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European Standard (Telecommunications series)

**Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
B-ISDN user-network interface layer 3 specification
for switched virtual path capability;
Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification**



Reference

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Keywords

B-ISDN, DSS2, UNI, layer 3, PICS, broadband

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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 Voting phase of the ETSI standards Two-step Approval Procedure.

The present document is part 2 of a multi-part EN covering the Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for switched virtual path capability, as described below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2934 (1998), modified]";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";**
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specifications for the user";
- Part 4: "Abstract test Suite (ATS) and partial Protocol Implementation eXtra Information for the Testing (PIXIT) proforma specification for the user";
- Part 5: "Test Suite Structure and Test Purpose (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

| Proposed national transposition dates | |
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| Date of withdrawal of any conflicting National Standard (dow): | 6 months after doa |

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 301 487-1 [1] is derived from ITU-T Recommendation Q.2934 [5] (1998). 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.2934 [5] with the modifications applied by EN 301 487-1 [1]. This has been done to assist understanding of how the European requirements relate to the requirements contained within ITU-T Recommendation Q.2934 [5] (and in particular, to the options specified in that recommendation that are selected by the ETS). In practical terms, this means that a number of capabilities specified by ITU-T Recommendation Q.2934 [5] 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

This second part of EN 301 487 provides the Protocol Implementation Conformance Statement (PICS) proforma for the Broadband Integrated Services Digital Network (B-ISDN) Digital Subscriber Signalling System No. two (DSS2) protocol user-network interface layer 3 specification for switched virtual path capability defined in EN 301 487-1 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4].

The supplier of a protocol implementation which is claimed to conform to EN 301 487-1 [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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ETSI EN 301 487-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling No. two (DSS2) protocol; Switched virtual path capability; Part 1: Protocol Specification [ITU-T Recommendation Q.2934 (1999), modified]".
- [2] ETSI ETS 300 443-1 (1996): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
- [3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [5] ITU-T Recommendation Q.2934: "Digital subscriber Signalling System No. 2 - Switched virtual path capability".
- [6] ITU-T Recommendation Q.921: "ISDN user-network interface - Data link layer specification".
- [7] ITU-T Recommendation X.25: "Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit".
- [8] ISO/IEC 8802-2: "Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 2: Logical link control".
- [9] ITU-T Recommendation X.75: "Packet-switched signalling system between public networks providing data transmission services".
- [10] ITU-T Recommendation Q.922: "ISDN data link layer specification for frame mode bearer services".

- [11] ITU-T Recommendation Q.2931: "Digital Subscriber Signalling System No. 2 (DSS 2) - User-Network Interface (UNI) layer 3 specification for basic call/connection control".
- [12] ISO 1745: "Information processing - Basic mode control procedures for data communication systems".
- [13] ITU-T Recommendation I.441: "ISDN user-network interface - Data link layer specification".
- [14] ISO/IEC 7776: "Information technology - Telecommunications and information exchange between systems - High-level data link control procedures - Description of the X.25 LAPB-compatible DTE data link procedures".
- [15] ISO/IEC 8208: "Information technology - Data communications - X.25 Packet Layer Protocol for Data Terminal Equipment".
- [16] ITU-T Recommendation X.223: "Use of X.25 to provide the OSI connection-mode network service for ITU-T applications".
- [17] ISO/IEC 8878: "Information technology - Telecommunications and information exchange between systems - Use of X.25 to provide the OSI Connection-mode Network Service".
- [18] ITU-T Recommendation X.233: "Information technology - Protocol for providing the connectionless-mode network service: Protocol specification".
- [19] ISO/IEC 8473 (all parts): "Information technology - Protocol for providing the connectionless-mode network service".
- [20] ITU-T Recommendation T.70: "Network-independent basic transport service for the telematic services".
- [21] ISO/IEC TR 9577: "Information technology - Protocol identification in the network layer".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the definitions in EN 301 487-1 [1], ISO/IEC 9646-1 [3], and ISO/IEC 9646-7 [4] apply. In particular, the following terms defined in ISO/IEC 9646-1 [3] 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. 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

The following terms and definitions also apply:

network: DSS2 protocol entity at the network side of the user-network interface

user: DSS2 protocol entity at the user side of the user-network interface

3.2 Abbreviations

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

| | |
|--------|---|
| ATM | Asynchronous Transfer Mode |
| BCOB | Broadband Class Of Bearer |
| B-ISDN | Broadband ISDN |
| CLP | Cell Loss Priority |
| DSS2 | Digital Subscriber Signalling System No. two |
| DTE | Data Terminal Equipment |
| ICS | Implementation Conformance Statement |
| IUT | Implementation Under Test |
| LAN | Local Area Network |
| NSAP | Network layer Service Access Point |
| OAM | Operations And Maintenance |
| PDU | Protocol Data Unit |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation eXtra Information for Testing |
| QOS | Quality Of Service |
| SLP | Single Link Procedure |
| SUT | System Under Test |
| SVP | Switched Virtual Path |
| VC | Virtual Connection |
| VCI | VC Identifier |
| VP | Virtual Path |
| VPC | VP Connection |
| VPCI | VPC Identifier |

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 301 487-1 [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 301 487-1

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 301 487-1 [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 user role;
- A.8: questions for the network role.

A.1.2 Abbreviations and conventions

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

Item column

The item column contains a unique reference (a mnemonic plus a number) for each item within the PICS proforma. Items are not always numbered sequentially.

Item description column

The item description contains a brief summary of the static requirement for which a support answer is required.

Conditions for status column

The conditions for status column contains a specification, if appropriate, of the predicate upon which a conditional status is based.

Status column

The following notations, defined in ISO/IEC 9646-7 [4], are used for the status column:

- I Irrelevant or out-of-scope - this capability is outside the scope of the EN to which this PICS proforma applies and is not subject to conformance testing in this context.
- M Mandatory - the capability is required to be supported.

| | |
|-----|---|
| N/A | Not Applicable - in the given context, it is impossible to use the capability. No answer in the support column is required. |
| O | Optional - the capability may be supported or not. |
| O.i | qualified Optional - for mutually exclusive or selectable options from a set. "i" is an integer that identifies a unique group of related optional items and the logic of their selection, defined below the table. |
| X | eXcluded or prohibited - there is a requirement not to use this capability in a given context. |

Reference column

Except where explicitly stated, the reference column refers to the appropriate text of ITU-T Recommendation Q.2934 [5] as modified by EN 301 487-1 [1] describing the particular item.

NOTE: A reference indicates only the location of the most essential information about an item. All additional requirements contained in EN 301 487-1 [1] have also to be taken into account when making a statement about the conformance of that particular item.

Support column

The following notation, defined in ISO/IEC 9646-7 [4], is used for the support column:

- Yes Tick "Yes" if item is supported;
- No Tick "No" if item is not supported;
- N/A Tick "N/A" if the item is "not applicable".

Prerequisite line

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

A prerequisite line after a subclause heading or table title indicates that the whole subclause 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 tickbox, 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 subclause of the proforma.

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

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 301 487-1 [1]: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling No. two (DSS2) protocol; Switched virtual path capability; Part 1: Protocol Specification [ITU-T Recommendation Q.2934 (1999), modified]".

A.4 PICS proforma tables

A.4.1 Correspondence to a physical interface

The "implementation" (IUT) about which this PICS proforma asks questions corresponds to a layer 3 implementation on top of ONE physical interface. If the SUT implements more than one configuration, then a layer 3 PICS shall be created for each type of interface (and for each configuration of each interface) provided by the SUT.

A.4.2 Structure of the tables

The supplier shall provide answers to the questions concerning the major roles of the IUT (see table A.1). The supplier shall then provide answers to the questions relating to the capabilities of the IUT in one of the major roles as appropriate. Apart from the initial questions to determine roles, the major roles of the IUT (the user role (R 1) and the network role (R 2)) are treated completely separately in the PICS proforma. It is only necessary to complete the questions for the supported role. Clause A.7 concerns the capabilities of the IUT whilst in the user role. Clause A.8 concerns the capabilities of the IUT whilst in the network role.

A.4.3 Complexity of conditions in Protocol Data Unit (PDU) parameter tables

The conditions governing when an individual information element has to be supported in a specific message are quite complex. To make the conditions for status easier to understand questions about these information elements have been split into several sub-items.

A.4.4 Support for received PDU parameters

In the PDU parameter tables (see subclauses A.7.5 and A.8.5), the PICS proforma asks questions about the information elements (parameters) supported in messages (PDUs) received by the IUT. This subclause explains, in the context of EN 301 487-1 [1], what means.

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

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

A non-transparent information element is one that causes the protocol control entity to vary its behaviour in accordance with the content of the information element. To support a non-transparent information element means an IUT can process the received parameter and behave according to the procedures described in EN 301 487-1 [1].

An information element is transparent if the actions taken according to its contents are not detectable in the subsequent behaviour of the protocol (i.e. EN 301 487-1 [1] does not specify the protocol behaviour). To support a transparent information element means an IUT can receive the information element concerned and pass it to an appropriate processing entity (e.g. call control); the information element is not discarded by the protocol control entity. Non-support of a transparent information element means that the IUT discards it.

This PICS proforma considers the Cause information element to be transparent in all circumstances where it is possible to be received. Other information elements may be transparent in some circumstances.

A.5 Global statement of conformance

Does the implementation described in this PICS meet all the mandatory requirements of the referenced standard?

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 PICS, with an explanation of why the implementation is non-conforming. Explanations may be entered in the comment field at the bottom of each table or on attached pages.

A.6 Roles

Table A.1: Roles

| Item | Role: Does the implementation support... | Conditions for status | Status | Reference | Support |
|---|---|--------------------------|--------|-----------|--|
| R 1 | the user role? | | O.1 | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| R 2 | the network role? | | O.1 | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| O.1 Support of one, and only one, of these options is required. | | | | | |
| Comments: | | | | | |

A.7 User

The tables provided in this clause need only to be completed for user implementations:

Prerequisite: R 1.

A.7.1 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 subclauses of ITU-T Recommendation Q.2934 [5] as modified by EN 301 487-1 [1]. Answering "No" to a particular question states that the implementation does not support that function of the protocol.

Table A.2: Major capabilities of the user role

| Item | Major capability: Does the implementation support... | Conditions for status | Status | Reference | Support |
|--|--|--------------------------|--------|---------------------------|--------------|
| Call establishment at the originating interface | | | | | |
| MCu 1 | outgoing calls | | O.2 | 9.1 | []Yes []No |
| Call establishment at the destination interface | | | | | |
| MCu 2 | incoming calls | | O.2 | 9.2 | []Yes []No |
| Others | | | | | |
| MCu 3 | initiation of call clearing | | M | 5.4 [Q.2931 [11]] | []Yes []No |
| MCu 4 | restart procedure | | M | 9.3 | []Yes []No |
| MCu 5 | handling of error conditions | | M | 5.6 [Q.2931 [11]] | []Yes []No |
| MCu 5.1 | invocation of the status enquiry procedure on receipt of an AAL-ESTABLISH.indication in the call establishment phase | | O | 5.6.9 b) [Q.2931 [11]] | []Yes []No |
| MCu 6 | error procedures with explicit action indication | | M | 5.7 [Q.2931 [11]] | []Yes []No |
| MCu 7 | handling of messages with insufficient information | | M | 5.8 [Q.2931 [11]] | []Yes []No |
| MCu 8 | notification procedures | | M | 5.9 [Q.2931 [11]] | []Yes []No |
| MCu 10 | broadband low layer information negotiation | | O | annex C [Q.2931 [11]] | []Yes []No |
| MCu 11 | transit network selection procedures | | O | clause D.2 [Q.2931] | []Yes []No |
| MCu 13 | handling of the OAM traffic descriptor | | O | 8.4 | []Yes []No |
| MCu 14 | handling of the End-to-end transit delay information element | | O | annex K [Q.2931 [11]] | []Yes []No |
| O.2 | Support of at least one of these options is required. | | | | |
| Comments: | | | | | |

A.7.2 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 of the user role

| Item | Subsidiary capability: Does the implementation support... | Conditions for status | Status | Reference | Support |
|--|--|--------------------------|----------|------------------------|------------------------|
| Call establishment at the originating interface | | | | | |
| SCu 1 | sending of the called party address information in the Called party number information element | MCu 1 NOT MCu 1 | M N/A | 5.1.1 [Q.2931 [11]] | []Yes []No []N/A |
| | | | | | |
| Call establishment at the destination interface | | | | | |
| SCu 2 | compatibility checking | MCu 2 NOT MCu 2 | M N/A | 9.2.3 | []Yes []No []N/A |
| | | | | | |
| SCu 3.1 | the sending of the ALERTING message as a first response to a SETUP message? | MCu 2 NOT MCu 2 | O N/A | 5.2.3 [Q.2931 [11]] | []Yes []No []N/A |
| | | | | | |
| SCu 3.2 | the sending of the CONNECT message as a first response to a SETUP message? | MCu 2 NOT MCu 2 | O N/A | 5.2.3 | []Yes []No []N/A |
| | | | | | |
| NOTE: Non-support of this item may preclude proper operation in certain countries. | | | | | |
| Comments: | | | | | |

A.7.3 PDUs

The tables in this subclause ask questions related to the supported PDUs in the user role. In the DSS2 protocol, PDUs are known by the term "messages".

