



SLOVENSKI STANDARD
SIST EN 300 196-2 V1.3.2:2004
01-april-2004

8 [[]HJbc`ca fYy`Y`n]bhY[f]fUb]a]gfcf]hj Ua]f!G8 BŁ!` ; YbYf] b]Z b_Wy`g_]dfcfc_c`
nUdcXdcfc`Xcdc`b]b]`gfcf]hj`!`Dfcfc_c`X[[]HJbY`bUfc b]y`Y`g[[bU]nUWY`yH`%
fB GG%Ł!`&`"XY.`:nUj U`c`g`UXbcgh]`nj YXVY`dfcfc_c`UfD=7 GŁ!`DfcZ`fa U
gdYWZ`_UWY`

Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification

ITeH STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 300 196-2 V1.3.2:2004](https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4cecf43d514a/sist-en-300-196-2-v1-3-2-2004)

<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4cecf43d514a/sist-en-300-196-2-v1-3-2-2004>

Ta slovenski standard je istoveten z: EN 300 196-2 Version 1.3.2

ICS:

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
--------	---	--

SIST EN 300 196-2 V1.3.2:2004 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 300 196-2 V1.3.2:2004](https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004)

<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004>

ETSI EN 300 196-2 V1.3.2 (2001-06)

European Standard (Telecommunications series)

**Integrated Services Digital Network (ISDN);
Generic functional protocol for the support
of supplementary services;
Digital Subscriber Signalling System No. one (DSS1) protocol;
Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification**

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST EN 300 196-2 V1.3.2:2004](https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004)

<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004>



Reference

REN/SPAN-05135-2

KeywordsDSS1, functional, generic, ISDN, PICS,
supplementary service**ETSI**650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

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

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

iTeh **STANDARD PREVIEW**
(standards.iteh.ai)

SIST EN 300 196-2 V1.3.2:2004<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004>

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at <http://www.etsi.org/tb/status/>

If you find errors in the present document, send your comment to:
editor@etsi.fr

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2001.
All rights reserved.

Contents

Intellectual Property Rights	4
Foreword	4
1 Scope	5
2 References	5
3 Definitions, symbols and abbreviations	6
3.1 Definitions	6
3.2 Symbols	6
3.3 Abbreviations	6
4 Conformance	7
Annex A (normative): PICS proforma for EN 300 196-1	8
A.1 Instructions for completing the PICS proforma	8
A.1.1 Identification of the implementation	8
A.1.2 Global statement of conformance	8
A.1.3 Explanation of PICS proforma clauses	8
A.1.4 Symbols, abbreviations and terms	9
A.2 Identification of the implementation	9
A.2.1 Implementation Under Test (IUT) identification	9
A.2.2 System Under Test (SUT) identification	9
A.2.3 Product supplier	10
A.2.4 Client	10
A.2.5 PICS contact person	11
A.3 PICS/SCS relationship	11
A.4 Identification of the protocol	11
A.5 Global statement of conformance	12
A.6 Roles	12
A.7 User	12
A.7.1 Major capabilities	12
A.7.2 Subsidiary capabilities	14
A.7.3 Protocol data units	15
A.7.4 Protocol data unit parameters	17
A.7.4.1 Protocol data unit parameters received	17
A.7.4.2 Protocol data unit parameters transmitted	28
A.7.5 Timers	38
A.7.6 Call states	39
A.8 Network	39
A.8.1 Major capabilities	39
A.8.2 Subsidiary capabilities	41
A.8.3 Protocol data units	42
A.8.4 Protocol data unit parameters	44
A.8.4.1 Protocol data unit parameters received	44
A.8.4.2 Protocol data unit parameters transmitted	54
A.8.5 Timers	65
A.8.6 Call states	66
Annex B (informative): Bibliography	67
History	68

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

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 deliverable covering the Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol, as identified below:

- Part 1: "Protocol specification";
- 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:	8 June 2001
Date of latest announcement of this EN (doa):	30 September 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2002
Date of withdrawal of any conflicting National Standard (dow):	31 March 2002

1 Scope

The present document is applicable to the generic functional protocol for the support of supplementary services for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators at the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [6]) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol.

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the ISDN DSS1 generic functional protocol for the support of supplementary services as specified in EN 300 196-1 [2] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [5].

The supplier of a protocol implementation which is claimed to conform to EN 300 196-1 [2] 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.

