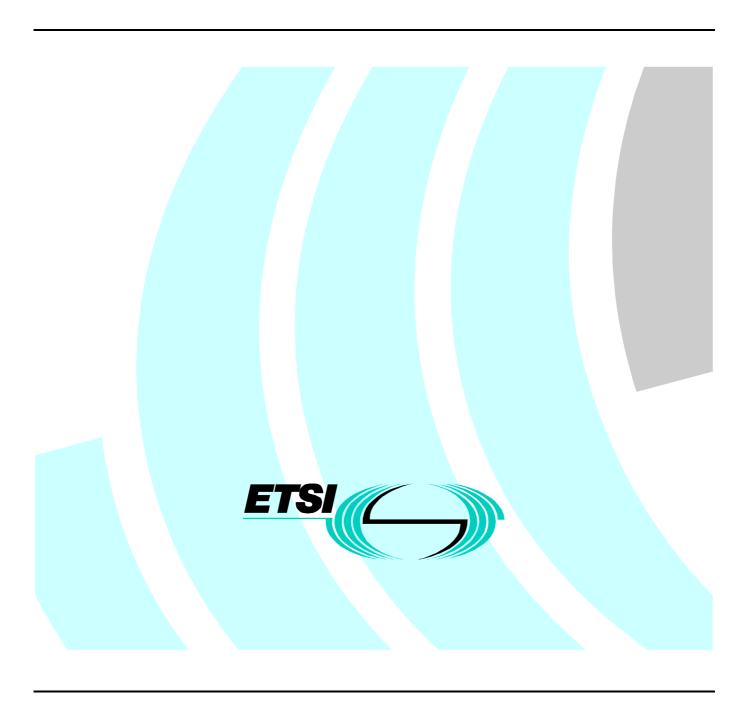
# Draft EN 300 402-4 V1.2.2 (1999-07)

European Standard (Telecommunications series)

Integrated Services Digital Network (ISDN);
Digital Subscriber Signalling System No. one (DSS1) protocol;
Data link layer;
Part 4: Protocol Implementation Conformance
Statement (PICS) proforma specification
for the general protocol



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### **Foreword**

This European Standard (Telecommunications series) (EN) has been produced by ETSI Technical Committee Services and Protocol for Advanced Networks (SPAN) and is now submitted for the One-step Approval Procedure.

The present document is part 4 of a multi-part standard covering the Integrated Services Digital Network (ISDN) Digital Subscriber Signalling System No. one (DSS1) data link layer specification as described below:

- Part 1: "General aspects [ITU-T Recommendation Q.920 (1993), modified]";
- Part 2: "General protocol specification [ITU-T Recommendation Q.921 (1993), modified]";
- Part 3: "Frame relay protocol specification";
- Part 4: "Protocol Implementation Conformance Statement (PICS) proforma specification for the general protocol";
- Part 5: "PICS proforma specification for the frame relay protocol";
- Part 6: "Test Suite Structure and Test Purposes (TSS&TP) specification for the general protocol";
- Part 7: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the general protocol".

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

## 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 Open Systems Interconnection (OSI) 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".

## 1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the Integrated Services Digital Network (ISDN) Digital Subscriber Signalling System No. one (DSS1) protocol data link layer general protocol as specified in ETS 300 402-2 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3].

The supplier of an implementation that is claimed to conform to ETS 300 402-2 [1] is required to complete a copy of the PICS proforma provided in annex A of the present document.

The supplier of an implementation that is claimed to conform to annex ZA of ETS 300 402-2 [1] is required to complete a copy of the PICS proforma provided in annex B of the present document.

## 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] ETS 300 402-2 (1995): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 2: General protocol specification [ITU-T Recommendation Q.921 (1993), modified]".
- [2] ISO/IEC 9646-1: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 1: General concepts".
- [3] ISO/IEC 9646-7: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".

## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the following terms and definitions apply, in addition to those in ETS 300 402-2 [1], ISO/IEC 9646-1 [2] and ISO/IEC 9646-7 [3]:

**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 (see ISO/IEC 9646-1 [2]).

network: DSS1 protocol entity at the network side of the user-network interface.

**Protocol Implementation Conformance Statement (PICS):** ICS for an implementation or system claimed to conform to a given specification (see ISO/IEC 9646-1 [2]).

**PICS proforma:** document, in the form of a questionnaire, which when completed for an implementation or system becomes a PICS (see ISO/IEC 9646-1 [2]).

**user:** DSS1 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:

AND Boolean "and" DL Data Link

DSS1 Digital Subscriber Signalling System No. one

FR Frames Received FT Frames Transmitted

ICS Implementation Conformance Statement ISDN Integrated Services Digital Network

IUT Implementation Under Test

M Mandatory requirement (to be observed in all cases)

MC Major Capabilities

N/A Not applicable, not supported or the conditions for status are not met

No not supported NOT Boolean "not"

O Option (may be selected to suit the implementation, provided that any requirements applicable to

the option are observed)

O.n Options, but support required for either at least one or only one of the options in the group labelled

with the same numeral "n"

OR Boolean "or"

OSI Open Systems Interconnection

PDU Protocol Data Unit

PICS Protocol Implementation Conformance Statement

PR Parameter Received PT Parameter Transmitted

R Role

SAP Service Access Point

SAPI Service Access Point Identifier

SC Subsidiary Capabilities
SDU Service Data Unit
SP System Parameter
SUT System Under Test

TEI Terminal Endpoint Identifier

TM Timer Yes supported

## 4 Conformance

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

A PICS that conforms to this PICS proforma specification shall:

- a) describe an implementation which conforms to the main text or to annex ZA of ETS 300 402-2 [1];
- b) be a conforming PICS proforma, which has been completed in accordance with the instructions for completion given in clauses A.1 or B.1, respectively; and
- c) include the information necessary to uniquely identify both the supplier and the implementation.

# Annex A (normative): PICS proforma for ETS 300 402-2

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 ETS 300 402-2 [1] may provide information in a standardized manner.