A.7.3.1 Messages received by the user

Indicating support for an item in table A.4 states that the implementation has the ability to recognize 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 301 487-1 [1].

Table A.4: Messages received by the user

| Item | Message: Does the implementation support the receipt of... | Conditions for status | Status | Reference | Support |
|-----------|--|-----------------------|----------|--|------------------------|
| MRu 1 | ALERTING | MCu 1 NOT MCu 1 | M N/A | 3.1.1, 5.1.6 [Q.2931 [11]] | []Yes []No []N/A |
| MRu 2 | CALL PROCEEDING | MCu 1 NOT MCu 1 | M N/A | 3.1.2, 5.1.5 [Q.2931 [11]] | []Yes []No []N/A |
| MRu 3 | CONNECT | MCu 1 NOT MCu 1 | M N/A | 3.1.3, 5.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu 4 | CONNECT ACKNOWLEDGE | MCu 2 NOT MCu 2 | M N/A | 3.1.4, 5.2.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu 5 | NOTIFY | | M | 3.1.10, 5.9 [Q.2931 [11]] | []Yes []No |
| MRu 6 | RELEASE | | M | 3.1.5, 5.4.4, 5.4.5 [Q.2931 [11]] | []Yes []No |
| MRu 7 | RELEASE COMPLETE | | M | 3.1.6, 5.1.2, 5.1.3, 5.2.5.3, 5.4.3, 5.6.3.2, 5.6.7, 5.6.8.1, 5.7.2 [Q.2931 [11]] | []Yes []No |
| MRu 8 | RESTART | | M | 3.3.1, 5.5.2 [Q.2931 [11]] | []Yes []No |
| MRu 9 | RESTART ACKNOWLEDGE | | M | 3.3.2, 5.5.1 [Q.2931 [11]] | []Yes []No |
| MRu 10 | SETUP | MCu 2 NOT MCu 2 | M N/A | 3.1.7, 5.2 [Q.2931 [11]] | []Yes []No []N/A |
| MRu 11 | STATUS | | M | 3.1.8, 5.6.3.2, 5.6.12 [Q.2931 [11]] | []Yes []No |
| MRu 12 | STATUS ENQUIRY | | M | 3.1.9, 5.6.3.2, 5.6.11 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.7.3.2 Messages transmitted by the user

Indicating support for an item in table A.5 states that the implementation has the ability to transmit the message listed in that item.

Table A.5: Messages transmitted by the user

| Item | Message: Does the implementation support the receipt of... | Conditions for status | Status | Reference | Support |
|-----------|--|-----------------------|----------|---|------------------------|
| MTu 1 | ALERTING | MCu 2 NOT MCu 2 | M N/A | 3.1.1, 5.2.5.1 [Q.2931 [11]] | []Yes []No []N/A |
| MTu 2 | CALL PROCEEDING | MCu 2 NOT MCu 2 | M N/A | 3.1.2, 5.2.5.1 [Q.2931 [11]] | []Yes []No []N/A |
| MTu 3 | CONNECT | MCu 2 NOT MCu 2 | M N/A | 3.1.3, 5.2.6 [Q.2931 [11]] | []Yes []No []N/A |
| MTu 4 | CONNECT ACKNOWLEDGE | MCu 1 NOT MCu 1 | M N/A | 3.1.4, 5.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu 5 | NOTIFY | | M | 3.1.10, 5.9 [Q.2931 [11]] | []Yes []No |
| MTu 6 | RELEASE | | M | 3.1.5, 5.4.3 [Q.2931 [11]] | []Yes []No |
| MTu 7 | RELEASE COMPLETE | | M | 3.1.6, 5.2.2.2.2, 5.2.3, 5.2.4, 5.2.5, 5.4.4 [Q.2931 [11]] | []Yes []No |
| MTu 8 | RESTART | | M | 3.3.1, 5.5.1 [Q.2931 [11]] | []Yes []No |
| MTu 9 | RESTART ACKNOWLEDGE | | M | 3.3.2, 5.5.2 [Q.2931 [11]] | []Yes []No |
| MTu 10 | SETUP | MCu 1 NOT MCu 1 | M N/A | 3.1.7, 5.1 [Q.2931 [11]] | []Yes []No []N/A |
| MTu 11 | STATUS | | M | 3.1.8, 5.5.2.1, 5.6.3.2, 5.6.4, 5.6.7, 5.6.8, 5.6.11, 5.7 [Q.2931 [11]] | []Yes []No |
| MTu 12 | STATUS ENQUIRY | | M | 3.1.9, 5.6.3.2, 5.6.11 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.7.4 PDU parameters

The tables in this subclause ask questions related to the support of PDU parameters in messages received and transmitted by the IUT in the user role. In the DSS2, protocol PDU parameters are known by the term "information elements".

Tables A.6 and A.7 deal with the four information elements that appear in all messages that are either received or transmitted (respectively) by the IUT in the user role (Protocol discriminator, Call reference, Message type and Message length) and two information elements which may appear in a message for which it is mandatory for the receiver to interpret (shift information elements).

Table A.6: Information elements in all messages received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|-----------------------------|-----------------------|--------|-----------------------------|--------------|
| MRu-IE1 | Protocol discriminator | | M | 3.1, 4.2 [Q.2931 [11]] | []Yes []No |
| MRu-IE2 | Call reference | | M | 3.1, 4.3 [Q.2931 [11]] | []Yes []No |
| MRu-IE3 | Message type | | M | 3.1, 4.4.1 [Q.2931 [11]] | []Yes []No |
| MRu-IE4 | Message length | | M | 3.1, 4.4.2 [Q.2931 [11]] | []Yes []No |
| MRu-IE5 | Broadband locking shift | | M | 4.5.3 [Q.2931 [11]] | []Yes []No |
| MRu-IE25 | Broadband non-locking shift | | M | 4.5.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.7: Information elements in all messages transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|-----------------------------|-----------------------|--------|----------------------------------|--------------|
| MTu-IE1 | Protocol discriminator | | M | 3.1, 3.2, 4.2 [Q.2931 [11]] | []Yes []No |
| MTu-IE2 | Call reference | | M | 3.1, 3.2, 4.3 [Q.2931 [11]] | []Yes []No |
| MTu-IE3 | Message type | | M | 3.1, 3.2, 4.4.1 [Q.2931 [11]] | []Yes []No |
| MTu-IE4 | Message length | | M | 3.1, 3.2, 4.4.2 [Q.2931 [11]] | []Yes []No |
| MTu-IE5 | Broadband locking shift | | O | 4.5.3 [Q.2931 [11]] | []Yes []No |
| MTu-IE25 | Broadband non-locking shift | | O | 4.5.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.7.4.1 Information elements in messages received by the user

Indicating support for an item in the tables in this subclause states that the implementation has the ability to process the information elements listed in the specified received messages.

Table A.8: Information elements in ALERTING received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|----------|------------------------|------------------------|
| MRu1-IE13 | Connection identifier | MRu 1 NOT MRu 1 | M N/A | 8.2 | []Yes []No []N/A |
| MRu1-IE20 | Notification indicator | MRu 1 NOT MRu 1 | M N/A | 3.1.1 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.9: Information elements in CALL PROCEEDING received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|----------|------------------------|------------------------|
| MRu2-IE13 | Connection identifier | MRu 2 NOT MRu 2 | M N/A | 8.2 | []Yes []No []N/A |
| MRu2-IE20 | Notification indicator | MRu 2 NOT MRu 2 | M N/A | 3.1.2 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.10: Information elements in CONNECT received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------------------|-----------------------|----------|------------------------|------------------------|
| MRu3-IE17 | Broadband low layer information | MRu 3 | O | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MRu3-IE13 | Connection identifier | MRu 3 NOT MRu 3 | M N/A | 8.2 | []Yes []No []N/A |
| MRu3-IE19 | End-to-end transit delay | MRu 3 NOT MRu 3 | M N/A | 3.1.3 [Q.2931 [11]] | []Yes []No []N/A |
| MRu3-IE20 | Notification indicator | MRu 3 NOT MRu 3 | M N/A | 3.1.3 [Q.2931 [11]] | []Yes []No []N/A |
| MRu3-IE14 | OAM traffic descriptor | MRu 3 NOT MRu 3 | M N/A | 8.4 | []Yes []No []N/A |
| Comments: | | | | | |

Table A.11: Information elements in CONNECT ACKNOWLEDGE received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|----------|------------------------|------------------------|
| MRu4-IE20 | Notification indicator | MRu 4 NOT MRu 4 | M N/A | 3.1.4 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.12: Information elements in NOTIFY received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------|--------------|
| MRu6-IE20 | Notification indicator | | M | 3.1.10 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.13: Information elements in RELEASE received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MRu8-IE24 | Cause | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| MRu8-IE20 | Notification indicator | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.14: Information elements in RELEASE COMPLETE received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------|-----------------------|--------|------------------------|--------------|
| MRu9-IE24 | Cause | | M | 3.1.6 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.15: Information elements in RESTART received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|-----------|--------------|
| MRu10-IE13 | Connection identifier | | M | 8.2 | []Yes []No |
| MRu10-IE4 | Restart indicator | | M | 8.3 | []Yes []No |
| Comments: | | | | | |

Table A.16: Information elements in RESTART ACKNOWLEDGE received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|-----------|--------------|
| MRu11-IE13 | Connection identifier | | M | 8.2 | []Yes []No |
| MRu11-IE4 | Restart indicator | | M | 8.3 | []Yes []No |
| Comments: | | | | | |

Table A.17: Information elements in SETUP received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|----------------------------------|---|----------|---------------------------------|------------------------|
| MRu12-IE12 | ATM traffic descriptor | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE16 | Broadband bearer capability | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE18 | Broadband high layer information | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE8 | Broadband repeat indicator | MCu 10 AND MRu 12 NOT (MCu 10 AND MRu 12) | M N/A | 3.1.7, annex C [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE17 | Broadband low layer information | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE1 | Called party number | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE2 | Called party subaddress | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE9 | Calling party number | | I | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRu12-IE10 | Calling party subaddress | | I | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRu12-IE13 | Connection identifier | MRu 12 NOT MRu 12 | M N/A | 8.2 | []Yes []No []N/A |
| MRu12-IE19 | End-to-end transit delay | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE20 | Notification indicator | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE14 | OAM traffic descriptor | MRu 12 NOT MRu 12 | M N/A | 8.4 | []Yes []No []N/A |
| | | | | | |
| MRu12-IE15 | QOS parameter | MRu 12 NOT MRu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE7 | Broadband sending complete | MRu 12 NOT MRu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MRu12-IE3 | Transit network selection | | X | | []Yes []No |
| Comments: | | | | | |

Table A.18: Information elements in STATUS received by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|---------------------|-----------------------|--------|------------------------|--------------|
| MRu14-IE21 | Call state | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| MRu14-IE24 | Cause | | M | 8.3 | []Yes []No |
| Comments: | | | | | |

A.7.4.2 Information elements in messages transmitted by the user

Indicating support for an item in the tables in this subclause states that the implementation has the ability to generate, and to transmit in the specified message, the information elements listed. Such support does not necessarily mean that the indicated information element is included in every instance of the transmitted message.