- ITeT STANDARD PREVIEW
(standards.iteh.ai)
- [1] ETSI EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".
- [2] ETSI EN 300 196-1 (V1.3.2): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [3] Void
- [4] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [5] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [6] ITU-T Recommendation I.411: "ISDN user-network interfaces - Reference configurations".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions given in EN 300 196-1 [2] and the following apply:

Protocol Implementation Conformance Statement (PICS): statement made by the supplier of an Open Systems Interconnection (OSI) implementation or system, stating which capabilities have been implemented for a given OSI protocol (see ISO/IEC 9646-1)

PICS proforma: document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which, when completed for an OSI implementation or system becomes the PICS (see ISO/IEC 9646-1)

static conformance review: review of the extent to which the static conformance requirements are met by the IUT, accomplished by comparing the PICS with the static conformance requirements expressed in the relevant standard(s) (see ISO/IEC 9646-1)

3.2 Symbols

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

and	Boolean "and"
C	Conditional requirement (to be observed if the relevant conditions apply)
M	Mandatory requirement (to be observed in all cases)
N/A	not applicable, not supported or the conditions for status are not meet
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)
or	Boolean "or"
Yes	supported

3.3 Abbreviations

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

DSS1	Digital Subscriber Signalling System No. one
IER	Information Elements Received
IET	Information Elements Transmitted
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
MC	Major Capabilities
MR	Messages Received
MT	Messages Transmitted
OSI	Open Systems Interconnection
P	Parameters
PICS	Protocol Implementation Conformance Statement
R	Role
SC	Subsidiary Capabilities
SCS	System Conformance Statement
SUT	System Under Test
TM	prefix for indexes numbers for the timers group

4 Conformance

A PICS proforma which 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 which conforms to this PICS proforma specification shall:

- a) describe an implementation which claims to conform to EN 300 196-1 [2];
- b) be a conforming ICS 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 300 196-2 V1.3.2:2004](https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004)

<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004>

Annex A (normative): PICS proforma for EN 300 196-1

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 Instructions for completing the PICS proforma

A.1.1 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 so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information 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.

The System Conformance Statement (SCS) as defined in ISO/IEC 9646-1 is a document supplied by the client or product supplier that summarizes which OSI standards are implemented and to which conformance is claimed. The PICS/SCS clause should describe the relationship of the PICS to the SCS.

A.1.2 Global statement of conformance

If the answer to the statement in this clause is "Yes", all subsequent clauses should be completed to facilitate selection of test cases for optional functions.

If the answer to the statement in this clause is "No", all subsequent clauses should be completed, and all non-supported mandatory capabilities should be identified and explained. Explanations may be entered in the comments field at the bottom of each table or on attached pages.

A.1.3 Explanation of PICS proforma clauses

The PICS proforma contains a Roles clause and thereafter is presented in two parts (for user and network) with the following clauses, as required:

- major capabilities;
- subsidiary capabilities;
- protocol data unit support;
- protocol data unit parameters;
- timers;
- call states.

The User clause shall only be completed for user implementations (including private network implementations) while the Network clause shall only be completed for network implementations. The Roles clause shall be completed for all implementations.

The relationship between this PICS proforma and other related PICS proforma (e.g. the basic call PICS proforma) is expressed in the requirements list contained in annex B. This provides the additional restrictions placed on the related proforma (different conditions, different status, etc.).

A.1.4 Symbols, abbreviations and terms

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.

The reference column contained in the tables gives reference to the appropriate part(s) of EN 300 196-1 (unless another numbered reference is explicitly indicated) describing the particular item. Note, however, that a reference merely indicates the place where the core of a description of an item can be found. Any additional information contained in EN 300 196-1 (or any other possibly used reference) has to be taken into account when making a statement about the conformance of that particular item.

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

- M mandatory
- O optional
- N/A not applicable
- O.<integer> mutually exclusive or selectable options from a set

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

- Y supported/implemented
- N not supported/not implemented

A.2 Identification of the implementation

iTeh STANDARD PREVIEW
(standards.iteh.ai)

A.2.1 Implementation Under Test (IUT) identification

IUT name:

.....
SIST EN 300 196-2 V1 3 2:2004
<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ece43d514a/sist-en-300-196-2-v1-3-2-2004>
.....

IUT version:

.....

A.2.2 System Under Test (SUT) identification

SUT name:

.....
.....

Hardware configuration:

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

Operating system:

.....
.....

A.2.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

iTeh STANDARD PREVIEW
(standards.iteh.ai)

A.2.4 Client

[SIST EN 300 196-2 V1.3.2:2004](https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004)

<https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4ecef43d514a/sist-en-300-196-2-v1-3-2-2004>

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

A.2.5 PICS contact person

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

ITeH STANDARD PREVIEW
(standards.iteh.ai)

A.3 PICS/SCS relationship

Provide the relationship of the PICS with the SCS for the system:

.....

.....

.....

.....

A.4 Identification of the protocol

This PICS proforma applies to the following standard:

ETSI EN 300 196-1: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

A.5 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No)

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming. Explanation may be entered in the comments field at the bottom of each table or on attached pages.

In the tabulations which follow, all references are to EN 300 196-1: unless another numbered reference is explicitly indicated.

