parameters of the AAL type 2 signalling protocol REL (Release) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMT.3-IE.14</b>	Cause	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.3-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header.					

**Table A.16: Parameters of the AAL type 2 signalling protocol RLC (Release Confirm) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 signalling protocol messages	Reference	Conditions for status	Status	Support
<b>SMT.4-IE.14.1</b>	Cause in RLC used to reject a connection establishment	7.2.2	MC.1 NOT MC.1	O.9 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.4-IE.14.2</b>	Cause in RLC to report unrecognized information received in the REL message	7.2.2	MC.1 NOT MC.1	O.9 N/A	[ ] Yes [ ] No [ ] N/A
<b>SMT.4-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.1 NOT MC.1	M N/A	[ ] Yes [ ] No [ ] N/A
O.9: One of the two causes must appear in the RLC. NOTE: Designates the destination signalling association identifier field in the message header.					

### A.6.3.5 Parameters of the AAL type 2 maintenance messages received by the signalling entity

The tables in this clause ask questions related to the support of PDU parameters in messages received by the IUT in the signalling entity role. In the B-ISDN, protocol PDU parameters are known by the term "parameters".

Tables A.17, A.18, A.19, A.20, A.21, A.22 and A.23 deal with the parameters that appear in all messages that are received by the IUT in the signalling entity role associated to maintenance.

**Table A.17: Parameters of the AAL type 2 maintenance protocol RES (Reset Request) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.5-IE.1</b>	Connection element identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.5-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.5-IE.6</b>	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A

NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".

**Table A.18: Parameters of the AAL type 2 maintenance protocol RSC (Reset Confirm) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.4-IE.14</b>	Cause	7.2.2	MC.2 NOT MC.2	O.10 N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.4-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A

O.10: Present only if the cause reports unrecognized information received.  
 NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".

**Table A.19: Parameters of the AAL type 2 maintenance protocol BLO (Block Request) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.2-IE.1</b>	Connection element identifier	7.2.2	MC.2 NOT MC.2	M (see note 2) N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.2-IE.4</b>	Destination signalling association identifier (see note 1)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.2-IE.6</b>	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A

NOTE 1: Designates the destination signalling association identifier field in the message header and contains the value "unknown".  
 NOTE 2: The channel identifier field is set to "Null", but the path identifier includes a value identifying an AAL type 2 path.

**Table A.20: Parameters of the AAL type 2 maintenance protocol BLC (Block Confirm) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.1-IE.14</b>	Cause	7.2.2	MC.2 NOT MC.2	O.11 N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.1-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
O.11: Present if it reports unrecognized information received.					
NOTE: Designates the destination signalling association identifier field in the message header.					

**Table A.21: Parameters of the AAL type 2 maintenance protocol UBL (Unblock Request) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.7-IE.1</b>	Connection element identifier	7.2.2	MC.2 NOT MC.2	M (see note 2) N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.7-IE.4</b>	Destination signalling association identifier (see note 1)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.7-IE.6</b>	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE 1: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					
NOTE 2: The channel identifier field is set to "Null", but the path identifier includes a value identifying an AAL type 2 path.					

**Table A.22: Parameters of the AAL type 2 maintenance protocol UBC (Unblock Confirm) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.6-IE.14</b>	Cause	7.2.2	MC.2 NOT MC.2	O.12 N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.6-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
O.12: Present if cause reports unrecognized information received.					
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.23: Parameters of the AAL type 2 maintenance protocol CFN (Confusion) message received by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMR.3-IE.14</b>	Cause	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMR.3-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header.					

### A.6.3.6 Parameters of the AAL type 2 Maintenance messages transmitted by the signalling entity

The tables in this clause ask questions related to the support of PDU parameters in messages transmitted by the IUT in the signalling entity role. In the B-ISDN, protocol PDU parameters are known by the term "parameters".

Tables A.24, A.25, A.26, A.27, A.28, A.29 and A.30 deal with the parameters that appear in all messages that are transmitted by the IUT in the signalling entity role associated to maintenance.

**Table A.24: Parameters of the AAL type 2 maintenance protocol RES (Reset Request) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMT.5-IE.1</b>	Connection element identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.5-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.5-IE.6</b>	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.25: Parameters of the AAL type 2 maintenance protocol RSC (Reset Confirm) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMT.4-IE.14</b>	Cause	7.2.2	MC.2 NOT MC.2	O.13 N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.4-IE.4</b>	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
O.13: Present only if the cause reports unrecognized information received.					
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.26: Parameters of the AAL type 2 maintenance protocol BLO (Block Request) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
<b>MMT.2-IE.1</b>	Connection element identifier	7.2.2	MC.2 NOT MC.2  (see note 2) N/A	M  N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.2-IE.4</b>	Destination signalling association identifier (see note 1)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
<b>MMT.2-IE.6</b>	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE 1: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					
NOTE 2: The channel identifier field is set to "Null", but the path identifier includes a value identifying an AAL type 2 path.					