Table A.19: Information elements in ALERTING transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|------------------------|----------|------------------------|------------------------|
| MTu1-IE13 | Connection identifier | SCu 5.1 NOT SCu 5.1 | M N/A | 8.2 | []Yes []No []N/A |
| MTu1-IE20 | Notification indicator | MTu 1 NOT MTu 1 | O N/A | 3.1.1 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.20: Information elements in CALL PROCEEDING transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|------------------------|----------|------------------------|------------------------|
| MTu2-IE13 | Connection identifier | SCu 5.2 NOT SCu 5.2 | M O | 8.3 | []Yes []No |
| | | | | | |
| MTu2-IE20 | Notification indicator | MTu2 NOT MTu2 | O N/A | 3.1.2 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.21: Information elements in CONNECT transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------------------|------------------------|----------|------------------------|------------------------|
| MTu3-IE17 | Broadband low layer information | MTu 3 NOT MTu 3 | O N/A | 3.1.3 [Q.2931 [11]] | []Yes []No []N/A |
| MTu3-IE13 | Connection identifier | SCu 5.3 NOT SCu 5.3 | M N/A | 8.3 | []Yes []No []N/A |
| MTu3-IE19 | End-to-end transit delay | MTu 3 NOT MTu 3 | M N/A | 3.1.3 [Q.2931 [11]] | []Yes []No []N/A |
| MTu3-IE20 | Notification indicator | MTu 3 NOT MTu 3 | O N/A | 3.1.3 [Q.2931 [11]] | []Yes []No []N/A |
| MTu3-IE14 | OAM traffic descriptor | MTu 3 NOT MTu 3 | M N/A | 8.4 | []Yes []No []N/A |
| Comments: | | | | | |

Table A.22: Information elements in CONNECT ACKNOWLEDGE transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|----------|------------------------|------------------------|
| MTu4-IE20 | Notification indicator | MTu 4 NOT MTu 4 | O N/A | 3.1.4 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.23: Information elements in NOTIFY transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------|--------------|
| MTu6-IE20 | Notification indicator | | M | 3.1.10 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.24: Information elements in RELEASE transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MTu8-IE24 | Cause | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| MTu8-IE20 | Notification indicator | | O | 3.1.5 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.25: Information elements in RELEASE COMPLETE transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------|-----------------------|--------|------------------------|--------------|
| MTu9-IE24 | Cause | | M | 3.1.6 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.26: Information elements in RESTART transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|------------------------|--------------|
| MTu10-IE13 | Connection identifier | | M | 8.3 | []Yes []No |
| MTu10-IE4 | Restart indicator | | M | 3.3.1 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.27: Information elements in RESTART ACKNOWLEDGE transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|------------------------|--------------|
| MTu11-IE13 | Connection identifier | | M | 8.3 | []Yes []No |
| MTu11-IE4 | Restart indicator | | M | 3.3.2 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.28: Information elements in SETUP transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|----------------------------------|--|----------|---------------------------------|------------------------|
| MTu12-IE12 | ATM traffic descriptor | MTu 12 NOT MTu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE16 | Broadband bearer capability | MTu 12 NOT MTu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE18 | Broadband high layer information | MTu 12 NOT MTu 12 | O N/A | 8.1 | []Yes []No []N/A |
| MTu12-IE8 | Broadband repeat indicator | MCu 10 AND MTu 12 NOT (MCu 10 AND MTu 12) | O N/A | 3.1.7, annex C [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE17 | Broadband low layer information | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE1 | Called party number | SCu2 NOT SCu2 | O M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTu12-IE2 | Called party subaddress | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE9 | Calling party number | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE10 | Calling party subaddress | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE13 | Connection identifier | MCu1.1 NOT MCu1.1 | M O | 8.2 | []Yes []No |
| MTu12-IE19 | End-to-end transit delay | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE20 | Notification indicator | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE14 | OAM traffic descriptor | MTu 12 NOT MTu 12 | O N/A | 8.4 | []Yes []No []N/A |
| MTu12-IE15 | QOS parameter | MTu 12 NOT MTu 12 | M N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| MTu12-IE3 | Transit network selection | MTu 12 NOT MTu 12 | O N/A | 3.1.7 [Q.2931 [11]] | []Yes []No []N/A |
| Comments: | | | | | |

Table A.29: Information elements in STATUS transmitted by the user

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|---------------------|-----------------------|--------|------------------------|--------------|
| MTu14-IE21 | Call state | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| MTu14-IE24 | Cause | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.7.5 Timers

Indicating support for an item in table A.36 states that the implementation has a timer that operates in accordance with the description in clause 7 and with the relevant behaviour specified in clauses 5 and 6 of ITU-T Recommendation Q.2934 [5] as modified by EN 301 487-1 [1].

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

Table A.30: Timers in the user role

| Item | Timer: Does the implementation support... | Conditions for status | Status | Reference | Support | Values Allowed | Value Supported |
|-----------|---|-----------------------|----------|----------------------------|------------------------|----------------|-----------------|
| TMu 1 | T301 | MCu 1 NOT MCu 1 | O N/A | table 7-3 [Q.2931 [11]] | []Yes []No []N/A | minim. 3 min | |
| TMu 2 | T302 | SCu 4 NOT SCu 4 | M N/A | table 7-4 [Q.2931 [11]] | []Yes []No []N/A | 10 - 15 s | |
| TMu 3 | T303 | MCu 1 NOT MCu 1 | M N/A | table 7-3 [Q.2931 [11]] | []Yes []No []N/A | 4 s | |
| TMu 5 | T308 | | M | table 7-3 [Q.2931 [11]] | []Yes []No | 30 s | |
| TMu 6 | T309 | | M | table 7-3 [Q.2931 [11]] | []Yes []No | 10 s | |
| TMu 7 | T310 | MCu 1 NOT MCu 1 | M N/A | table 7-3 [Q.2931 [11]] | []Yes []No []N/A | 30 - 120 s | |
| TMu 8 | T313 | MCu 2 NOT MCu 2 | M N/A | table 7-3 [Q.2931 [11]] | []Yes []No []N/A | 4 s | |
| TMu 9 | T316 | | M | table 7-3 [Q.2931 [11]] | []Yes []No | 120 s | |
| TMu 10 | T317 | | M | table 7-3 [Q.2931 [11]] | []Yes []No | < T316 | |
| TMu 11 | T322 | | M | table 7-3 [Q.2931 [11]] | []Yes []No | 4 s | |
| Comments: | | | | | | | |

A.7.6 Structure of information elements received

These tables are to be completed in order to evaluate the likelihood of successful interoperation of two implementations. The answers supplied are not used for conformance testing.

A.7.6.1 Broadband locking shift

Table A.31: Broadband locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--|
| IERu 25.1 | New codeset identification | M | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 1. Codeset 4 | M | 4 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 2. Codeset 5 | M | 5 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 3. Codeset 6 | M | 6 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 4. Codeset 7 | M | 7 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Comments: | | | | |

A.7.6.2 Broadband non-locking shift

Table A.32: Broadband non-locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--|
| IERu 26.1 | Temporary codeset identification | M | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 1. Codeset 0 | M | 0 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 2. Codeset 4 | M | 4 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 3. Codeset 5 | M | 5 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 4. Codeset 6 | M | 6 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 5. Codeset 7 | M | 7 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Comments: | | | | |

A.7.6.3 Void

A.7.6.4 ATM traffic descriptor

Table A.33: ATM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--|
| IERu 12.1 | Forward peak cell rate (CLP=0) | O | N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Backward peak cell rate (CLP=0) | O | N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Forward peak cell rate (CLP=0+1) | M | N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Backward peak cell rate (CLP=0+1) | M | N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Comments: | | | | |

A.7.6.5 Broadband bearer capability

Table A.34: Broadband bearer capability information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 16.1 | Bearer class | M | | []Yes []No |
| | 1. BCOB-A | O | 1 | []Yes []No |
| | 2. BCOB-C | O | 3 | []Yes []No |
| | 3. BCOB-X | O | 16 | []Yes []No |
| | 4. Transparent VP | O | 24 | []Yes []No |
| IERu 16.2 | Traffic type | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. Constant bit rate | O | 1 | []Yes []No |
| | 3. Variable bit rate | O | 2 | []Yes []No |
| IERu 16.3 | Timing requirements | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. End-to-end timing required | O | 1 | []Yes []No |
| | 3. End-to-end timing not required | O | 2 | []Yes []No |
| IERu 16.4 | Susceptibility to clipping | M | | []Yes []No |
| | 1. Not susceptible to clipping | O | 0 | []Yes []No |
| | 2. Susceptible to clipping | O | 1 | []Yes []No |
| IERu 16.5 | User plane connection configuration | | | |
| | 1. Point-to-point | M | 0 | []Yes []No |
| Comments: | | | | |

A.7.6.6 Broadband high layer information

Table A.35: Broadband high layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 18.1 | High layer information type | M | | []Yes []No |
| | 1. ISO/IEC | O | 0 | []Yes []No |
| | 2. User specific | O | 1 | []Yes []No |
| | 3. Vendor specific application identifier | O | 3 | []Yes []No |
| | 4. Reference to ITU-T SG 1 B-ISDN teleservice recommendation | O | 4 | []Yes []No |
| Comments: | | | | |

