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Širokopasovno digitalno omrežje z integriranimi storitvami (B-ISDN) - Protokol digitalne naročniške signalizacije št. 2 (DSS2) - Specifikacija 3. plasti vmesnika B-ISDN uporabnik-omrežje za možnost komutirane navidezne poti - 2. del: Izjava o skladnosti izvedbe protokola (PICS) - Proforma specifikacija

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

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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

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Foreword

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

The present document is part 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 [5] (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".

National transposition dates	
Date of adoption of this EN:	25 August 2000
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Introduction

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

EN 301 487-1 [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.

[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: "Broadband Integrated Services Digital Network (B-ISDN) - 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 9577: "Information technology - Protocol identification in the network layer".

[22] ITU-T Recommendation Q.33: "Protection against the effects of faulty transmission on groups of circuits".

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

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 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.

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:

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Hardware configuration:

.....

.....

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Operating system:

.....

A.2.4 Product supplier

Name:

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Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

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Additional information:

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