**Table A.27: Parameters of the AAL type 2 maintenance protocol BLC (Block Confirm) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
MMT.1-IE.14	Cause	7.2.2	MC.2 NOT MC.2	O.14 N/A	[ ] Yes [ ] No [ ] N/A
MMT.1-IE.4	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
O.14: Present only if the cause reports unrecognized information received.					
NOTE: Designates the destination signalling association identifier field in the message header.					

**Table A.28: Parameters of the AAL type 2 maintenance protocol UBL (Unblock Request) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
MMT.7-IE.1	Connection element identifier	7.2.2	MC.2 NOT MC.2	M (see note 2) N/A	[ ] Yes [ ] No [ ] N/A
MMT.7-IE.4	Destination signalling association identifier (see note 1)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
MMT.7-IE.6	Originating signalling association identifier	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE 1: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					
NOTE 2: The channel identifier field is set to "Null", but the path identifier includes a value identifying an AAL type 2 path.					

**Table A.29: Parameters of the AAL type 2 maintenance protocol UBC (Unblock Confirm) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
MMT.6-IE.14	Cause	7.2.2	MC.2 NOT MC.2	O.15 N/A	[ ] Yes [ ] No [ ] N/A
MMT.6-IE.4	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
O.15: Present if cause reports unrecognized information received.					
NOTE: Designates the destination signalling association identifier field in the message header and contains the value "unknown".					

**Table A.30: Parameters of the AAL type 2 maintenance protocol CFN (Confusion) message transmitted by the signalling entity**

Item	Parameters of the AAL type 2 maintenance messages. Does the implementation support...	Reference	Conditions for status	Status	Support
MMT.3-IE.14	Cause	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
MMT.3-IE.4	Destination signalling association identifier (see note)	7.2.2	MC.2 NOT MC.2	M N/A	[ ] Yes [ ] No [ ] N/A
NOTE: Designates the destination signalling association identifier field in the message header.					

### A.6.3.7 Structure of parameters

These tables complete the detailed implementation conformance statement.

#### A.6.3.7.1 Identifiers of the AAL type 2 message parameters

**Table A.31: Identifiers of the AAL type 2 message parameter contents**

AAL type 2 parameter	Does the implementation support the parameter field:	Status	Value	Support
CAU	Cause	M	00000001	[ ] Yes [ ] No
CEID	Connection element identifier	M	00000010	[ ] Yes [ ] No
ESEA	Destination E.164 service end point address	M	00000011	[ ] Yes [ ] No
NSEA	Destination NSAP service endpoint address	M	00000100	[ ] Yes [ ] No
ALC	Link characteristics	M	00000101	[ ] Yes [ ] No
OSAID	Originating signalling association identifier	M	00000110	[ ] Yes [ ] No
SUGR	Served user generated reference	M	00000111	[ ] Yes [ ] No
SUT	Served user transport	M	00001000	[ ] Yes [ ] No
SSIA	Service specific information (audio)	M	00001001	[ ] Yes [ ] No
SSIM	Service specific information (multirate)	M	00001010	[ ] Yes [ ] No
SSISA	Service specific information (SAR-assured)	M	00001011	[ ] Yes [ ] No
SSISU	Service specific information (SAR-unassured)	M	00001100	[ ] Yes [ ] No
TCI	Test connection indicator	M	00001101	[ ] Yes [ ] No

#### A.6.3.7.2 Cause parameter contents

NOTE: IER stands for Parameter Receive.