A.7.6.7 Broadband low layer information

Table A.36: Broadband low layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------------|--|-----------------------|--------------|--------------|
| IERu 17.1 | User information layer 2 protocol | <input type="radio"/> | | []Yes []No |
| | 1. Basic mode ISO 1745 [12] | <input type="radio"/> | 1 | []Yes []No |
| | 2. ITU-T Recommendation Q.921 [6] (I.441 [13]) | <input type="radio"/> | 2 | []Yes []No |
| | 3. ITU-T Recommendation X.25 [7] link layer | <input type="radio"/> | 6 | []Yes []No |
| | 4. LAN logical link control (ISO/IEC 8802/2) | <input type="radio"/> | 12 | []Yes []No |
| | 5. ITU-T Recommendation X.75 [9] SLP | <input type="radio"/> | 13 | []Yes []No |
| | 6. ITU-T Recommendation Q.922 [10] | <input type="radio"/> | 14 | []Yes []No |
| | 7. User specified | <input type="radio"/> | 16 | []Yes []No |
| IERu 17.2 | 8. ISO/IEC 7776 DTE-DTE operation | <input type="radio"/> | 17 | []Yes []No |
| | Mode of operation (octet 6a) | <input type="radio"/> | | []Yes []No |
| IERu 17.3 | 1. Normal mode | <input type="radio"/> | 1 | []Yes []No |
| | 2. Extended mode | <input type="radio"/> | 2 | []Yes []No |
| IERu 17.3 | Q.33 use | <input type="radio"/> | | []Yes []No |
| IERu 17.4 | User specified layer 2 protocol information | <input type="radio"/> | | []Yes []No |
| IERu 17.5 | Window size | <input type="radio"/> | | []Yes []No |
| IERu 17.6 | User information layer 3 protocol | <input type="radio"/> | | []Yes []No |
| | 1. ITU-T Recommendation X.25 [7], packet layer | <input type="radio"/> | 6 | []Yes []No |
| | 2. ISO/IEC 8208 [15] | <input type="radio"/> | 7 | []Yes []No |
| | 3. X.223 [16] or ISO/IEC 8878 [17] | <input type="radio"/> | 8 | []Yes []No |
| | 4. X.233 [18] or ISO/IEC 8473 [19] | <input type="radio"/> | 9 | []Yes []No |
| | 5. ITU-T Recommendation T.70 [20] | <input type="radio"/> | 10 | []Yes []No |
| | 6. ISO/IEC TR 9577 [21] | <input type="radio"/> | 11 | []Yes []No |
| IERu 17.7 | 7. User specified | <input type="radio"/> | 16 | []Yes []No |
| | Mode of operation (octet 7a) | <input type="radio"/> | | []Yes []No |
| IERu 17.7 | 1. Normal packet sequence numbering | <input type="radio"/> | 1 | []Yes []No |
| | 2. Extended packet sequence numbering | <input type="radio"/> | 2 | []Yes []No |
| IERu 17.8 | User specified layer 3 protocol information | <input type="radio"/> | | []Yes []No |
| IERu 17.9 | Default packet size | <input type="radio"/> | | []Yes []No |
| | 1. 16 octets | <input type="radio"/> | 4 | []Yes []No |
| | 2. 32 octets | <input type="radio"/> | 5 | []Yes []No |
| | 3. 64 octets | <input type="radio"/> | 6 | []Yes []No |
| | 4. 128 octets | <input type="radio"/> | 7 | []Yes []No |
| | 5. 256 octets | <input type="radio"/> | 8 | []Yes []No |
| | 6. 512 octets | <input type="radio"/> | 9 | []Yes []No |
| | 7. 1 024 octets | <input type="radio"/> | 10 | []Yes []No |
| | 8. 2 048 octets | <input type="radio"/> | 11 | []Yes []No |
| 9. 4 096 octets | <input type="radio"/> | 12 | []Yes []No | |
| IERu 17.10 | Packet window size | <input type="radio"/> | | []Yes []No |
| IERu 17.11 | Additional layer 3 protocol information for ISO/IEC TR 9577 [21] | <input type="radio"/> | | []Yes []No |
| Comments: | | | | |

A.7.6.8 Call state

Table A.37: Call state information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|--------------|--------------|
| IERu 21.1 | Call state value | M | | []Yes []No |
| | 1. Null | M | 0 | []Yes []No |
| | 2. Call initiated | M | 1 | []Yes []No |
| | 3. Outgoing call proceeding | | | |
| | 4. Call delivered | M | 3 | []Yes []No |
| | 5. Call present | M | 4 | []Yes []No |
| | 6. Call received | M | 6 | []Yes []No |
| | 7. Connect request | M | 7 | []Yes []No |
| | 8. Incoming call proceeding | M | 8 | []Yes []No |
| | 9. Active | M | 9 | []Yes []No |
| | 10. Release request | M | 10 | []Yes []No |
| | 11. Release indication | M | 11 | []Yes []No |
| | 12. Restart null | M | 12 | []Yes []No |
| | 13. Restart request | | 0 | |
| | 14. Restart | M | 61 | []Yes []No |
| | M | 62 | []Yes []No | |
| | M | | []Yes []No | |
| Comments: | | | | |

A.7.6.9 Called party number

Table A.38: Called party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 1.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| | 6. Abbreviated | O | 6 | []Yes []No |
| IERu 1.2 | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| Comments: | | | | |

A.7.6.10 Called party subaddress

Table A.39: Called party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 2.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| IERu 2.2 | Odd/even indicator | M | | []Yes []No |
| | 1. Even number of address signals | O | 0 | []Yes []No |
| | 2. Odd number of address signals | O | 1 | []Yes []No |
| Comments: | | | | |

A.7.6.11 Calling party number

Table A.40: Calling party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 9.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| | 6. Abbreviated | O | 6 | []Yes []No |
| IERu 9.2 | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| IERu 9.3 | Presentation indicator | O | | []Yes []No |
| | 1. Presentation allowed | O | 0 | []Yes []No |
| | 2. Presentation restricted | O | 1 | []Yes []No |
| | 3. Number not available | O | 2 | []Yes []No |
| IERu 9.4 | Screening indicator | O | | []Yes []No |
| | 1. User provided, not screened | O | 0 | []Yes []No |
| | 2. User provided, verified and passed | O | 1 | []Yes []No |
| | 3. User provided, verified and failed | O | 2 | []Yes []No |
| | 4. Network provided | O | 3 | []Yes []No |
| Comments: | | | | |

A.7.6.12 Calling party subaddress

Table A.41: Calling party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 10.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| IERu 10.2 | Odd/even indicator | M | | []Yes []No |
| | 1. Even number of address signals | O | 0 | []Yes []No |
| | 2. Odd number of address signals | O | 1 | []Yes []No |
| Comments: | | | | |

A.7.6.13 Connection identifier

Table A.42: Connection identifier information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 13.1 | VP-associated signalling | M | | []Yes []No |
| | 1. VP-associated signalling | O | 0 | []Yes []No |
| | 2. Explicit indication of VPCI | M | 1 | []Yes []No |
| IERu 13.2 | Preferred/exclusive | M | | []Yes []No |
| | 1. Exclusive VPCI, exclusive VCI | O | 0 | []Yes []No |
| | 2. Exclusive VPCI, any VCI | O | 1 | []Yes []No |
| | 3. Exclusive VPCI, no VCI | O | 4 | []Yes []No |
| Comments: | | | | |

A.7.6.14 End-to-end transit delay

Table A.43: End-to-end transit delay information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 19.1 | Maximum end-to-end transit delay | O | | []Yes []No |
| Comments: | | | | |

A.7.6.15 Quality of service parameter

Table A.44: Quality of service parameter information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 15.1 | QOS class forward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| IERu 15.2 | QOS class backward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| Comments: | | | | |

A.7.6.16 Restart indicator

Table A.45: Restart indicator information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 4.1 | Class | M | | []Yes []No |
| | 1. Indicated virtual channel | O | 0 | []Yes []No |
| | 2. VP or all VCs in indicated VP controlled by the signalling VC | O | 1 | []Yes []No |
| | 3. All VPs controlled by the layer 3 entity | O | 2 | []Yes []No |
| Comments: | | | | |

A.7.6.17 OAM traffic descriptor

Table A.46: OAM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERu 14.1 | Shaping indicator | M | | []Yes []No |
| | 1. No user requirement | O | 0 | []Yes []No |
| | 2. Aggregate shaping not allowed | O | 1 | []Yes []No |
| IERu 14.2 | Compliance indicator | M | | []Yes []No |
| | 1. Optional end-to-end OAM F4 flow | O | 0 | []Yes []No |
| | 2. Mandatory end-to-end OAM F4 flow | O | 1 | []Yes []No |
| IERu 14.3 | User-network fault management indicator | M | | []Yes []No |
| | 1. No user-originated indications | O | 0 | []Yes []No |
| | 2. Use of user-originated indications | O | 1 | []Yes []No |
| IERu 14.4 | Forward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| IERu 14.5 | Backward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| Comments: | | | | |

A.7.7 Structure of information elements transmitted

These tables are to be completed in order to evaluate the likelihood of successful interoperation of two implementations. The answers supplied are not used for conformance testing.

A.7.7.1 Broadband locking shift

Table A.47: Broadband locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 25.1 | New codeset identification | | | []Yes []No |
| | 1. Codeset 4 | M | 4 | []Yes []No |
| | 2. Codeset 5 | M | 5 | []Yes []No |
| | 3. Codeset 6 | M | 6 | []Yes []No |
| | 4. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.7.7.2 Broadband non-locking shift

Table A.48: Broadband non-locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 26.1 | Temporary codeset identification | | | []Yes []No |
| | 1. Codeset 0 | M | 0 | []Yes []No |
| | 2. Codeset 4 | M | 4 | []Yes []No |
| | 3. Codeset 5 | M | 5 | []Yes []No |
| | 4. Codeset 6 | M | 6 | []Yes []No |
| | 5. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.7.7.3 Void

A.7.7.4 ATM traffic descriptor

Table A.49: ATM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 12.1 | Forward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Forward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| Comments: | | | | |

A.7.7.5 Broadband bearer capability

Table A.50: Broadband bearer capability information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 16.1 | Bearer class | M | | []Yes []No |
| | 1. BCOB-A | O | 1 | []Yes []No |
| | 2. BCOB-C | O | 3 | []Yes []No |
| | 3. BCOB-X | O | 16 | []Yes []No |
| | 4. Transparent VP | O | 24 | []Yes []No |
| IETu 16.2 | Traffic type | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. Constant bit rate | O | 1 | []Yes []No |
| | 3. Variable bit rate | O | 2 | []Yes []No |
| IETu 16.3 | Timing requirements | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. End-to-end timing required | O | 1 | []Yes []No |
| | 3. End-to-end timing not required | O | 2 | []Yes []No |
| IETu 16.4 | Susceptibility to clipping | M | | []Yes []No |
| | 1. Not susceptible to clipping | O | 0 | []Yes []No |
| | 2. Susceptible to clipping | O | 1 | []Yes []No |
| IETu 16.5 | User plane connection configuration | M | | []Yes []No |
| | 1. Point-to-point | O | 0 | []Yes []No |
| Comments: | | | | |

A.7.7.6 Broadband high layer information

Table A.51: Broadband high layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 18.1 | High layer information type | M | | []Yes []No |
| | 1. ISO/IEC | O | 0 | []Yes []No |
| | 2. User specific | O | 1 | []Yes []No |
| | 3. Vendor specific application identifier | O | 3 | []Yes []No |
| | 4. Reference to ITU-T SG 1 B-ISDN teleservice recommendation | O | 4 | []Yes []No |
| Comments: | | | | |

A.7.7.7 Broadband low layer information

Table A.52: Broadband low layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-------------------|--|--------|--------------|--------------|
| IETu 17.1 | User information layer 2 protocol | O | | []Yes []No |
| | 1. Basic mode ISO 1745 [12] | O | 1 | []Yes []No |
| | 2. ITU-T Recommendation Q.921 [6] (1.441 [13]) | O | 2 | []Yes []No |
| | 3. ITU-T Recommendation X.25 [7] link layer | O | 6 | []Yes []No |
| | 4. LAN logical link control (ISO/IEC 8802/2) | O | 12 | []Yes []No |
| | 5. ITU-T Recommendation X.75 [9] SLP | O | 13 | []Yes []No |
| | 6. ITU-T Recommendation Q.922 [10] | O | 14 | []Yes []No |
| | 7. User specified | O | 16 | []Yes []No |
| IETu 17.2 | Mode of operation (octet 6a) | O | | []Yes []No |
| | 1. Normal mode | O | 1 | []Yes []No |
| | 2. Extended mode | O | 2 | []Yes []No |
| IETu 17.3 | Q.33 use | O | | []Yes []No |
| IETu 17.4 | User specified layer 2 protocol information | O | | []Yes []No |
| IETu 17.5 | Window size | O | | []Yes []No |
| IETu 17.6 | User information layer 3 protocol | O | | []Yes []No |
| | 1. ITU-T Recommendation X.25 [7], packet layer | O | 6 | []Yes []No |
| | 2. ISO/IEC 8208 [15] | O | 7 | []Yes []No |
| | 3. X.223 [16] or ISO/IEC 8878 [17] | O | 8 | []Yes []No |
| | 4. X.233 [18] or ISO/IEC 8473 [19] | O | 9 | []Yes []No |
| | 5. ITU-T Recommendation T.70 [20] | O | 10 | []Yes []No |
| | 6. ISO/IEC TR 9577 [21] | O | 11 | []Yes []No |
| 7. User specified | O | 16 | []Yes []No | |
| IETu 17.7 | Mode of operation (octet 7a) | O | | []Yes []No |
| | 1. Normal packet sequence numbering | O | 1 | []Yes []No |
| | 2. Extended packet sequence numbering | O | 2 | []Yes []No |
| IETu 17.8 | User specified layer 3 protocol information | O | | []Yes []No |
| IETu 17.9 | Default packet size | O | | []Yes []No |
| | 1. 16 octets | O | 4 | []Yes []No |
| | 2. 32 octets | O | 5 | []Yes []No |
| | 3. 64 octets | O | 6 | []Yes []No |
| | 4. 128 octets | O | 7 | []Yes []No |
| | 5. 256 octets | O | 8 | []Yes []No |
| | 6. 512 octets | O | 9 | []Yes []No |
| | 7. 1 024 octets | O | 10 | []Yes []No |
| | 8. 2 048 octets | O | 11 | []Yes []No |
| 9. 4 096 octets | O | 12 | []Yes []No | |
| IETu 17.10 | Packet window size | O | | []Yes []No |
| IETu 17.11 | Additional layer 3 protocol information for ISO/IEC TR 9577 [21] | O | | []Yes []No |
| Comments: | | | | |