The PICS proforma is subdivided into clauses as follows:

- A.1: instructions 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; and
- A.8: questions for the network role.

## A.1.2 Symbols, 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 [3].

#### Item column:

The item column contains a unique reference (a mnemonic plus a number) for each item within the PICS proforma.

An additional lower case letter has been added to differentiate PICS items related to the user role (e.g. MCu) and PICS items related to the network role (e.g. MCn). In earlier PICS proformas both these cases were identified by the same mnemonic (e.g. MC).

#### 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 [3], are used for the status column:

M Mandatory - the capability is required to be supported.

O Optional - the capability may be supported or not.

N/A Not Applicable - in the given context, it is impossible to use the capability.

O.i qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer that

identifies an 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.

NOTE: To support a capability means that the capability is implemented in conformance to ETS 300 402-2 [1].

#### Reference column:

Except where explicitly stated, the reference column refers to the appropriate parts of ETS 300 402-2 [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 ETS 300 402-2 [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 [3], is used for the support column:

[] Yes [] No Tick "Yes" if item is supported, tick "No" if item is not supported.

[] N/A Tick "N/A" if the item is "not applicable".

#### Prerequisite line:

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 tick box, no answer is required. If necessary, the supplier may enter additional comments at the end of each table, or separately.

More detailed instructions may be found at the beginning of each 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 IUT name:	Implementation Under Test (IUT) identification
IUT version:	
A.2.3 SUT name:	System Under Test (SUT) identification
Hardware co	nfiguration:
Operating sy	stem:

# A.2.4 Product supplier

Name:	
E-mail address:	
Address:	
T. I I	
Telephone number:	
Facsimile number:	
Additional information:	
A.2.5 Client	
E-mail address:	
Address:	
Telephone number:	
Facsimile number:	

Additional i	nformation:
A.2.6 Name:	PICS contact person
E-mail addr	ess:
Address:	
Telephone r	number:
Facsimile n	umber:
Additional i	nformation:

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

This PICS proforma applies to the following standard:

**ETS 300 402-2 (1995):** "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 2: General protocol specification [ITU-T Recommendation Q.921 (1993), modified]".

# A.4 The 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 2 implementation on top of ONE physical interface (i.e. one ISDN Basic access or one ISDN Primary rate access interface structure). If the SUT implements both Basic access and Primary rate access interface structures, and in the case of the Basic access, supports more than one configuration, then a layer 2 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 and the type of interface (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. The supplier shall also provide answers to the questions relating to the type of interface supporting the IUT (the behaviour of the IUT is dependant on the type of interface and its configuration). Apart from the initial questions to determine roles, the major roles of the IUT - the user role (R 2.1) and the network role (R 2.2), 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.5 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced standard?

[ ] Yes

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 comments field at the bottom of each table or on attached pages.

## A.6 Roles

Table A.1: Roles

Item	Role	Conditions for status	Status	Reference	Support
R 1	not used	·			
R 2.1	the user role		0.1		[ ]Yes [ ]No
R 2.2	the network role		0.1		[ ]Yes [ ]No
	Type of implementation				
R 3	not used	·			
R 4	not used				
R 5	not used				
R 6.1	basic access		0.2		[ ]Yes [ ]No
R 6.2	primary rate access		0.2		[ ]Yes [ ]No
	port of one and only one of these optoort of one and only one of these opt				
Comments:					

## A.7 User

The tables provided in this subclause need only to be completed for user implementations.

Prerequisite: R 2.1

# 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 ETS 300 402-2 [1]. Answering "No" to a particular question states that the implementation does not support that function of the protocol.

Table A.2: Major capabilities - user

		l	1
	,		
	O.3	Annex A	[ ]Yes [ ]No
	O.3	Annex A	[ ]Yes [ ]No
ion transfer	· I		,
MCu 3 NOT MCu 3	M O	5.2	[ ]Yes [ ]No
	0	5.2, 5.2.1	[ ]Yes [ ]No
	·L		1
MCu 1.1 MCu 1.2	M O	5.3 Annex A	[ ]Yes [ ]No
MCu 3 NOT MCu 3	O.4 N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
MCu 3 NOT MCu 3	O.4 N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
MCu 3 NOT MCu 3	M N/A	5.3.3	[ ]Yes [ ]No [ ]N/A
MCu 3 NOT MCu 3	M N/A	5.3.4	[ ]Yes [ ]No [ ]N/A
MCu 3 NOT MCu 3	O N/A	5.3.5	[ ]Yes [ ]No [ ]N/A
	·L		
	M	5.4	[ ]Yes [ ]No
	1		
	М	5.5	[]Yes[]No
	0		[]Yes []No
	М	5.5.1, 5.5.5, 5.5.6	[ ]Yes [ ]No
	0	5.5.3, 5.5.5, 5.5.6	[ ]Yes [ ]No
	M	5.5.3, 5.5.5, 5.5.6	[ ]Yes [ ]No
	М	5.6	[ ]Yes [ ]No
	М	5.7	[ ]Yes [ ]No
	0	5.10	[ ]Yes [ ]No
iired. iired.	•		
		O ired.	O 5.10 ired.

