



**SLOVENSKI STANDARD**  
**SIST EN 300 443-2 V1.2.3:2003**  
**01-december-2003**

ü]fc\_cdUgcj bc`X][ ]HJbc`ca fYy`Y`n`]bhY[ f]fUbj]a ]`g]cf]h] Ua ]`f6 !=G8 BŁĚ`Dfc]c`c`  
X][ ]HJbY`bUfc b]y`Y`g][ bU]nUWY`Y`y`h`r`&f8 GG&ŁĚ`GdYWZ]\_UWY`U`f`Y`h`Y`d`Ug]h`j`a`Y`gb]\_U  
i`dcfUVb]\_!ca fYy`Y`6 !=G8 B`nU`fa ]`Y`b`Y`cgbcj bY[ U`\_]WU#bcg]WUĚ`&`r`XY`.`n`Uj`Uc  
g`\_UXbcg]h`]nj YXVY`dfc]c`c`U`fD`Z`GLĚ`Dfc]c`fa UgdYWZ]\_UWY`U

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 2: Protocol Implementation Conformance Statement (PICS) proforma specification

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**ICS:**

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
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# ETSI EN 300 443-2 V1.2.3 (1999-09)

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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 basic call/bearer control;  
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 Signalling Protocols and Switching (SPS).

The present document is part 2 of a multi-part standard covering the Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control, as described below:

Part 1: "Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]";

**Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";**

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";

Part 5: "Test Suite Structure and Test Purposes (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:	3 September 1999
Date of latest announcement of this EN (doa):	31 December 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 June 2000
Date of withdrawal of any conflicting National Standard (dow):	30 June 2000

## 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 300 443-1 [1] is derived from ITU-T Recommendation Q.2931 [5]. 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.2931 [5] with the modifications applied by EN 300 443-1 [1]. This has been done to assist understanding of how the European requirements relate to the requirements contained within ITU-T Recommendation Q.2931 [5] (and in particular, to the options specified in that recommendation that are selected by the present document). In practical terms, this means that a number of capabilities specified by ITU-T Recommendation Q.2931 [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)).

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## 1 Scope

The present document 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 basic call control defined in EN 300 443-1 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3].

The supplier of a protocol implementation that is claimed to conform to EN 300 443-1 [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, subsequent revisions do apply.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

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- [1] EN 300 443-1 (1.3): "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]".
- [2] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [3] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [4] EN 301 068-2: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [5] ITU-T Recommendation Q.2931 (1995): "Digital Subscriber Signalling System No. 2 (DSS 2) – User-Network Interface (UNI) layer 3 specification for basic call/connection control Modified by Rec. Q.2971 (10/1995)".

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## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 300 443-1 [1], ISO/IEC 9646-1 [2], and ISO/IEC 9646-7 [3] apply. In particular, the following terms defined in ISO/IEC 9646-1 [2] apply:

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

AAL	ATM Adaptation Layer
ATM	Asynchronous Transfer Mode
ATS	Abstract Test Suite
BCOB	Broadband Class Of Bearer
B-ISDN	Broadband ISDN
CBR	Constant Bit Rate
CLP	Cell Loss Priority
CPCS	Common Part Convergence Sublayer
DSS2	Digital Subscriber Signalling System No. two
DTE	Data Terminal Equipment
FEC	Forward Error Correction
HDLC	High-level Data Link Control
HDLC ABM	HDLC Asynchronous Balanced Mode
HDLC ARM	HDLC Asynchronous Response Mode
HDLC NRM	HDLC Normal Response Mode
ICS	Implementation Conformance Statement
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
LAN	Local Area Network
LAPB	Link Access Protocol Balanced
MID	Multiplexing Identifier
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
SDU	Service Data Unit
SLP	Single Link Procedure
SSCOP	Service Specific Connection-Oriented Protocol
SSCS	Service Specific Convergence Sublayer
SUT	System Under Test
TSS&TP	Test Suite Structure and Test Purposes
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 300 443-1 [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.

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## Annex A (normative): PICS proforma for EN 300 443-1

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 300 443-1 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.

##### **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, 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.2931 as modified by EN 300 443-1 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 300 443-1 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, is used for the support column:

<input type="checkbox"/> Yes	Tick "Yes" if item is supported.
<input type="checkbox"/> No	Tick "No" if item is not supported.
<input type="checkbox"/> 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 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 Implementation Under Test (IUT) identification

IUT name:

.....  
.....

IUT version:

.....

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

SUT name:

.....  
.....

Hardware configuration:

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

Operating system:

.....

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## A.2.4 Product supplier

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Name:

.....

Address:

.....  
.....  
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Telephone number:

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Facsimile number:

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E-mail address:

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Additional information:

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.....