A.7.7.8 Call state

Table A.53: Call state information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-------------|--|--------|--------------|--------------|
| IETu 21.1 | Call state value | M | | []Yes []No |
| | 1. Null | M | 0 | []Yes []No |
| | 2. Call initiated | M | 1 | []Yes []No |
| | 3. Outgoing call proceeding | M | 3 | []Yes []No |
| | 4. Call delivered | M | 4 | []Yes []No |
| | 5. Call present | M | 6 | []Yes []No |
| | 6. Call received | M | 7 | []Yes []No |
| | 7. Connect request | M | 8 | []Yes []No |
| | 8. Incoming call proceeding | M | 9 | []Yes []No |
| | 9. Active | M | 10 | []Yes []No |
| | 10. Release request | M | 11 | []Yes []No |
| | 11. Release indication | M | 12 | []Yes []No |
| | 12. Restart null | M | 0 | []Yes []No |
| | 13. Restart request | M | 61 | []Yes []No |
| 14. Restart | M | 62 | []Yes []No | |
| Comments: | | | | |

A.7.7.9 Called party number

Table A.54: Called party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|---------------------------|--|--------|--------------|--------------|
| IETu 1.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| IETu 1.2 | 6. Abbreviated | O | 6 | []Yes []No |
| | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| 3. NSAP addressing | O | 2 | []Yes []No | |
| 4. Private numbering plan | O | 9 | []Yes []No | |
| Comments: | | | | |

A.7.7.10 Called party subaddress

Table A.55: Called party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 2.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| Comments: | | | | |

A.7.7.11 Calling party number

Table A.56: Calling party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 9.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| IETu 9.2 | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| IETu 9.3 | Private numbering plan | O | 9 | []Yes []No |
| | Presentation indicator | O | | []Yes []No |
| | 1. Presentation allowed | O | 0 | []Yes []No |
| IETu 9.4 | 2. Presentation restricted | O | 1 | []Yes []No |
| | 3. Number not available | O | 2 | []Yes []No |
| | Screening indicator | O | | []Yes []No |
| | 1. User provided, not screened | O | 0 | []Yes []No |
| | 2. User provided, verified and passed | O | 1 | []Yes []No |
| | 3. User provided, verified and failed | O | 2 | []Yes []No |
| | 4. Network provided | O | 3 | []Yes []No |
| Comments: | | | | |

A.7.7.12 Calling party subaddress

Table A.57: Calling party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 10.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| Comments: | | | | |

A.7.7.13 Connection identifier

Table A.58: Connection identifier information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 13.1 | VP-associated signalling | M | | []Yes []No |
| | 1. VP-associated signalling | O | 0 | []Yes []No |
| | 2. Explicit indication of VPCI | M | 1 | []Yes []No |
| IETu 13.2 | Preferred/exclusive | M | | []Yes []No |
| | 1. Exclusive VPCI, exclusive VCI | O | 0 | []Yes []No |
| | 2. Exclusive VPCI, any VCI | O | 1 | []Yes []No |
| | 3. Exclusive VPCI no VCI | O | 4 | []Yes []No |
| Comments: | | | | |

A.7.7.14 End-to-end transit delay

Table A.59: End-to-end transit delay information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 19.1 | Maximum end-to-end transit delay | O | | []Yes []No |
| Comments: | | | | |

A.7.7.15 Quality of service parameter

Table A.60: Quality of service parameter information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 15.1 | QOS class forward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| IETu 15.2 | QOS class backward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| Comments: | | | | |

A.7.7.16 Restart indicator

Table A.61: Restart indicator information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 4.1 | Class | M | | []Yes []No |
| | 1. Indicated virtual channel | O | 0 | []Yes []No |
| | 2. Indicated SVP or all VCs in indicated VPC controlled by the signalling VC | O | 1 | []Yes []No |
| | 3. All VPs controlled by the layer 3 entity | O | 2 | []Yes []No |
| Comments: | | | | |

A.7.7.17 Transit network selection

Table A.62: Transit network selection information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 3.1 | Type of network identification | M | | []Yes []No |
| | 1. User specified | O | 0 | []Yes []No |
| | 2. National network identification | O | 2 | []Yes []No |
| | 3. International network identification | O | 3 | []Yes []No |
| IETu 3.2 | Network identification plan | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. Carrier identification code | O | 1 | []Yes []No |
| | 3. Data network identification code | O | 3 | []Yes []No |
| Comments: | | | | |

A.7.7.18 OAM traffic descriptor

Table A.63: OAM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETu 14.1 | Shaping indicator | M | | []Yes []No |
| | 1. No user requirement | O | 0 | []Yes []No |
| | 2. Aggregate shaping not allowed | O | 1 | []Yes []No |
| IETu 14.2 | Compliance indicator | M | | []Yes []No |
| | 1. Optional end-to-end OAM F4 flow | O | 0 | []Yes []No |
| | 2. Mandatory end-to-end OAM F4 flow | O | 1 | []Yes []No |
| IETu 14.3 | User-network fault management indicator | M | | []Yes []No |
| | 1. No user-originated indications | O | 0 | []Yes []No |
| | 2. Use of user-originated indications | O | 1 | []Yes []No |
| IETu 14.4 | Forward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| IETu 14.5 | Backward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| Comments: | | | | |

A.8 Network

The tables provided in this clause need only to be completed for network implementations:

Prerequisite: R 2.

A.8.1 Major capabilities

Each question in table A.72 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 subclauses of ITU-T Recommendation Q.2934 [5] as modified by EN 301 487-1 [1]. Answering to a particular question states that the implementation does not support that function of the protocol.

Table A.64: Major capabilities of the network role

| Item | Major capability: Does the implementation support... | Conditions for status | Status | Reference | Support |
|--|---|--------------------------|--------|---------------------------|--------------|
| Call establishment at the originating interface | | | | | |
| MCn 1 | call establishment at the originating interface (outgoing calls from the user's point of view) | | M | 9.1 | []Yes []No |
| Call establishment at the destination interface | | | | | |
| MCn 2 | call establishment at the destination interface (incoming calls from the user's point of view) | | M | 9.2 | []Yes []No |
| Others | | | | | |
| MCn 3 | initiation of call clearing | | M | 5.4 [Q.2931 [11]] | []Yes []No |
| MCn 4 | restart procedure | | M | 9.3 | []Yes []No |
| MCn 5 | handling of error conditions | | M | 5.6 [Q.2931 [11]] | []Yes []No |
| MCn 5.1 | invoke the status enquiry procedure on receipt of an AAL-ESTABLISH.indication in the call establishment phase | | O | 5.6.9 b) [Q.2931 [11]] | []Yes []No |
| MCn 6 | error procedures with explicit action indication | | M | 5.7 [Q.2931 [11]] | []Yes []No |
| MCn 7 | handling of messages with insufficient information | | M | 5.8 [Q.2931 [11]] | []Yes []No |
| MCn 8 | notification procedures | | M | 5.9 [Q.2931 [11]] | []Yes []No |
| MCn 11 | transit network selection procedures | | O | clause D.2 [Q.2931] | []Yes []No |
| MCn 13 | handling of the OAM traffic descriptor | | O | 8.4 | []Yes []No |
| Comments: | | | | | |

A.8.2 Subsidiary capabilities

Indicating support for an item in table A.73 states that the implementation supports special cases or options within a major capability.

Table A.65: Subsidiary capabilities of the network role

| Item | Subsidiary capability: Does the implementation support... | Conditions for status | Status | Reference | Support |
|--|--|--------------------------|--------|------------------------|--------------|
| Call establishment at the originating interface | | | | | |
| SCn 1 | sending of the called party address information in the Called party number information element | | M | 5.1.1 [Q.2931 [11]] | []Yes []No |
| Call establishment at the destination interface | | | | | |
| Comments: | | | | | |

A.8.3 PDUs

The tables in this subclause ask questions related to the supported PDUs in the network role. In the DSS2 protocol, PDUs are known by the term "messages".

A.8.3.1 Messages received by the network

Indicating support for an item in table A.74 states that the implementation has the ability to recognize 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 300 487-1 [1].

Table A.66: Messages received by the network

| Item | Message: Does the implementation support the receipt of... | Conditions for status | Status | Reference | Support |
|-----------|--|-----------------------|--------|--|--------------|
| MRn 1 | ALERTING | | M | 3.1.1, 5.2.5 [Q.2931 [11]] | []Yes []No |
| MRn 2 | CALL PROCEEDING | | M | 3.1.2, 5.2.5 [Q.2931 [11]] | []Yes []No |
| MRn 3 | CONNECT | | M | 3.1.3, 5.2.7 [Q.2931 [11]] | []Yes []No |
| MRn 4 | CONNECT ACKNOWLEDGE | | M | 3.1.4, 5.1.7 [Q.2931 [11]] | []Yes []No |
| MRn 6 | NOTIFY | | M | 3.1.10, 5.9 [Q.2931 [11]] | []Yes []No |
| MRn 8 | RELEASE | | M | 3.1.5, 5.4.3, 5.4.5 [Q.2931 [11]] | []Yes []No |
| MRn 9 | RELEASE COMPLETE | | M | 3.1.6, 5.2.2.2.2, 5.2.3, 5.2.4, 5.2.5, 5.4.2, 5.4.4, 5.6.3.2, 5.6.4, 5.6.7, 5.6.8.1, 5.7.2 [Q.2931 [11]] | []Yes []No |
| MRn 10 | RESTART | | M | 3.3.1, 5.5.2 [Q.2931 [11]] | []Yes []No |
| MRn 11 | RESTART ACKNOWLEDGE | | M | 3.3.2, 5.5.1 [Q.2931 [11]] | []Yes []No |
| MRn 12 | SETUP | | M | 3.1.7, 5.1 | []Yes []No |
| MRn 14 | STATUS | | M | 3.1.8, 5.6.3.2, 5.6.12 [Q.2931 [11]] | []Yes []No |
| MRn 15 | STATUS ENQUIRY | | M | 3.1.9, 5.6.3.2, 5.6.11 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.8.3.2 Messages transmitted by the network

Indicating support for an item in table A.75 states that the implementation has the ability to transmit the message listed in that item.