## 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 - user

Item	Subsidiary capability: does the IUT support	Conditions for status	Status	Reference	Support	
	TEI management procedures	Olutuo	1			
SCu 1.1	the multiple use of the TEI assignment procedure to obtain a number of TEI values?	MCu 3.1.1 NOT MCu 3.1.1	O N/A	5.3.1	[ ]Yes [ ]No [ ]N/A	
SCu 1.2	the checking of whether the TEI received in an Identity Assigned message is already used, when no Identity Request message is outstanding?	MCu 3.1.1 NOT MCu 3.1.1	O N/A	5.3.2, 5.3.4.2	[ ]Yes [ ]No [ ]N/A	
	after having assumed a possible duplicate as message,	signment by chec	king a rece	eived Identity Ass	igned	
SCu 1.3.1	initiation of TEI removal?	MCu 3.3 NOT MCu 3.3	O.5 N/A	5.3.2, 5.3.4.2	[ ]Yes [ ]No [ ]N/A	
SCu 1.3.2	initiation of TEI identity verify procedures?	MCu 3.4 NOT MCu 3.4	O.5 N/A	5.3.2, 5.3.4.2	[ ]Yes [ ]No [ ]N/A	
	after having received a MDL-ERROR primitive indicating that the DL entity has assumed a possible duplicate assignment,					
SCu 1.4.1	initiation of TEI removal?	MCu 3.3 NOT MCu 3.3	O.6 N/A	5.3.2, 5.3.4.2	[ ]Yes [ ]No [ ]N/A	
SCu 1.4.2	initiation of TEI identity verify procedures?	MCu 3.4 NOT MCu 3.4	O.6 N/A	5.3.2, 5.3.4.2	[ ]Yes [ ]No [ ]N/A	
SCu 1.5	the sending of more than one TEI value within a single Identity check response message?	MCu 3.2 NOT MCu 3.2	O N/A	5.3.3	[ ]Yes [ ]No [ ]N/A	
	Multiple frame operations					
SCu 2	the transmission of I frames in the own receiver busy condition?		0	5.6.1	[ ]Yes [ ]No	
O.6 Supp	ort of at least one of these options is required. ort of at least one of these options is required.			•	•	
Comments:						

## A.7.3 Protocol data units

The tables in this subclause ask questions related to the support of Protocol Data Units (PDUs) in the user role.

## A.7.3.1 Frames received by the user

Indicating support for an item in table A.4 states that the implementation has the ability to recognize the frame specified by 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 ETS 300 402-2 [1].

Table A.4: Frames received - user

Item	Message: does the IUT support the receipt of a frame of type	Conditions for status	Status	Reference	Support
	Information transfer (I) format				
FRu 1	I command?		M	3.6.2, 5.6	[ ]Yes [ ]No
	Supervisory (S) format				
FRu 2	RR command?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FRu 3	RR response?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FRu 4	RNR command?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FRu 5	RNR response?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FRu 6	REJ command?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
FRu 7	REJ response?		М	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
	Unnumbered (U) format				
FRu 8	SABME command?		M	3.6.3, 5.5.1, 5.7	[]Yes []No
FRu 9	DISC command?		M	3.6.4, 5.5.3	[ ]Yes [ ]No
FRu 10	UA response?		M	3.6.9, 5.5	[ ]Yes [ ]No
FRu 11	DM response?		М	3.6.10, 5.5	[ ]Yes [ ]No
FRu 12	UI command?	MCu 2.1 or MCu 2.2 NOT (MCu 2.1 or	M O	3.6.5, 5.2.3, 5.3	[]Yes[]No
		MCu 2.2)			
FRu 13	FRMR response?		M	3.6.11, 5.8.6	[ ]Yes [ ]No
FRu 14	XID command?		M	3.6.12	[ ]Yes [ ]No
FRu 15	XID response?		M	3.6.12	[ ]Yes [ ]No
Comments:					

# A.7.3.2 Frames transmitted by the user

Indicating support for an item in table A.5 states that the implementation has the ability to transmit the frame specified by that item.

Table A.5: Frames transmitted - user

Item	Message:	Conditions for	Status	Reference	Support
	does the IUT support the transmission of a frame of type	status			
	Information transfer (I) format				
FTu 1	I command?		M	3.6.2, 5.6	[]Yes[]No
	Supervisory (S) format				
FTu 2	RR command?		M	3.6.6, 5.6, 5.10	[]Yes[]No
FTu 3	RR response?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FTu 4	RNR command?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FTu 5	RNR response?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FTu 6	REJ command?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
FTu 7	REJ response?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
	Unnumbered (U) format				
FTu 8	SABME command?		M	3.6.3, 5.5.1, 5.7	[ ]Yes [ ]No
FTu 9	DISC command?	MCu 5.2.1	M	3.6.4, 5.5.3	[ ]Yes [ ]No
		NOT MCu 5.2.1	0		
FTu 10	UA response?		M	3.6.9, 5.5	[ ]Yes [ ]No
FTu 11	DM response?		M	3.6.10, 5.5	[ ]Yes [ ]No
FTu 12	UI command?	MCu 2.1 or MCu 2.2	М	3.6.5, 5.2.2, 5.3	[ ]Yes [ ]No
		NOT (MCu 2.1 OR MCu 2.2)	0		
FTu 13	FRMR response?		Χ	3.6.11, 5, 5.8.6	[ ]Yes [ ]No
Comments:					

# A.7.4 PDU parameters

## A.7.4.1 Service data units

## A.7.4.1.1 Service data units received by the user

The tables in this subclause ask questions related to the support of Service Data Unit (SDU) parameters in UI frames received and transmitted by the IUT in the user role.

Table A.6: SDUs received in UI frames - user

Item	Does the IUT support in the UI frame	Conditions for	Status	Reference	Support
	information field the interpretation of	status			
PRu 1	Layer 3 messages?	FRu 12	0	5.2	[ ]Yes [ ]No
		NOT FRu 12	N/A		[ ]N/A
	Layer management messages				
PRu 2.1	Identity assign?	MCu 3.1.1	M	5.3.2	[ ]Yes [ ]No
		NOT MCu 3.1.1	N/A		[ ]N/A
PRu 2.2	Identity denied?	MCu 3.1.1	M	5.3.2	[ ]Yes [ ]No
		NOT MCu 3.1.1	N/A		[ ]N/A
PRu 2.3	Identity check request?	MCu 3.2	M	5.3.3	[ ]Yes [ ]No
		NOT MCu 3.2	N/A		[ ]N/A
PRu 2.4	Identity remove?	MCu 3.3	M	5.3.4	[ ]Yes [ ]No
		NOT MCu 3.3	N/A		[ ]N/A
Comments:					