**Table A.32: Cause parameter contents**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.14.1	Cause value Coding standard ITU-T Standardized coding as in Q.850 and Q.2610 ISO/IEC standards national standard standard defined for the network	M M O O O O	00 01 10 11	[ ] Yes [ ] No [ ] Yes [ ] No
	Cause			
	Unallocated (unassigned) number No route to destination Normal, unspecified No circuit/channel available Network out of order Temporary failure Switching equipment congestion Requested circuit/channel not available Resource unavailable, unspecified AAL parameters cannot be supported Invalid message, unspecified Mandatory parameter is missing Message type non-existent or not implemented Parameter/parameter non-existent or not implemented Invalid parameter contents Recovery on timer expiry Message with unrecognized parameter, discarded	O O O O O O O O O O O O O O O O O O O	001 003 031 034 038 041 042 044 047 093 095 096 097 099 100 102 110	[ ] Yes [ ] No [ ] Yes [ ] No
IER.14.2	Diagnostics 1. Field length 2. Diagnostic	O O O		[ ] Yes [ ] No [ ] Yes [ ] No [ ] Yes [ ] No

### A.6.3.7.3 Connection element identifier parameter content

**Table A.33: Connection element identifier parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.1.1	Path identifier Octet 1 Octet 2	M M M		[ ] Yes [ ] No [ ] Yes [ ] No [ ] Yes [ ] No
	Octet 3	M		[ ] Yes [ ] No
	Octet 4	M		[ ] Yes [ ] No
IER.1.2	Channel identifier Octet 1	M M		[ ] Yes [ ] No [ ] Yes [ ] No

### A.6.3.7.4 Destination E.164 service endpoint address parameter content

**Table A.34: Destination E.164 service endpoint address parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
AAL2_0_01 clause 8.1.2.2	Nature of address	M		[ ] Yes [ ] No
IER.4.1	Spare Subscriber number (national use) Unknown national number international number network specific number spare  reserved for national use	M	0000000 0000001 0000010 0000011 0000100 0000101 0000110- 1101111 1110000- 1111110 1111111	[ ] Yes [ ] No [ ] Yes [ ] No
IER.4.2	spare E.164 address	M		[ ] Yes [ ] No [ ] Yes [ ] No
	Field length	M		[ ] Yes [ ] No
	4 bits reserved   First hexadecimal digit of address	C (see note)		[ ] Yes [ ] No
	4 bits reserved   ---	C		[ ] Yes [ ] No
	4 bits reserved   Last hexadecimal digit of address	C		[ ] Yes [ ] No

NOTE: Conditional on field length.

### A.6.3.7.5 Destination NSAP service endpoint address parameter content

**Table A.35: Destination NSAP service endpoint address parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.3.1	NSAP address Octet 1 --- Octet 20	M M M M		[ ] Yes [ ] No [ ] Yes [ ] No --- [ ] Yes [ ] No

### A.6.3.7.6 Link characteristics information element content

**Table A.36: Link characteristics parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.5.1	Maximum CPS-SDU bit rate	M	(see note 1)	[ ] Yes [ ] No
IER.5.2	Average CPS-SDU bit rate	M	(see note 1)	[ ] Yes [ ] No
IER.5.3	Maximum CPS-SDU size	M	(see note 2)	[ ] Yes [ ] No
IER.5.4	Average CPS-SDU size	M	(see note 2)	[ ] Yes [ ] No

NOTE 1: Coded as a CPS-CDU bit rate field.  
 NOTE 2: Coded as a CPS-SDU size field.

### A.6.3.7.7 Originating signalling association identifier parameter content

**Table A.37: Originating signalling association identifier parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.6.1	Originating signalling association identifier parameter content	M	Octet 1 (see note)	[ ] Yes [ ] No
		M	Octet 2	[ ] Yes [ ] No
		M	Octet 3	[ ] Yes [ ] No
		M	Octet 4	[ ] Yes [ ] No

NOTE: This field is coded as a signalling association identifier field.

### A.6.3.7.8 Served user generated reference parameter content

**Table A.38: Served user generated reference parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.7.1	Served user generated reference parameter content	M	Octet 1	[ ] Yes [ ] No
		M	Octet 2	[ ] Yes [ ] No
		M	Octet 3	[ ] Yes [ ] No
		M	Octet 4	[ ] Yes [ ] No

### A.6.3.7.9 Served user transport parameter content

**Table A.39: Served user transport parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.8.1	Field length	M	Octet 1	[ ] Yes [ ] No
	Served user transport octet 1	M	Octet 2	[ ] Yes [ ] No
	---	---	---	---
	Served user transport octet n (see note)	M	Octet n (see note)	[ ] Yes [ ] No

NOTE: n can reach a value up to 254.