Table A.67: Messages transmitted by the network

| Item | Message: Does the implementation support the receipt of... | Conditions for status | Status | Reference | Support |
|-----------|--|-----------------------|--------|--|--------------|
| MTn 1 | ALERTING | | M | 3.1.1, 5.1.6 [Q.2931 [11]] | []Yes []No |
| MTn 2 | CALL PROCEEDING | | M | 3.1.2, 5.1.5 [Q.2931 [11]] | []Yes []No |
| MTn 3 | CONNECT | | M | 3.1.3, 5.1.7 [Q.2931 [11]] | []Yes []No |
| MTn 4 | CONNECT ACKNOWLEDGE | | M | 3.1.4, 5.2.7 [Q.2931 [11]] | []Yes []No |
| | | | | | |
| MTn 6 | NOTIFY | | M | 3.1.10, 5.9 [Q.2931 [11]] | []Yes []No |
| | | | | | |
| MTn 8 | RELEASE | | M | 3.1.5, 5.4.4 [Q.2931 [11]] | []Yes []No |
| MTn 9 | RELEASE COMPLETE | | M | 3.1.6, 5.1.2, 5.1.3, 5.4.2, 5.4.3, 5.6.3, 5.6.7, 5.6.8.1, 5.6.12, 5.7.2 [Q.2931 [11]] | []Yes []No |
| MTn 10 | RESTART | | M | 3.3.1, 5.5.1 [Q.2931 [11]] | []Yes []No |
| MTn 11 | RESTART ACKNOWLEDGE | | M | 3.3.2, 5.5.2 [Q.2931 [11]] | []Yes []No |
| MRn 12 | SETUP | | M | 3.1.7, 5.2 [Q.2931 [11]] | []Yes []No |
| | | | | | |
| MTn 14 | STATUS | | M | 3.1.8, 5.5.2.1, 5.6.3.2, 5.6.4, 5.6.7, 5.6.8, 5.6.11, 5.7 [Q.2931 [11]] | []Yes []No |
| MTn 15 | STATUS ENQUIRY | | M | 3.1.9, 5.6.3.2, 5.6.11 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.8.4 PDU parameters

The tables in this subclause ask questions related to the support of PDU parameters in messages received and transmitted by the IUT in the network role. In the DSS2, protocol PDU parameters are known by the term "information elements".

Tables A.76 and A.77 deal with the four information elements that appear in all messages that are either received or transmitted (respectively) by the IUT in the network role (Protocol discriminator, Call reference, Message type and Message length) and two information elements which may appear in a message for which it is mandatory for the receiver to interpret (shift information elements).

Table A.68: Information elements in all messages received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|-----------------------------|-----------------------|--------|-----------------------------|--------------|
| MRn-IE1 | Protocol discriminator | | M | 3.1, 4.2 [Q.2931 [11]] | []Yes []No |
| MRn-IE2 | Call reference | | M | 3.1, 4.3 [Q.2931 [11]] | []Yes []No |
| MRn-IE3 | Message type | | M | 3.1, 4.4.1 [Q.2931 [11]] | []Yes []No |
| MRn-IE4 | Message length | | M | 3.1, 4.4.2 [Q.2931 [11]] | []Yes []No |
| MRn-IE5 | Broadband locking shift | | M | 4.5.3 [Q.2931 [11]] | []Yes []No |
| MRn-IE25 | Broadband non-locking shift | | M | 4.5.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.69: Information elements in all messages transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|-----------------------------|-----------------------|--------|-----------------------------|--------------|
| MTn-IE1 | Protocol discriminator | | M | 3.1, 4.2 [Q.2931 [11]] | []Yes []No |
| MTn-IE2 | Call reference | | M | 3.1, 4.3 [Q.2931 [11]] | []Yes []No |
| MTn-IE3 | Message type | | M | 3.1, 4.4.1 [Q.2931 [11]] | []Yes []No |
| MTn-IE4 | Message length | | M | 3.1, 4.4.2 [Q.2931 [11]] | []Yes []No |
| MTn-IE5 | Broadband locking shift | | O | 4.5.3 [Q.2931 [11]] | []Yes []No |
| MTn-IE25 | Broadband non-locking shift | | O | 4.5.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.8.4.1 Information elements in messages received by the network

Indicating support for an item in the tables in this subclause states that the implementation has the ability to process the information elements listed in the specified received messages.

Table A.70: Information elements in ALERTING received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MRn1-IE13 | Connection identifier | | M | 8.2 | []Yes []No |
| MRn1-IE20 | Notification indicator | | M | 3.1.1 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.71: Information elements in CALL PROCEEDING received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MRn2-IE13 | Connection identifier | | M | 8.2 | []Yes []No |
| MRn2-IE20 | Notification indicator | | M | 3.1.2 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.72: Information elements in CONNECT received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------------------|-----------------------|--------|------------------------|--------------|
| MRn3-IE17 | Broadband low layer information | | O | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MRn3-IE13 | Connection identifier | | M | 8.2 | []Yes []No |
| MRn3-IE19 | End-to-end transit delay | | M | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MRn3-IE20 | Notification indicator | | M | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MRn3-IE14 | OAM traffic descriptor | | M | 8.4 | []Yes []No |
| Comments: | | | | | |

Table A.73: Information elements in CONNECT ACKNOWLEDGE received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MRn4-IE20 | Notification indicator | | M | 3.1.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.74: Information elements in NOTIFY received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------|--------------|
| MRn6-IE20 | Notification indicator | | M | 3.1.10 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.75: Information elements in RELEASE received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MRn8-IE24 | Cause | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| MRn8-IE20 | Notification indicator | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.76: Information elements in RELEASE COMPLETE received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------|-----------------------|--------|------------------------|--------------|
| MRn9-IE24 | Cause | | M | 3.1.6 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.77: Information elements in RESTART received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|-----------|--------------|
| MRn10-IE13 | Connection identifier | | M | 9.3 | []Yes []No |
| MRn10-IE4 | Restart indicator | | M | 9.3 | []Yes []No |
| Comments: | | | | | |

Table A.78: Information elements in RESTART ACKNOWLEDGE received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|-----------|--------------|
| MRn11-IE13 | Connection identifier | | M | 9.3 | []Yes []No |
| MRn11-IE | Restart indicator | | M | 9.3 | []Yes []No |
| Comments: | | | | | |

Table A.79: Information elements in SETUP received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|----------------------------------|-----------------------|--------|---------------------------------|--------------|
| MRn12-IE12 | ATM traffic descriptor | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE16 | Broadband bearer capability | | M | 8.1 | []Yes []No |
| MRn12-IE18 | Broadband high layer information | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE8 | Broadband repeat indicator | | M | 3.1.7, annex C [Q.2931 [11]] | []Yes []No |
| MRn12-IE17 | Broadband low layer information | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE1 | Called party number | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE2 | Called party subaddress | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE9 | Calling party number | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE10 | Calling party subaddress | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE13 | Connection identifier | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE19 | End-to-end transit delay | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE20 | Notification indicator | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE14 | OAM traffic descriptor | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE15 | QOS parameter | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE7 | Broadband sending complete | | O | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MRn12-IE3 | Transit network selection | | O | 3.1.7 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.80: Information elements in STATUS received by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|---------------------|-----------------------|--------|------------------------|--------------|
| MRn14-IE21 | Call state | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| MRn14-IE24 | Cause | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.8.4.2 Information elements in messages transmitted by the network

Indicating support for an item in the tables in this subclause states that the implementation has the ability to generate, and to transmit in the specified message, the information elements listed. Such support does not necessarily mean that the indicated information element is included in every instance of the transmitted message.

Table A.81: Information elements in ALERTING transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------------|--------------|
| MTn1-IE13 | Connection identifier | | O | 3.1.1 note 1 [Q.2931 [11]] | []Yes []No |
| MTn1-IE20 | Notification indicator | | O | 3.1.1 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.82: Information elements in CALL PROCEEDING transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------------|--------------|
| MTn2-IE13 | Connection identifier | | M | 3.1.2 note 1 [Q.2931 [11]] | []Yes []No |
| MTn2-IE20 | Notification indicator | | O | 3.1.2 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.83: Information elements in CONNECT transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------------------|-----------------------|--------|-------------------------------|--------------|
| MTn3-IE17 | Broadband low layer information | | O | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MTn3-IE13 | Connection identifier | | O | 3.1.3 note 3 [Q.2931 [11]] | []Yes []No |
| MTn3-IE19 | End-to-end transit delay | | M | 3.1.3 note 4 [Q.2931 [11]] | []Yes []No |
| MTn3-IE20 | Notification indicator | | O | 3.1.3 [Q.2931 [11]] | []Yes []No |
| MTn3-IE14 | OAM traffic descriptor | | M | 3.1.3 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.84: Information elements in CONNECT ACKNOWLEDGE transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MTn4-IE20 | Notification indicator | | O | 3.1.4 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.85: Information elements in NOTIFY transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|-------------------------|--------------|
| MTn6-IE20 | Notification indicator | | M | 3.1.10 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.86: Information elements in RELEASE transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|------------------------|-----------------------|--------|------------------------|--------------|
| MTn8-IE24 | Cause | | M | 3.1.5 [Q.2931 [11]] | []Yes []No |
| MTn8-IE20 | Notification indicator | | O | 3.1.5 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.87: Information elements in RELEASE COMPLETE transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|-----------|---------------------|-----------------------|--------|------------------------|--------------|
| MTn9-IE24 | Cause | | M | 3.1.6 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.88: Information elements in RESTART transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|-----------|--------------|
| MTn10-IE13 | Connection identifier | | M | 9.3 | []Yes []No |
| MTn10-IE4 | Restart indicator | | M | 9.3 | []Yes []No |
| Comments: | | | | | |

Table A.89: Information elements in RESTART ACKNOWLEDGE transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|-----------------------|-----------------------|--------|------------------------|--------------|
| MTn11-IE13 | Connection identifier | | M | 3.3.2 [Q.2931 [11]] | []Yes []No |
| MTn11-IE4 | Restart indicator | | M | 3.3.2 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

Table A.90: Information elements in SETUP transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|----------------------------------|------------------------|--------|--|--------------|
| MTn12-IE12 | ATM traffic descriptor | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE16 | Broadband bearer capability | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE18 | Broadband high layer information | | M | 3.1.7 note 2 [Q.2931 [11]] | []Yes []No |
| MTn12-IE8 | Broadband repeat indicator | | M | 3.1.7, annex C [Q.2931 [11]] | []Yes []No |
| MTn12-IE17 | Broadband low layer information | | O | 3.1.7 note 4 [Q.2931 [11]] | []Yes []No |
| MTn12-IE1 | Called party number | SCn 2 NOT SCn 2 | O M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE2 | Called party subaddress | | M | 3.1.7 note 6, 3.2.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE9 | Calling party number | | I | 3.1.7 note 7, 3.2.7 note 4 [Q.2931 [11]] | []Yes []No |
| MTn12-IE10 | Calling party subaddress | | I | 3.1.7 note 8, 3.2.7 note 5 [Q.2931 [11]] | []Yes []No |
| MTn12-IE13 | Connection identifier | MCn 2.1 NOT MCn 2.1 | M O | 3.1.7 note 9, 3.2.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE19 | End-to-end transit delay | | M | 3.1.7 note 10, 3.2.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE20 | Notification indicator | | O | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE14 | OAM traffic descriptor | | O | 8.4 | []Yes []No |
| MTn12-IE15 | QOS parameter | | M | 3.1.7 [Q.2931 [11]] | []Yes []No |
| MTn12-IE3 | Transit network selection | | X | | []Yes []No |
| Comments: | | | | | |

Table A.91: Information elements in STATUS transmitted by the network

| Item | Information element | Conditions for status | Status | Reference | Support |
|------------|---------------------|-----------------------|--------|------------------------|--------------|
| MTn14-IE21 | Call state | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| MTn14-IE24 | Cause | | M | 3.1.8 [Q.2931 [11]] | []Yes []No |
| Comments: | | | | | |

A.8.5 Timers

Indicating support for an item in table A.106 states that the implementation has a timer that operates in accordance with the description in clause 7 and with the relevant behaviour specified in clauses 5 and 6 of ITU-T Recommendation Q.2934 [5] as modified by EN 301 487-1 [1].