## A.7.4.1.2 Service data units transmitted by the user

Table A.7: SDUs transmitted in UI frames - user

information field the inclusion of	status		Reference	Support
Layer 3 messages?	FTu 12	O N/A	5.2	[ ]Yes [ ]No [ ]N/A
Layer management messages	NOTTUTE	14// (		[ ]  1// (
Identity request?	MCu 3.1.1 NOT MCu 3.1.1	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
Identity check response?	MCu 3.2 NOT MCu 3.2	M N/A	5.3.3	[ ]Yes [ ]No [ ]N/A
Identity verify?	MCu 3.4 NOT MCu 3.4	M N/A	5.3.5	[ ]Yes [ ]No [ ]N/A
•	•			
	Layer management messages Identity request? Identity check response?	Layer management messages  Identity request?  Identity check response?  MCu 3.1.1  NOT MCu 3.1.1  MCu 3.2  NOT MCu 3.2  NOT MCu 3.2  NOT MCu 3.2  MCu 3.4	NOT FTu 12   N/A	NOT FTu 12   N/A

## A.7.4.2 Address field variables

The tables in this subclause ask questions related to the support of the values of certain fields of the address field received and transmitted by the IUT in the user role.

Table A.8: SAPI values supported - user

Item	Does the IUT support the	Conditions for status	Status	Reference	Support
		รเสเนร			
SAPu 1	SAPI value 0?		O.7	3.3.3	[ ]Yes [ ]No
SAPu 2	SAPI value 12?		O.7	3.3.3	[ ]Yes [ ]No
SAPu 3	SAPI value 16?		0.7	3.3.3	[ ]Yes [ ]No
SAPu 4	SAPI value 63?	MCu 3	M	3.3.3, 5.3.1	[ ]Yes [ ]No
		NOT MCu 3	N/A		[ ]N/A

Support of at least one of these options is required. O.7 Supp Comments:

Table A.9: TEI values supported - user

Item	Does the IUT support the	Conditions for	Status	Reference	Support
		status			
TEIu 1	TEI value 0 exclusively?	MCu 1.2	M	3.3.4.2, Annex A	[ ]Yes [ ]No
	·	NOT MCu 1.2	N/A		[ ]N/A
TElu 2	TEI values in the range from 0 to 63?	MCu 3.1.2	М	3.3.4.2	[ ]Yes [ ]No
	-	NOT MCu 3.1.2	N/A		[ ]N/A
TEIu 3	TEI values in the range from 64 to 126?	MCu 3.1.1	M	3.3.4.2	[ ]Yes [ ]No
	-	NOT MCu 3.1.1	N/A		[ ]N/A
TElu 4	TEI value 127?	MCu 2.1	М	3.3.4.1	[ ]Yes [ ]No
		NOT MCu 2.1	N/A		[ ]N/A

Comments:

#### A.7.5 **Timers**

Indicating support for an item in table A.10 states that the implementation has a timer that operates in accordance with the description in subclause 5.9 and the relevant behaviour in ETS 300 402-2 [1].

Table A.10: Timers - user

Item	Timer:	Conditions for	Status	Referenc	Support	Supported
	does the IUT support	status		е		value(s)
TMu 1	T200 (default value1 s)?		M	5.9.1	[ ]Yes [ ]No	
TMu 2	T202 (default value 2 s)?	MCu 1.1	M	5.9.7	[ ]Yes [ ]No	
		MCu 1.2	N/A		[ ]N/A	
TMu 3	T203 (default value 10 s)?	MCu 5.5	M	5.9.8	[ ]Yes [ ]No	
		NOT MCu 5.5	N/A		[ ]N/A	

Comments:

## A.7.6 System parameters

Indicating support for an item in table A.11 states that the implementation has implemented the system parameter.

Table A.11: Parameters - user

ltem	System parameter: does the IUT support	Conditions for status	Status	Referenc e	Support	Supported value(s)
SPu 1	N200 (default value 3)?		M	5.9.2	[ ]Yes [ ]No	
SPu 2	N201 (default value 260)?		M	5.9.3	[ ]Yes [ ]No	
SPu 3	k (default values 1, 3, 7)?		M	5.9.5	[ ]Yes [ ]No	
Comments:						

## A.8 Network

The tables provided in this subclause need only to be completed for network implementations.

Prerequisite: R 2.2

## A.8.1 Major capabilities

Each question in table A.12 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 ETS 300 402-2 [1]. Answering "No" to a particular question states that the implementation does not support that function of the protocol.

Table A.12: Major capabilities - network

	Major capability:	Conditions for status	Status	Reference	Support
	does the IUT support				
	General	Т	I	1.	le m c
MCn 1.1	configurations using more than one Terminal Endpoint Identifier (TEI)?		O.8	Annex A	[ ]Yes [ ]No
MCn 1.2	point-to-point configurations using only one TEI value?		O.8	Annex A	[ ]Yes [ ]No
	Procedures for unacknowledged information	on transfer			
MCn 2.1	the unacknowledged information transfer service in the broadcast data link (using TEI value 127)?	MCn 3 NOT MCn 3	M O	5.2	[ ]Yes [ ]No
MCn 2.2	the unacknowledged information transfer service in a point-to-point data link (using a TEI value other than 127)?		0	5.2, 5.2.1	[ ]Yes [ ]No
	TEI management procedure				
MCn 3	TEI management procedures?	MCn 1.1 MCn 1.2	M O	5.3 Annex A	[ ]Yes [ ]No
MCn 3.1.1	the automatic TEI assignment procedures?	MCn 3 NOT MCn 3	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
MCn 3.1.2	the non-automatic TEI assignment procedures?	MCn 3 NOT MCn 3	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
MCn 3.2	the TEI check procedures?	MCn 3 NOT MCn 3	M N/A	5.3.3	[ ]Yes [ ]No [ ]N/A
MCn 3.3	the TEI removal procedures?	MCn 3 NOT MCn 3	M N/A	5.3.4	[ ]Yes [ ]No [ ]N/A
MCn 3.4	the TEI identity verify procedures?	MCn 3 NOT MCn 3	O N/A	5.3.5	[ ]Yes [ ]No [ ]N/A
	Initialization of data link layer parameters		1 -		
MCn 4	the procedures for initialization of the data link parameters to the default values?		M	5.4	[ ]Yes [ ]No
	Multiple frame operations			•	
MCn 5	multiple frame operations?		М	5.5	[ ]Yes [ ]No
MCn 5.1.1	the self initiated establishment of multiple frame operation?		0	5.5.1, 5.5.5, 5.5.6	[ ]Yes [ ]No
MCn 5.1.2	the peer initiated establishment of multiple frame operation?		М	5.5.1, 5.5.5, 5.5.6	[ ]Yes [ ]No
MCn 5.2.1	the self initiated termination of multiple frame operation?		0	5.5.3, 5.5.5, 5.5.6	[ ]Yes [ ]No
MCn 5.2.2	the peer initiated termination of multiple frame operation?		М	5.5.3, 5.5.5, 5.5.6	[ ]Yes [ ]No
MCn 5.3	information transfer in multiple frame operation?		М	5.6	[ ]Yes [ ]No
MCn 5.4	the re-establishment of multiple frame operation?		М	5.7	[ ]Yes [ ]No
	the data link layer monitor function?		М	5.10	[ ]Yes [ ]No
MCn 5.5 O.8 Suppo	ort of one and only one of these options is requ				