A.6 Roles

Table A.1: Type of implementation

Item	Major role: Does the implementation...	Conditions for status	Status	Reference	Support
Type of implementation					
R 1	not used				
R 2.1	support user requirements?		O.1	7, 8, 9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 2.2	support network requirements?		O.1	7, 8, 9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 3	not used				
R 4	not used				
R 5.1	support the functions of an initiating entity?		O.2	7, 8, 9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 5.2	support the functions of a responding entity?		O.2	7, 8, 9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No
O.1	Support of one and only one of these options is required.				
O.2	Support of at least one of these options is required.				
Comments:					
<p>SIST EN 300 196-2 V1.3.2:2004</p> <p>https://standards.iteh.ai/catalog/standards/sist/7e6c3210-97fc-42c1-93ce-4cecf43d514a/sist-en-300-196-2-v1-3-2-2004</p>					

A.7 User

The tables provided in this clause need only to be completed for user implementations, where item R 2.1 in table A.1 is supported.

A.7.1 Major capabilities

Table A.2: Major capabilities - user

Item	Major capability: Does the implementation...	Conditions for status	Status	Reference	Support
MCu 1	support the functional protocol (separate message category) for the control of supplementary services?		O.3	6.3, 7	<input type="checkbox"/> Yes <input type="checkbox"/> No
MCu 2	support the functional protocol (common information element category) for the control of supplementary services?		O.3	6.3, 8	<input type="checkbox"/> Yes <input type="checkbox"/> No
MCu 2.1	support bearer related supplementary services procedure?	MCu 2 NOT MCu 2	O.4 N/A	8.3.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
MCu 2.2	support bearer independent supplementary services procedure?	MCu 2 NOT MCu 2	O.4 N/A	8.3.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Item	Major capability: Does the implementation...	Conditions for status	Status	Reference	Support
MCu 2.3	support point-to-point (bearer related) transport mechanism?	MCu 2.1 NOT MCu 2.1	M N/A	8.3.1, 8.3.1.1	[]Yes []No []N/A
MCu 2.4	support broadcast (bearer related) transport mechanism?	MCu 2.1 NOT MCu 2.1	O N/A	8.3.1, 8.3.1.2	[]Yes []No []N/A
MCu 2.5	support point-to-point (bearer independent) connection-oriented transport mechanism for local signalling?	MCu 2.2 NOT MCu 2.2	O.5 N/A	8.3.2, 8.3.2.1	[]Yes []No []N/A
MCu 2.6	support point-to-point (bearer independent) connectionless transport mechanism?	MCu 2.2 NOT MCu 2.2	O.5 N/A	8.3.2, 8.3.2.2	[]Yes []No []N/A
MCu 2.7	support broadcast (bearer independent) connectionless transport mechanism?	MCu 2.2 NOT MCu 2.2	O.5 N/A	8.3.2, 8.3.2.4	[]Yes []No []N/A
MCu 2.8	support point-to-point (bearer independent) connection-oriented transport mechanism for general signalling?	MCu 2.2 NOT MCu 2.2	O.5 N/A	8.3.2, 8.3.2.5	[]Yes []No []N/A
MCu 3	support notification category procedures?		O.3	9	[]Yes []No
MCu 3.1	support transport of bearer-related notifications?	MCu 3 NOT MCu 3	O.6 N/A	9.3	[]Yes []No []N/A
MCu 3.2	support transport of bearer-independent notifications?	MCu 3 NOT MCu 3	O.6 N/A	9.4	[]Yes []No []N/A
MCu 4	support the network-side channel reservation?		O.3	10.1	[]Yes []No []N/A
MCu 4.1	support implicit reservation?	MCu 4 NOT MCu 4	O.7 N/A	10.1.1	[]Yes []No []N/A
MCu 4.2	support explicit reservation?	MCu 4 NOT MCu 4	O.7 N/A	10.1.2	[]Yes []No []N/A
MCu 5	support generic procedures for the supplementary services management?		O.3	10.2	[]Yes []No
MCu 5.1	support activation?	MCu 5 AND MCu 2.6 NOT (MCu 5 AND MCu 2.6)	O.8 N/A	10.2.2	[]Yes []No []N/A
MCu 5.2	support deactivation?	MCu 5 AND MCu 2.6 NOT (MCu 5 AND MCu 2.6)	O.8 N/A	10.2.3	[]Yes []No []N/A
MCu 5.3	support interrogation?	MCu 5 AND MCu 2.6 NOT (MCu 5 AND MCu 2.6)	O.8 N/A	10.2.4	[]Yes []No []N/A
MCu 5.4	support status notification? (note)	MCu 5 AND MCu 2.7 NOT (MCu 5 AND MCu 2.7)	O.8 N/A	10.2.5	[]Yes []No []N/A
MCu 6	support generic status request procedure?	MCu 2.6 OR MCu 2.7 NOT (MCu 2.6 OR MCu 2.7)	O.3 N/A	10.3	[]Yes []No []N/A
O.3	Support of at least one of these options is required.				
O.4	Support of at least one of these options is required.				
O.5	Support of at least one of these options is required.				
O.6	Support of at least one of these options is required.				
O.7	Support of at least one of these options is required.				
O.8	Support of at least one of these options is required.				
NOTE:	This major capability can be supported even if neither MCu 5.1 nor MCu 5.2 are supported.				
Comments:					