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

Table A.92: Timers in the network role

| Item | Timer: Does the implementation support... | Conditions for status | Status | Reference | Support | Values Allowed | Value Supported |
|-----------|---|-----------------------|----------|----------------------------------|------------------------|----------------|-----------------|
| TMn 1 | T301 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | minim. 3 min | |
| TMn 2 | T302 | MCn 9 NOT MCn 9 | M N/A | table 7-2 [Q.2931 [11]] | []Yes []No []N/A | 10 - 15 s | |
| TMn 3 | T303 | | M | table 7-1 & 7-2 [Q.2931 [11]] | []Yes []No | 4 s | |
| TMn 12 | T306 | MCn 9 NOT MCn 9 | M N/A | table 7-2 [Q.2931 [11]] | []Yes []No []N/A | 30 s | |
| TMn 5 | T308 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | 30 s | |
| TMn 6 | T309 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | 10 s | |
| TMn 7 | T310 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | 30 - 120 s | |
| TMn 9 | T316 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | 120 s | |
| TMn 10 | T317 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | < T316 | |
| TMn 11 | T322 | | M | table 7-1 [Q.2931 [11]] | []Yes []No | 4 s | |
| Comments: | | | | | | | |

A.8.6 Structure of information elements received

These tables are to be completed in order to evaluate the likelihood of successful interoperation of two implementations. The answers supplied are not used for conformance testing.

A.8.6.1 Broadband locking shift

Table A.93: Broadband locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 25.1 | New codeset identification | M | | []Yes []No |
| | 1. Codeset 4 | M | 4 | []Yes []No |
| | 2. Codeset 5 | M | 5 | []Yes []No |
| | 3. Codeset 6 | M | 6 | []Yes []No |
| | 4. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.8.6.2 Broadband non-locking shift

Table A.94: Broadband non-locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 26.1 | Temporary codeset identification | M | | []Yes []No |
| | 1. Codeset 0 | M | 0 | []Yes []No |
| | 2. Codeset 4 | M | 4 | []Yes []No |
| | 3. Codeset 5 | M | 5 | []Yes []No |
| | 4. Codeset 6 | M | 6 | []Yes []No |
| | 5. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.8.6.3 Void

A.8.6.4 ATM traffic descriptor

Table A.95: ATM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 12.1 | Forward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Forward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| Comments: | | | | |

A.8.6.5 Broadband bearer capability

Table A.96: Broadband bearer capability information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 16.1 | Bearer class | M | | []Yes []No |
| | 1. BCOB-A | O | 1 | []Yes []No |
| | 2. BCOB-C | O | 3 | []Yes []No |
| | 3. BCOB-X | O | 16 | []Yes []No |
| | 4. Transparent VP | O | 24 | []Yes []No |
| IERn 16.2 | Traffic type | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. Constant bit rate | O | 1 | []Yes []No |
| | 3. Variable bit rate | O | 2 | []Yes []No |
| IERn 16.3 | Timing requirements | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. End-to-end timing required | O | 1 | []Yes []No |
| | 3. End-to-end timing not required | O | 2 | []Yes []No |
| IERn 16.4 | Susceptibility to clipping | M | | []Yes []No |
| | 1. Not susceptible to clipping | O | 0 | []Yes []No |
| | 2. Susceptible to clipping | O | 1 | []Yes []No |
| IERn 16.5 | User plane connection configuration | M | | []Yes []No |
| | 1. Point-to-point | O | 0 | []Yes []No |
| Comments: | | | | |

A.8.6.6 Broadband high layer information

Table A.97: Broadband high layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 18.1 | High layer information type | M | | []Yes []No |
| | 1. ISO/IEC | O | 0 | []Yes []No |
| | 2. User specific | O | 1 | []Yes []No |
| | 3. Vendor specific application identifier | O | 3 | []Yes []No |
| | 4. Reference to ITU-T SG 1 B-ISDN teleservice recommendation | O | 4 | []Yes []No |
| Comments: | | | | |

A.8.6.7 Broadband low layer information

Table A.98: Broadband low layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-------------------|--|-----------------------|--------------|--------------|
| IERn 17.1 | User information layer 2 protocol | <input type="radio"/> | | []Yes []No |
| | 1. Basic mode ISO 1745 [12] | <input type="radio"/> | 1 | []Yes []No |
| | 2. ITU-T Recommendation Q.921 [6] (I.441 [13]) | <input type="radio"/> | 2 | []Yes []No |
| | 3. ITU-T Recommendation X.25 [7] link layer | <input type="radio"/> | 6 | []Yes []No |
| | 4. LAN logical link control (ISO/IEC 8802/2) | <input type="radio"/> | 12 | []Yes []No |
| | 5. ITU-T Recommendation X.75 [9] SLP | <input type="radio"/> | 13 | []Yes []No |
| | 6. ITU-T Recommendation Q.922 [10] | <input type="radio"/> | 14 | []Yes []No |
| | 7. User specified | <input type="radio"/> | 16 | []Yes []No |
| IERn 17.2 | Mode of operation (octet 6a) | <input type="radio"/> | | []Yes []No |
| | 1. Normal mode | <input type="radio"/> | 1 | []Yes []No |
| | 2. Extended mode | <input type="radio"/> | 2 | []Yes []No |
| IERn 17.3 | Q.33 use | <input type="radio"/> | | []Yes []No |
| IERn 17.4 | User specified layer 2 protocol information | <input type="radio"/> | | []Yes []No |
| IERn 17.5 | Window size | <input type="radio"/> | | []Yes []No |
| IERn 17.6 | User information layer 3 protocol | <input type="radio"/> | | []Yes []No |
| | 1. ITU-T Recommendation X.25 [7], packet layer | <input type="radio"/> | 6 | []Yes []No |
| | 2. ISO/IEC 8208 [15] | <input type="radio"/> | 7 | []Yes []No |
| | 3. X.223 [16] or ISO/IEC 8878 [17] | <input type="radio"/> | 8 | []Yes []No |
| | 4. X.233 [18] or ISO/IEC 8473 [19] | <input type="radio"/> | 9 | []Yes []No |
| | 5. ITU-T Recommendation T.70 [20] | <input type="radio"/> | 10 | []Yes []No |
| | 6. ISO/IEC TR 9577 [21] | <input type="radio"/> | 11 | []Yes []No |
| 7. User specified | <input type="radio"/> | 16 | []Yes []No | |
| IERn 17.7 | Mode of operation (octet 7a) | <input type="radio"/> | | []Yes []No |
| | 1. Normal packet sequence numbering | <input type="radio"/> | 1 | []Yes []No |
| | 2. Extended packet sequence numbering | <input type="radio"/> | 2 | []Yes []No |
| IERn 17.8 | User specified layer 3 protocol information | <input type="radio"/> | | []Yes []No |
| IERn 17.9 | Default packet size | <input type="radio"/> | | []Yes []No |
| | 1. 16 octets | <input type="radio"/> | 4 | []Yes []No |
| | 2. 32 octets | <input type="radio"/> | 5 | []Yes []No |
| | 3. 64 octets | <input type="radio"/> | 6 | []Yes []No |
| | 4. 128 octets | <input type="radio"/> | 7 | []Yes []No |
| | 5. 256 octets | <input type="radio"/> | 8 | []Yes []No |
| | 6. 512 octets | <input type="radio"/> | 9 | []Yes []No |
| | 7. 1 024 octets | <input type="radio"/> | 10 | []Yes []No |
| | 8. 2 048 octets | <input type="radio"/> | 11 | []Yes []No |
| 9. 4 096 octets | <input type="radio"/> | 12 | []Yes []No | |
| IERn 17.10 | Packet window size | <input type="radio"/> | | []Yes []No |
| IERn 17.11 | Additional layer 3 protocol information for ISO/IEC TR 9577 [21] | <input type="radio"/> | | []Yes []No |
| Comments: | | | | |

A.8.6.8 Call state

Table A.99: Call state information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-------------|--|--------|--------------|--------------|
| IERn 21.1 | Call state value | M | | []Yes []No |
| | 1. Null | M | 0 | []Yes []No |
| | 2. Call initiated | M | 1 | []Yes []No |
| | 3. Outgoing call proceeding | M | 3 | []Yes []No |
| | 4. Call delivered | M | 4 | []Yes []No |
| | 5. Call present | M | 6 | []Yes []No |
| | 6. Call received | M | 7 | []Yes []No |
| | 7. Connect request | M | 8 | []Yes []No |
| | 8. Incoming call proceeding | M | 9 | []Yes []No |
| | 9. Active | M | 10 | []Yes []No |
| | 10. Release request | M | 11 | []Yes []No |
| | 11. Release indication | M | 12 | []Yes []No |
| | 12. Restart null | M | 0 | []Yes []No |
| | 13. Restart request | M | 61 | []Yes []No |
| 14. Restart | M | 62 | []Yes []No | |
| Comments: | | | | |

A.8.6.9 Called party number

Table A.100: Called party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 1.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| IERn 1.2 | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| Comments: | | | | |

A.8.6.10 Called party subaddress

Table A.101: Called party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 2.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| IERn 2.2 | Odd/even indicator | M | | []Yes []No |
| | 1. Even number of address signals | O | 0 | []Yes []No |
| | 2. Odd number of address signals | O | 1 | []Yes []No |
| Comments: | | | | |

A.8.6.11 Calling party number

Table A.102: Calling party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 9.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| | 6. Abbreviated | O | 6 | []Yes []No |
| IERn 9.2 | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| IERn 9.3 | Presentation indicator | O | | []Yes []No |
| | 1. Presentation allowed | O | 0 | []Yes []No |
| | 2. Presentation restricted | O | 1 | []Yes []No |
| | 3. Number not available | O | 2 | []Yes []No |
| IERn 9.4 | Screening indicator | O | | []Yes []No |
| | 1. User provided, not screened | O | 0 | []Yes []No |
| | 2. User provided, verified and passed | O | 1 | []Yes []No |
| | 3. User provided, verified and failed | O | 2 | []Yes []No |
| | 4. Network provided | O | 3 | []Yes []No |
| Comments: | | | | |

A.8.6.12 Calling party subaddress

Table A.103: Calling party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 10.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| | 3. User specified | O | 2 | []Yes []No |
| IERn 10.2 | Odd/even indicator | M | | []Yes []No |
| | 1. Even number of address signals | O | 0 | []Yes []No |
| | 2. Odd number of address signals | O | 1 | []Yes []No |
| Comments: | | | | |

A.8.6.13 Connection identifier

Table A.104: Connection identifier information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 13.1 | VP-associated signalling | M | | []Yes []No |
| | 1. VP-associated signalling | O | 0 | []Yes []No |
| | 2. Explicit indication of VPCI | M | 1 | []Yes []No |
| IERn 13.2 | Preferred/exclusive | M | | []Yes []No |
| | 1. Exclusive VPCI, exclusive VCI | O | 0 | []Yes []No |
| | 2. Exclusive VPCI, any VCI | O | 1 | []Yes []No |
| | 3. Exclusive VPCI, no VCI | O | 4 | []Yes []No |
| Comments: | | | | |

A.8.6.14 End-to-end transit delay

Table A.105: End-to-end transit delay information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 19.1 | Maximum end-to-end transit delay | O | | []Yes []No |
| Comments: | | | | |

A.8.6.15 Quality of service parameter

Table A.106: Quality of service parameter information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 15.1 | QOS class forward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| IERn 15.2 | QOS class backward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| Comments: | | | | |

A.8.6.16 Restart indicator

Table A.107: Restart indicator information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 4.1 | Class | M | | []Yes []No |
| | 1. Indicated virtual channel | O | 0 | []Yes []No |
| | 2. VP or all VCs in indicated VP controlled by the signalling VC | O | 1 | []Yes []No |
| | 3. All VPs controlled by the layer 3 entity | O | 2 | []Yes []No |
| Comments: | | | | |

A.8.6.17 Transit network selection

Table A.108: Transit network selection information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 3.1 | Type of network identification | M | | []Yes []No |
| | 1. User specified | O | 0 | []Yes []No |
| | 2. National network identification | O | 2 | []Yes []No |
| | 3. International network identification | O | 3 | []Yes []No |
| IERn 3.2 | Network identification plan | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. Carrier identification code | O | 1 | []Yes []No |
| | 3. Data network identification code | O | 3 | []Yes []No |
| Comments: | | | | |

A.8.6.18 OAM traffic descriptor

Table A.109: OAM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IERn 14.1 | Shaping indicator | M | | []Yes []No |
| | 1. No user requirement | O | 0 | []Yes []No |
| | 2. Aggregate shaping not allowed | O | 1 | []Yes []No |
| IERn 14.2 | Compliance indicator | M | | []Yes []No |
| | 1. Optional end-to-end OAM F4 flow | O | 0 | []Yes []No |
| | 2. Mandatory end-to-end OAM F4 flow | O | 1 | []Yes []No |
| IERn 14.3 | User-network fault management indicator | M | | []Yes []No |
| | 1. No user-originated indications | O | 0 | []Yes []No |
| | 2. Use of user-originated indications | O | 1 | []Yes []No |
| IERn 14.4 | Forward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| IERn 14.5 | Backward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| Comments: | | | | |

A.8.7 Structure of information elements transmitted

These tables are to be completed in order to evaluate the likelihood of successful interoperation of two implementations. The answers supplied are not used for conformance testing.