# A.8.2 Subsidiary capabilities

Indicating support for an item in table A.13 states that the implementation supports special cases or options within a major capability.

Table A.13: Subsidiary capabilities - network

Item	Subsidiary capability:	Conditions for	Status	Reference	Support
	does the IUT support	status			
SCn 1	not used				
	Multiple frame operations				
SCn 2	the transmission of I frames in the own		0	5.6.1	[ ]Yes [ ]No
	receiver busy condition?				
Comments:					<u> </u>

## A.8.3 Protocol data units

The tables in this subclause ask questions related to the support of PDUs in the network role.

## A.8.3.1 Frames received by the network

Indicating support for an item in table A.14 states that the implementation has the ability to recognize the frame 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 ETS 300 402-2 [1].

Table A.14: Frames received - network

Item	Message: does the IUT support the receipt of a	Conditions for status	Status	Reference	Support
	frame of type				
	Information transfer (I) format	1	l .	1	•
FRn 1	I command?		M	3.6.2, 5.6	[ ]Yes [ ]No
	Supervisory (S) format				
FRn 2	RR command?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FRn 3	RR response?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FRn 4	RNR command?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FRn 5	RNR response?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FRn 6	REJ command?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
FRn 7	REJ response?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
	Unnumbered (U) format				
FRn 8	SABME command?		M	3.6.3, 5.5.1, 5.7	[ ]Yes [ ]No
FRn 9	DISC command?		M	3.6.4, 5.5.3	[ ]Yes [ ]No
FRn 10	UA response?		M	3.6.9, 5.5	[ ]Yes [ ]No
FRn 11	DM response?		M	3.6.10, 5.5	[ ]Yes [ ]No
FRn 12	UI command?	MCn 2.1 OR	M	3.6.5, 5.2.3, 5.3	[ ]Yes [ ]No
		MCn 2.2			[ ]N/A
		NOT (MCn 2.1 OR MCn 2.2)	N/A		
FRn 13	FRMR response?		M	3.6.11, 5.8.6	[ ]Yes [ ]No
FRn 14	XID command?		M	3.6.12	[ ]Yes [ ]No
FRn 15	XID response?		M	3.6.12	[ ]Yes [ ]No
Comments:				•	

## A.8.3.2 Frames transmitted by the network

Indicating support for an item in table A.15 states that the implementation has the ability to transmit the frame listed in that item.

Table A.15: Frames transmitted - network

Item	Message: does the IUT support the transmission of a frame of type	Conditions for status	Status	Reference	Support
	Information transfer (I) format	•	1	1	1
FTn 1	I command?		M	3.6.2, 5.6	[]Yes[]No
	Supervisory (S) format				
FTn 2	RR command?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FTn 3	RR response?		M	3.6.6, 5.6, 5.10	[ ]Yes [ ]No
FTn 4	RNR command?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FTn 5	RNR response?		M	3.6.8, 5.6, 5.10	[ ]Yes [ ]No
FTn 6	REJ command?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
FTn 7	REJ response?		M	3.6.7, 5.6, 5.8.1	[ ]Yes [ ]No
	Unnumbered (U) format				
FTn 8	SABME command?		M	3.6.3, 5.5.1, 5.7	[ ]Yes [ ]No
FTn 9	DISC command?	MCn 5.2.1 NOT MCn 5.2.1	M O	3.6.4, 5.5.3	[ ]Yes [ ]No
FTn 10	UA response?		M	3.6.9, 5.5	[ ]Yes [ ]No
FTn 11	DM response?		М	3.6.10, 5.5	[ ]Yes [ ]No
FTn 12	UI command?	MCn 2.1 OR MCn 2.2	М	3.6.5, 5.2.2, 5.3	[ ]Yes [ ]No [ ]N/A
		NOT (MCn 2.1 OR MCn 2.2)			
FTn 13	FRMR response?		Χ	3.6.11, 5, 5.8.6	[ ]Yes [ ]No
Comments:					

# A.8.4 PDU parameters

## A.8.4.1 Service data units

### A.8.4.1.1 Service data units received by the network

The tables in this subclause ask questions related to the support of SDU parameters in UI frames received and transmitted by the IUT in the network role.