### A.6.3.7.10 Service specific information (audio) parameter content

**Table A.40: Service specific information (audio) parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.9.1	Audio service			[ ] Yes [ ] No
	Profile type   Reserved	M	Octet 1	[ ] Yes [ ] No
	Profile identifier	M	Octet 2	[ ] Yes [ ] No
	FRM   CMD   MR-R2   MF-R1   DTMF   CAS   FAX   A/ $\mu$ law	M	Octet 3	[ ] Yes [ ] No
	Maximum length of frame mode data	M	Octet 4	[ ] Yes [ ] No
		M	Octet 5	[ ] Yes [ ] No
IER.9.2	Organizational unique identifier	M	Octet 1	[ ] Yes [ ] No
		M	Octet 2	[ ] Yes [ ] No
		M	Octet 3	[ ] Yes [ ] No

### A.6.3.7.11 Service specific information (multirate) parameter content

**Table A.41: Service specific information (multirate) parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.10.1	Multirate			[ ] Yes [ ] No
	FRM   Reserved   Multiplier n for n x 6 464 kbit/s	M	Octet 1	[ ] Yes [ ] No
	Maximum length of frame mode data	M	Octet 2	[ ] Yes [ ] No
		M	Octet 3	[ ] Yes [ ] No

### A.6.3.7.12 Service specific information (SAR-assured) parameter content

**Table A.42: Service specific information (SAR-assured) parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.11.1	Segmentation and reassembly (assured data transfer)	O.8		[ ] Yes [ ] No
	Maximum length of SSSAR-SDU	M	Octet 1	[ ] Yes [ ] No
	In the forward direction	M	Octet 2	[ ] Yes [ ] No
	Maximum length of SSCOP-SDU	M	Octet 3	[ ] Yes [ ] No
	In the backward direction	M	Octet 4	[ ] Yes [ ] No
	SSSAR-SDU	M	Octet 5	[ ] Yes [ ] No
	Maximum length of SSCOP-SDU	M	Octet 6	[ ] Yes [ ] No
	In the forward direction	M	Octet 7	[ ] Yes [ ] No
	Maximum length of SSCOP-UU	M	Octet 8	[ ] Yes [ ] No
	In the backward direction	M	Octet 9	[ ] Yes [ ] No
	Maximum length of SSCOP-UU	M	Octet 10	[ ] Yes [ ] No
	In the forward direction	M	Octet 11	[ ] Yes [ ] No
	Maximum length of SSCOP-UU	M	Octet 12	[ ] Yes [ ] No
	In the backward direction	M	Octet 13	[ ] Yes [ ] No
		M	Octet 14	[ ] Yes [ ] No

### A.6.3.7.13 Service specific information (SAR-unassured) parameter content

**Table A.43: Service specific information (SAR-unassured) parameter content**

Item	Does the implementation support the parameter field:	Status	Value	Support
IER.12.1	Segmentation and reassembly (unassured data transfer)	O.8		[ ] Yes [ ] No
	Maximum length of	M	Octet 1	[ ] Yes [ ] No
	SSSAR-SDU	M	Octet 2	[ ] Yes [ ] No
	In the forward direction	M	Octet 3	[ ] Yes [ ] No
	Maximum length of	M	Octet 4	[ ] Yes [ ] No
	SSSAR-SDU	M	Octet 5	[ ] Yes [ ] No
	In the backward direction	M	Octet 6	[ ] Yes [ ] No
TED     Reserved		M	Octet 7	[ ] Yes [ ] No

### A.6.4 Timers in the signalling entity role

Indicating support for an item in table A.44 states that the implementation has a timer that operates in accordance with the description in ITU-T Recommendation Q.2630.1 as modified by EN 301 816-1.

The table indicates the permitted range of values for each timer. The supplier shall state the values supported by their implementation.

NOTE: TM stands for Timer.

**Table A.44: Timers in the signalling entity role**

Item	Timer: Does the implementation support...	Conditions for status	Status	Reference	Support	Values Allowed	Value Supported
TM.1	Timer_ERQ	MC.1 NOT MC.1	M N/A	Table 8-1	[ ] Yes [ ] No [ ] N/A	5-30s	
TM.2	Timer_REL	MC.1 NOT MC.1	M N/A	Table 8-1	[ ] Yes [ ] No [ ] N/A	2-60s	
TM.3	Timer_RES	MC.1 NOT MC.1	M N/A	Table 8-1	[ ] Yes [ ] No [ ] N/A	2-60s	
TM.4	Timer_BLO	MC.1 NOT MC.1	M N/A	Table 8-1	[ ] Yes [ ] No [ ] N/A	2-60s	
TM.5	TimerUBL	MC.2 NOT MC.2	M N/A	Table 8-1	[ ] Yes [ ] No [ ] N/A	2-60s	

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## History

<b>Document history</b>			
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