A.8.7.1 Broadband locking shift

Table A.110: Broadband locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 25.1 | New codeset identification | | | []Yes []No |
| | 1. Codeset 4 | M | 4 | []Yes []No |
| | 2. Codeset 5 | M | 5 | []Yes []No |
| | 3. Codeset 6 | M | 6 | []Yes []No |
| | 4. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.8.7.2 Broadband non-locking shift

Table A.111: Broadband non-locking shift information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 26.1 | Temporary codeset identification | | | []Yes []No |
| | 1. Codeset 0 | M | 0 | []Yes []No |
| | 2. Codeset 4 | M | 4 | []Yes []No |
| | 3. Codeset 5 | M | 5 | []Yes []No |
| | 4. Codeset 6 | M | 6 | []Yes []No |
| | 5. Codeset 7 | M | 7 | []Yes []No |
| Comments: | | | | |

A.8.7.3 Void

A.8.7.4 ATM traffic descriptor

Table A.112: ATM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 12.1 | Forward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0) | O | N/A | []Yes []No |
| | Forward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| | Backward peak cell rate (CLP=0+1) | M | N/A | []Yes []No |
| Comments: | | | | |

A.8.7.5 Broadband bearer capability

Table A.113: Broadband bearer capability information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 16.1 | Bearer class | M | | []Yes []No |
| | 1. BCOB-A | O | 1 | []Yes []No |
| | 2. BCOB-C | O | 3 | []Yes []No |
| | 3. BCOB-X | O | 16 | []Yes []No |
| | 4. Transparent VP | O | 24 | []Yes []No |
| IETn 16.2 | Traffic type | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. Constant bit rate | O | 1 | []Yes []No |
| | 3. Variable bit rate | O | 2 | []Yes []No |
| IETn 16.3 | Timing requirements | O | | []Yes []No |
| | 1. No indication | O | 0 | []Yes []No |
| | 2. End-to-end timing required | O | 1 | []Yes []No |
| | 3. End-to-end timing not required | O | 2 | []Yes []No |
| IETn 16.4 | Susceptibility to clipping | M | | []Yes []No |
| | 1. Not susceptible to clipping | O | 0 | []Yes []No |
| | 2. Susceptible to clipping | O | 1 | []Yes []No |
| IETn 16.5 | User plane connection configuration | M | | []Yes []No |
| | 1. Point-to-point | O | 0 | []Yes []No |
| Comments: | | | | |

A.8.7.6 Broadband high layer information

Table A.114: Broadband high layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 18.1 | High layer information type | M | | []Yes []No |
| Comments: | | | | |

A.8.7.7 Broadband low layer information

Table A.115: Broadband low layer information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------------------------------|--|--------|--------------|--------------|
| IETn 17.1 | User information layer 2 protocol | M | | []Yes []No |
| | 1. Basic mode ISO 1745 [12] | M | 1 | []Yes []No |
| | 2. ITU-T Recommendation Q.921 [6] (1.441 [13]) | M | 2 | []Yes []No |
| | 3. ITU-T Recommendation X.25 [7] link layer | M | 6 | []Yes []No |
| | 4. LAN logical link control (ISO/IEC 8802/2) | O | 12 | []Yes []No |
| | 5. ITU-T Recommendation X.75 [9] SLP | O | 13 | []Yes []No |
| | 6. ITU-T Recommendation Q.922 [10] | O | 14 | []Yes []No |
| | 7. User specified | O | 16 | []Yes []No |
| 8. ISO/IEC 7776 DTE-DTE operation | O | 17 | []Yes []No | |
| IETn 17.2 | Mode of operation (octet 6a) | O | | []Yes []No |
| IETn 17.3 | Q.33 use | O | | []Yes []No |
| IETn 17.4 | User specified layer 2 protocol information | O | | []Yes []No |
| IETn 17.5 | Window size | O | | []Yes []No |
| IETn 17.6 | User information layer 3 protocol | O | | []Yes []No |
| IETn 17.7 | Mode of operation (octet 7a) | O | | []Yes []No |
| | 1. Normal packet sequence numbering | O | 1 | []Yes []No |
| | 2. Extended packet sequence numbering | O | 2 | []Yes []No |
| IETn 17.8 | User specified layer 3 protocol information | O | | []Yes []No |
| IETn 17.9 | Default packet size | O | | []Yes []No |
| IETn 17.10 | Packet window size | O | | []Yes []No |
| IETn 17.11 | Additional layer 3 protocol information for ISO/IEC TR 9577 [21] | O | | []Yes []No |
| Comments: | | | | |

A.8.7.8 Call state

Table A.116: Call state information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-------------|--|--------|--------------|--------------|
| IETn 21.1 | Call state value | M | | []Yes []No |
| | 1. Null | M | 0 | []Yes []No |
| | 2. Call initiated | M | 1 | []Yes []No |
| | 3. Outgoing call proceeding | M | 3 | []Yes []No |
| | 4. Call delivered | M | 4 | []Yes []No |
| | 5. Call present | M | 6 | []Yes []No |
| | 6. Call received | M | 7 | []Yes []No |
| | 7. Connect request | M | 8 | []Yes []No |
| | 8. Incoming call proceeding | M | 9 | []Yes []No |
| | 9. Active | M | 10 | []Yes []No |
| | 10. Release request | M | 11 | []Yes []No |
| | 11. Release indication | M | 12 | []Yes []No |
| | 12. Restart null | M | 0 | []Yes []No |
| | 13. Restart request | M | 61 | []Yes []No |
| 14. Restart | M | 62 | []Yes []No | |
| Comments: | | | | |

A.8.7.9 Called party number

Table A.117: Called party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 1.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| IETn 1.2 | 6. Abbreviated | O | 6 | []Yes []No |
| | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| Comments: | | | | |

A.8.7.10 Called party subaddress

Table A.118: Called party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 2.1 | Type of subaddress | M | | []Yes []No |
| | | | | |
| Comments: | | | | |

A.8.7.11 Calling party number

Table A.119: Calling party number information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 9.1 | Type of number | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. International | O | 1 | []Yes []No |
| | 3. National | O | 2 | []Yes []No |
| | 4. Network specific | O | 3 | []Yes []No |
| | 5. Subscriber | O | 4 | []Yes []No |
| IETn 9.2 | 6. Abbreviated | O | 6 | []Yes []No |
| | Addressing/numbering plan identification | M | | []Yes []No |
| | 1. Unknown | O | 0 | []Yes []No |
| | 2. ISDN numbering plan | O | 1 | []Yes []No |
| IETn 9.3 | 3. NSAP addressing | O | 2 | []Yes []No |
| | 4. Private numbering plan | O | 9 | []Yes []No |
| IETn 9.3 | Presentation indicator | O | | []Yes []No |
| | 1. Presentation allowed | O | 0 | []Yes []No |
| | 2. Presentation restricted | O | 1 | []Yes []No |
| IETn 9.4 | 3. Number not available | O | 2 | []Yes []No |
| | Screening indicator | O | | []Yes []No |
| | 1. User provided, not screened | O | 0 | []Yes []No |
| | 2. User provided, verified and passed | O | 1 | []Yes []No |
| IETn 9.4 | 3. User provided, verified and failed | O | 2 | []Yes []No |
| | 4. Network provided | O | 3 | []Yes []No |
| Comments: | | | | |

A.8.7.12 Calling party subaddress

Table A.120: Calling party subaddress information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 10.1 | Type of subaddress | M | | []Yes []No |
| | 1. NSAP | O | 0 | []Yes []No |
| | 2. User specified ATM endsystem address | O | 1 | []Yes []No |
| IETn 10.2 | 3. User specified | O | 2 | []Yes []No |
| | Odd/even indicator | M | | []Yes []No |
| IETn 10.2 | 1. Even number of address signals | O | 0 | []Yes []No |
| | 2. Odd number of address signals | O | 1 | []Yes []No |
| Comments: | | | | |

A.8.7.13 Connection identifier

Table A.121: Connection identifier information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|---------------------------|--|--------|-------|--------------|
| IETn 13.1 | VP-associated signalling | M | | []Yes []No |
| | 1. VP-associated signalling | O | 0 | []Yes []No |
| | 2. Explicit indication of VPCI | M | 1 | []Yes []No |
| IETn 13.2 | Preferred/exclusive | M | | []Yes []No |
| | 1. Exclusive VPCI, exclusive VCI | O | 0 | []Yes []No |
| | 2. Exclusive VPCI, any VCI | O | 1 | []Yes []No |
| 3. Exclusive VPCI, no VCI | | | | |
| Comments: | | | | |

A.8.7.14 End-to-end transit delay

Table A.122: End-to-end transit delay information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 19.1 | Maximum end-to-end transit delay | O | | []Yes []No |
| Comments: | | | | |

A.8.7.15 Quality of service parameter

Table A.123: Quality of service parameter information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 15.1 | QOS class forward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| IETn 15.2 | QOS class backward | M | | []Yes []No |
| | 1. Unspecified QOS class | O | 0 | []Yes []No |
| | 2. Parameterized QOS | O | 255 | []Yes []No |
| Comments: | | | | |

A.8.7.16 Restart indicator

Table A.124: Restart indicator information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 4.1 | Class | M | | []Yes []No |
| | 1. Indicated virtual channel | O | 0 | []Yes []No |
| | 2. Indicated SVP or all VCs in indicated VPC controlled by the signalling VC | O | 1 | []Yes []No |
| | 3. All VPs controlled by the layer 3 entity | O | 2 | []Yes []No |
| Comments: | | | | |

A.8.7.17 OAM traffic descriptor

Table A.125: OAM traffic descriptor information element contents

| Item | Does the implementation support the information element field: | Status | Value | Support |
|-----------|--|--------|-------|--------------|
| IETn 14.1 | Shaping indicator | M | | []Yes []No |
| | 1. No user requirement | O | 0 | []Yes []No |
| | 2. Aggregate shaping not allowed | O | 1 | []Yes []No |
| IETn 14.2 | Compliance indicator | M | | []Yes []No |
| | 1. Optional end-to-end OAM F4 flow | O | 0 | []Yes []No |
| | 2. Mandatory end-to-end OAM F4 flow | O | 1 | []Yes []No |
| IETn 14.3 | User-network fault management indicator | M | | []Yes []No |
| | 1. No user-originated indications | O | 0 | []Yes []No |
| | 2. Use of user-originated indications | O | 1 | []Yes []No |
| IETn 14.4 | Forward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| IETn 14.5 | Backward end-to-end OAM F4 flow indicator | M | | []Yes []No |
| | 1. 0 % | O | 0 | []Yes []No |
| | 2. 0,1 % | O | 1 | []Yes []No |
| | 3. 1 % | O | 4 | []Yes []No |
| Comments: | | | | |

History

| Document history | | | |
|-------------------------|---------------|----------------|--------------------------------------|
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