Table A.16: SDUs received in UI frames - network

Item	Does the IUT support in the UI frame information field the interpretation of	Conditions for status	Status	Reference	Support
PRn 1	Layer 3 messages?	FRn 12 NOT FRn 12	O N/A	5.2	[ ]Yes [ ]No [ ]N/A
	Layer management messages		•		
PRn 2.1	Identity request?	MCn 3.1.1 NOT MCn 3.1.1	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
PRn 2.2	Identity check response?	MCn 3.2 NOT MCn 3.2	M N/A	5.3.3	[ ]Yes [ ]No [ ]N/A
PRn 2.3	Identity verify?	MCn 3.4 NOT MCn 3.4	M N/A	5.3.5	[ ]Yes [ ]No [ ]N/A
Comments:					

## A.8.4.1.2 Service data units transmitted by the network

Table A.17: SDUs transmitted in UI frames - network

Item	Does the IUT support in the UI frame information field the inclusion of	Conditions for status	Status	Reference	Support
PTn 1	Layer 3 messages?	FTn 12	0	5.2	[ ]Yes [ ]No
	_ayo. o mossagos.	NOT FTn 12	N/A	0.2	[ ]N/A
	Layer management messages	•	•	•	15.2
PTn 2.1	Identity assign?	MCn 3.1.1 NOT MCn 3.1.1	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
PTn 2.2	Identity denied?	MCn 3.1.1 NOT MCn 3.1.1	M N/A	5.3.2	[ ]Yes [ ]No [ ]N/A
PTn 2.3	Identity check request?	MCn 3.2 NOT MCn 3.2	M N/A	5.3.3	[ ]Yes [ ]No [ ]N/A
PTn 2.4	Identity remove?	MCn 3.3 NOT MCn 3.3	M N/A	5.3.4	[ ]Yes [ ]No [ ]N/A
Comments:					

## A.8.4.2 Address field variables

The tables in this subclause ask questions related to the support of the values of certain fields of the address field received and transmitted by the IUT in the network role.

Table A.18: SAPI values supported - network

Item	Does the IUT support the	Conditions for status	Status	Reference	Support
SAPn 1	SAPI value 0?		0.9	3.3.3	[ ]Yes [ ]No
SAPn 2	SAPI value 12?		0.9	3.3.3	[ ]Yes [ ]No
SAPn 3	SAPI value 16?		0.9	3.3.3	[ ]Yes [ ]No
SAPn 4	SAPI value 63?	MCn 3	M	3.3.3, 5.3.1	[ ]Yes [ ]No
		NOT MCn 3	N/A		[ ]N/A

O.9 Support of at least one of these options is required. Comments:

Table A.19: TEI values supported - network

Item	Does the IUT support the	Conditions for	Status	Reference	Support
		status			
TEIn 1	TEI value 0 exclusively?	MCn 1.2	M	3.3.4.2, Annex A	[ ]Yes [ ]No
	·	NOT MCn 1.2	N/A		[ ]N/A
TEIn 2	TEI values in the range from 0 to 63?	MCn 3.1.2	M	3.3.4.2	[ ]Yes [ ]No
		NOT MCn 3.1.2	N/A		[ ]N/A
TEIn 3	TEI values in the range from 64 to 126?	MCn 3.1.1	M	3.3.4.2	[ ]Yes [ ]No
		NOT MCn 3.1.1	N/A		[ ]N/A
TEIn 4	TEI value 127?	MCn 2.1	M	3.3.4.1	[ ]Yes [ ]No
		NOT MCn 2.1	N/A		[ ]N/A

Comments:

#### A.8.5 **Timers**

Indicating support for an item in table A.20 states that the implementation has a timer that operates in accordance with the description in subclause 5.9 and the relevant behaviour in ETS 300 402-2 [1].

Table A.20: Timers - network

Item	Timer:	Conditions for	Status	Referenc	Support	Supported
	does the IUT support	status		е		value(s)
TMn 1	T200 (default value 1 s)?		M	5.9.1	[ ]Yes [ ]No	
TMn 2	T201 (default value 1 s)?	MCn 1.1	M	5.9.6	[ ]Yes [ ]No	
		MCn 1.2	N/A		[ ]N/A	
TMn 3	T203 (default value 10 s)?	MCn 5.5	M	5.9.8	[ ]Yes [ ]No	
		NOT MCn 5.5	N/A		[ ]N/A	

Comments:

# A.8.6 System parameters

Indicating support for an item in table A.21 states that the implementation has implemented the system parameter.

Table A.21: Parameters - network

Item	System parameter: does the IUT support	Conditions for status	Status	Referenc e	Support	Supported value(s)
SPn 1	N200 (default value 3)?		М	5.9.2	[ ]Yes [ ]No	` ,
SPn 2	N201 (default value 260)?		М	5.9.3	[ ]Yes [ ]No	
SPn 3	k (default values 1, 3, 7)?		М	5.9.5	[ ]Yes [ ]No	
Comments:						

# Annex B (normative): PICS proforma for annex ZA of ETS 300 402-2

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.

## B.1 Guidance for completing the PICS proforma

## B.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 annex ZA of ETS 300 402-2 [1] may provide information in a standardized manner.

The PICS proforma is subdivided into clauses as follows:

- B.1: instructions for completing the various parts of the PICS proforma;
- B.2: identification of the implementation;
- B.3: identification of the protocol to which this PICS proforma applies;
- B.4: explanation of the PICS proforma tables;
- B.5: global statement of conformance;
- B.6: Roles; and
- B.7: PICS questions.

## B.1.2 Symbols, 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 [3].

#### Item column:

The item column contains a unique reference (a mnemonic plus a number) for each item within the PICS proforma.

#### 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 [3], are used for the status column:

M Mandatory - the capability is required to be supported.

O Optional - the capability may be supported or not.

N/A Not Applicable - in the given context, it is impossible to use the capability.

O.i qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer that identifies an unique group of related optional items and the logic of their selection, defined below

the table.

NOTE: To support a capability means that the capability is implemented in conformance to annex ZA of ETS 300 402-2 [1].

#### Reference column:

Except where explicitly stated, the reference column refers to the appropriate parts of annex ZA of ETS 300 402-2 [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 ETS 300 402-2 [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 [3], is used for the support column:

[] Yes [] No Tick "Yes" if item is supported, tick "No" if item is not supported.

[] N/A Tick "N/A" if the item is "not applicable".

## B.1.3 Instructions for completing the PICS proforma

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

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

# B.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.

	Date of the statement
B.2.2	Implementation Under Test (IUT) identification

# System Under Test (SUT) identification B.2.3 SUT name: Hardware configuration: Operating system: Product supplier B.2.4 Name: E-mail address: Address: Telephone number: Facsimile number: Additional information: B.2.5 Client Name: E-mail address:

Address:
Telephone number:
receptione number.
Facsimile number:
Additional information:
B.2.6 PICS contact person
Name:
E-mail address:
Address:
T.11
Telephone number:
Facsimile number:
r destrine number.
Additional information:

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

This PICS proforma applies to the protocol specified in:

Annex ZA of ETS 300 402-2 (1995): "Inter-exchange signalling data link layer protocol in Private Telecommunication Networks (PTNs) - Applicability and additions to frame structure, elements of procedures, formats of fields, elements for layer communication, peer-to-peer procedures to accommodate PTN inter-exchange requirements".

## B.4 The PICS proforma tables

## B.4.1 Correspondence to a physical interface

The "implementation" (IUT) about which this PICS proforma asks questions corresponds to a layer 2 implementation on top of ONE physical interface. If the SUT implements more than one interface structure, then a layer 2 PICS shall be created for each type of interface provided by the SUT.

#### B.4.2 Structure of the tables

The supplier shall provide answers to the questions relating to the capabilities of the IUT.

Clause B.7 concerns the capabilities of the IUT.

## B.5 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced standard?

[ ] Yes

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 comments field at the bottom of each table or on attached pages.

## B.6 Roles

No items requiring response.

# B.7 PICS questions

# B.7.1 Major capabilities

Each question in table B.1 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 annex ZA of ETS 300 402-2 [1]. Answering "No" to a particular question states that the implementation does not support that function of the protocol.

Table B.1: Major capabilities

Major capability: does the IUT support	Conditions for status	Status	Reference	Support
General			•	
point-to-point configurations using only Terminal Endpoint Identifier (TEI) value 0?		М	ZA	[ ]Yes [ ]No
	on transfer			
the unacknowledged information transfer service?		0	ZA.4.2	[ ]Yes [ ]No
TEI management procedure				
the non-automatic TEI assignment procedures?		M	ZA.4.3.2	[ ]Yes [ ]No
link parameters to the default values?		M	ZA.4.4	[ ]Yes [ ]No
Multiple frame operations				
multiple frame operations?		M	ZA.4.5, ZA.4.6	[ ]Yes [ ]No
the self initiated establishment of multiple frame operation?		0	ZA.4.5.1, ZA.4.5.5, ZA.4.5.6	[ ]Yes [ ]No
the peer initiated establishment of multiple frame operation?		М	ZA.4.5.1, ZA.4.5.5, ZA.4.5.6	[ ]Yes [ ]No
the self initiated termination of multiple frame operation?		0	ZA.4.5.2, ZA.4.5.5,	[ ]Yes [ ]No
the peer initiated termination of multiple frame operation?		М	ZA.4.5.2, ZA.4.5.5,	[ ]Yes [ ]No
information transfer in multiple frame operation?		М	ZA.4.6	[ ]Yes [ ]No
the re-establishment of multiple frame operation?		М	ZA.4.7	[ ]Yes [ ]No
the data link layer monitor function?		М	ZA.410	[ ]Yes [ ]No
F t t t t t t t t t t t t t t t t t t t	Procedures for unacknowledged information to the unacknowledged information transfer service?  FILI management procedure the non-automatic TEI assignment procedures?  Initialization of data link layer parameters to the default values?  Multiple frame operations multiple frame operations?  The self initiated establishment of multiple rame operation?  The self initiated termination of multiple frame operation?  The peer initiated termination of multiple frame operation?  The re-establishment of multiple frame operation?	Procedures for unacknowledged information transfer the non-automatic TEI assignment the procedures for initialization of the data intralization of data link layer parameters the procedures for initialization of the data ink parameters the procedures for initialization of the data ink parameters the procedures for initialization of the data ink parameters the procedures for initialization of the data ink parameters the procedures for initialization of the data ink parameters the unacknowledged information of the data ink parameters the procedures the unacknowledged information of the data ink parameters the procedures the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the unacknowledged information of the data ink parameters the non-automatic TEI assignment the non-automatic TEI assignment the non-automatic TEI assignment the non-automati	point-to-point configurations using only Ferminal Endpoint Identifier (TEI) value 0?  Procedures for unacknowledged information transfer the unacknowledged information of transfer transfer in multiple frame the unacknowledged information of transfer transfer in multiple frame the unacknowledged information transfer in multiple frame the unacknowledged information of transfer transfer in multiple frame the unacknowledged information transfer transfe	point-to-point configurations using only Ferminal Endpoint Identifier (TEI) value 0?  Procedures for unacknowledged information transfer the unacknowledged information transfer service?  FEI management procedure the non-automatic TEI assignment procedures?  Initialization of data link layer parameters the procedures for initialization of the data link parameters to the default values?  Multiple frame operations  Multiple frame operations?  Multiple frame operations?  Multiple frame operation?  Multiple frame operation?

## B.7.2 Subsidiary capabilities

Indicating support for an item in table B.2 states that the implementation supports special cases or options within a major capability.

Table B.2: Subsidiary capabilities

Item	Subsidiary capability: does the IUT support	Conditions for status	Status	Reference	Support
	Multiple frame operations				
SC 1	the transmission of I frames in the own receiver busy condition?		0	ZA.4.6.1	[ ]Yes [ ]No
Comments:					

## B.7.3 Protocol data units

The tables in this subclause ask questions related to the support of Protocol Data Units (PDUs).

#### B.7.3.1 Frames received

Indicating support for an item in table B.3 states that the implementation has the ability to recognize the frame specified by 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 annex ZA of ETS 300 402-2 [1].

Table B.3: Frames received

Item	Message: does the IUT support the receipt of a frame of type	Conditions for status	Status	Reference	Support
	Information transfer (I) format				
FR 1	I command?		М	ZA.2.6.2, ZA.4.6	[ ]Yes [ ]No
	Supervisory (S) format				
FR 2	RR command?		M	ZA.2.6.6, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FR 3	RR response?		M	ZA.2.6.6, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FR 4	RNR command?		М	ZA.2.6.8, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FR 5	RNR response?		M	ZA.2.6.8, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FR 6	REJ command?		M	ZA.2.6.7, ZA.4.6, ZA.4.8.1	[ ]Yes [ ]No
FR 7	REJ response?		М	ZA.2.6.7, ZA.4.6, ZA.4.8.1	[ ]Yes [ ]No
	Unnumbered (U) format	·	·I.	,	1
FR 8	SABME command?		М	ZA.2.6.3, ZA.4.5.1, ZA.4.7	[ ]Yes [ ]No
FR 9	DISC command?		М	ZA.2.6.4, ZA.4.5.3	[ ]Yes [ ]No
FR 10	UA response?		М	ZA.2.6.9, ZA.4.5	[ ]Yes [ ]No
FR 11	DM response?		M	ZA.2.6.10, ZA.4.5	[]Yes []No
FR 12	UI command?	MC 2 NOT MC 2	M O	ZA.2.6.5, ZA.4.2	[ ]Yes [ ]No
FR 13	FRMR response?		M	ZA.2.6.11, ZA.4.8.6	[ ]Yes [ ]No
FR 14	XID command?		М	ZA.2.6.12	[]Yes[]No
FR 15	XID response?		М	ZA.2.6.12	[]Yes[]No
Comments:					

## B.7.3.2 Frames transmitted

Indicating support for an item in table B.4 states that the implementation has the ability to transmit the frame specified by that item.

Table B.4: Frames transmitted

Item	Message: does the IUT support the transmission of a frame of type	Conditions for status	Status	Reference	Support
	Information transfer (I) format				
FT 1	I command?		M	ZA.2.6.2, ZA.4.6	[ ]Yes [ ]No
	Supervisory (S) format				
FT 2	RR command?		M	ZA.2.6.6, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FT 3	RR response?		М	ZA.2.6.6, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FT 4	RNR command?		М	ZA.2.6.8, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FT 5	RNR response?		М	ZA.2.6.8, ZA.4.6, ZA.4.10	[ ]Yes [ ]No
FT 6	REJ command?		M	ZA.2.6.7, ZA.4.6, ZA.4.8.1	[ ]Yes [ ]No
FT 7	REJ response?		M	ZA.2.6.7, ZA.4.6, ZA.4.8.1	[ ]Yes [ ]No
	Unnumbered (U) format		•		
FT 8	SABME command?		M	ZA.2.6.3, ZA.4.5.1, ZA.4.7	[ ]Yes [ ]No
FT 9	DISC command?	MC 5.2.1	М	ZA.2.6.4,	[ ]Yes [ ]No
		NOT MC 5.2.1	0	ZA.4.5.3	
FT 10	UA response?		М	ZA.2.6.9, ZA.4.5	[ ]Yes [ ]No
FT 11	DM response?		M	ZA.2.6.10, ZA.4.5	[ ]Yes [ ]No
FT 12	UI command?		0	ZA.2.6.5, ZA.4.2	[ ]Yes [ ]No
FT 13	FRMR response?		Х	ZA.2.6.11, ZA.4.8.6	[ ]Yes [ ]No
Comments:			•	,	

# B.7.4 PDU parameters

The tables in this subclause ask questions related to the support of the values of certain fields of the address field received and transmitted by the IUT.

Table B.5: SAPI values supported

Item	Does the IUT support the	Conditions for status	Status	Reference	Support
SAP 1	SAPI value 0?		M	ZA.2.3.3	[ ]Yes [ ]No
Comments:					

#### Table B.6: TEI values supported

Item	Does the IUT support the	Conditions for status	Status	Reference	Support
TEI 1	TEI value 0 exclusively?		M	ZA.2.3.4	[ ]Yes [ ]No
Comments:					

## B.7.5 Timers

Indicating support for an item in table B.7 states that the implementation has a timer that operates in accordance with the description in subclause ZA.4.9 of ETS 300 402-2 [1] and the relevant behaviour in annex ZA of ETS 300 402-2 [1].

**Table B.7: Timers** 

Item	Timer: does the IUT support	Conditions for status	Status	Referenc e	Support	Supported value(s)
TM 1	T200 (default value 1 s)?		M	ZA.4.9	[ ]Yes [ ]No	
TM 2	T203 (default value 10 s)?		M	ZA.4.9	[ ]Yes [ ]No	
Comments:		•				

# B.7.6 System parameters

Indicating support for an item in table B.8 states that the implementation has implemented the system parameter.

**Table B.8: Parameters** 

Item	System parameter: does the IUT support	Conditions for status	Status	Referenc e	Support	Supported value(s)		
SP 1	N200 (default value 3)?		М	ZA.4.9	[ ]Yes [ ]No			
SP 2	N201 (default value 260)?		М	ZA.4.9	[ ]Yes [ ]No			
SP 3	k (default values 3, 7)? (note)		М	ZA.4.9	[ ]Yes [ ]No			
NOTE: The use of a k value of 7 is required where a signalling channel of greater than or equal to 64 kbit/s is used. The use of a k value of 3 is required where a signalling channel of less than 64 kbit/s is used. Additional values of k may be used on particular inter-PTNX links by special arrangement between the two PTNXs.								
Comments:								

# Annex C (informative): Changes to the present document compared with ETS 300 402-4 edition 1

The status of the data link monitoring function for the network (see MCn 5.5) was changed from 'optional' to 'mandatory'.

# History

Document history							
Edition 1	September 1996	Publication as ETS 300 402-4					
V1.2.2	July 1999	One-step Approval Procedure	OAP 9949:	1999-07-07 to 1999-11-05			