
Ja Ygb]_J`X][]HbY[Ugkcf]hj YbY[Uj cn`ý UfGBŁ!`Ja Ygb]_]bUfYZYfYb b]`hc _]
J6) "%nUdcXdcfc`ý]fc_cdUgcj b]`U]`ca V]b]fUb]`cn_cdUgcj b]`]b
ý]fc_cdUgcj b]`Xcglcdcj b]`ca fYj]`f5 BŁ!`&`XY.`nUj Uc`g`UXbcgh]`nj YXVY
dfcfc_c`UfD=7 GŁ!`DfcZfa UgdYWZ]_UWY

V interfaces at the digital Service Node (SN); Interfaces at the VB5.1 reference point for the support of broadband or combined narrowband and broadband Access Networks (ANs); Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification

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European Standard (Telecommunications series)

**V interfaces at the digital Service Node (SN);
Interfaces at the VB5.1 reference point for the support of
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Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification**

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Contents

Intellectual Property Rights.....	5
Foreword	5
Introduction	5
1 Scope.....	6
2 Normative references	6
3 Definitions and abbreviations	6
3.1 Definitions	6
3.2 Abbreviations.....	7
4 Conformance to this PICS proforma specification	8
Annex A (normative): PICS proforma for EN 301 005-1	9
A.1 Guidance for completing the PICS proforma.....	9
A.1.1 Purposes and structure	9
A.1.2 Abbreviations and conventions	9
A.1.3 Instructions for completing the PICS proforma	11
A.2 Identification of the implementation.....	12
A.2.1 Date of the statement	12
A.2.2 Implementation Under Test (IUT) identification	12
A.2.3 System Under Test (SUT) identification.....	12
A.2.4 Product supplier	13
A.2.5 Client (if different from product supplier)	13
A.2.6 PICS contact person.....	14
A.3 Identification of the protocol.....	14
A.4 Global statement of conformance.....	14
A.5 Service node.....	15
A.5.1 Main features	15
A.5.1.1 General.....	15
A.5.1.2 ATM layer characteristics	15
A.5.1.2.1 Broadband access network connection types.....	15
A.5.1.2.2 ATM transfer characteristics	16
A.5.2 VB5.1 reference point.....	16
A.5.2.1 Basic characteristics	16
A.5.2.1.1 Support of a physical interface	16
A.5.2.1.2 Physical layer at the VB5.1 reference point.....	17
A.5.2.2 ATM layer functions	17
A.5.2.3 ATM adaptation layer	17
A.5.2.3.1 AAL for the RTMC protocol.....	17
A.5.2.3.2 AAL for circuit emulation of 2 048 kbit/s signals	18
A.5.2.4 RTMC function and protocol	18
A.5.2.4.1 RTMC main features	18
A.5.2.4.2 RTMC messages.....	18
A.5.2.4.2.1 RTMC messages received by the Service Node.....	18
A.5.2.4.2.2 RTMC messages transmitted by the Service Node	19
A.5.2.4.3 Timers used in RTMC procedures.....	19
A.5.2.4.4 RTMC function specific information elements.....	19
A.6 Access network	20
A.6.1 Main features	20
A.6.1.1 General.....	20
A.6.1.2 ATM layer characteristics	20
A.6.1.2.1 Broadband access network connection types.....	20

A.6.1.2.2	ATM transfer characteristics	21
A.6.2	Access types.....	21
A.6.2.1	Support of ATM based access types	21
A.6.2.1.1	Basic characteristics	21
A.6.2.1.2	Physical layer.....	22
A.6.2.1.3	ATM layer functions.....	22
A.6.2.2	Support of non B-ISDN access types	23
A.6.2.2.1	Narrowband access types.....	23
A.6.3	VB5.1 reference point.....	23
A.6.3.1	Basic characteristics	23
A.6.3.1.1	Support of a physical interface	23
A.6.3.2	Physical layer at the VB5.1 reference point	23
A.6.3.3	ATM layer functions	24
A.6.3.4	ATM adaptation layer	24
A.6.3.4.1	AAL for the RTMC protocol.....	24
A.6.3.4.2	AAL for circuit emulation of 2 048 kbit/s signals	24
A.6.3.5	RTMC function and protocol	25
A.6.3.5.1	RTMC main features	25
A.6.3.5.2	RTMC messages.....	25
A.6.3.5.2.1	RTMC messages received by the Access Network	25
A.6.3.5.2.2	RTMC messages transmitted by the Access Network.....	25
A.6.3.5.3	Timers used in RTMC procedures.....	26
A.6.3.5.4	RTMC function specific information elements.....	26
Annex B (informative): Status of OAM functions based F4/F5 flows.....		27
B.1	OAM functions at service port (SN-side).....	28
B.2	OAM functions at user port	29
B.3	OAM functions at service port (AN-side).....	30
Annex C (informative): Support of ATM transfer capabilities and QoS classes.....		31
C.1	ATM transfer capabilities	31
C.2	QoS classes	32
History		33

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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 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 Signalling Protocols and Switching (SPS).

The present document is part 2 of a multi-part standard covering the interfaces at the VB5.1 reference point as described below:

Part 1: "Interface specification";

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

NOTE: Further parts covering conformance testing may be identified later.

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National transposition dates

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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 telecommunication specification. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the interfaces at the VB5.1 reference point for the support of broadband or combined narrowband and broadband Access Networks (ANs) as defined in EN 301 005-1 [1] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4] and ETS 300 406 [2].

It details in tabular form the implementation options, i.e. the optional functions additional to those which are mandatory to implement.

2 Normative references

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case 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.

- iTech STANDARD PREVIEW
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- [1] EN 301 005-1 (V1.1): "V interfaces at the digital Service Node (SN); Interfaces at the VB5.1 reference point for the support of broadband or combined narrowband and broadband Access Networks (ANs); Part 1: Interface specification"
<https://standards.itech.ai/catalog/standards/sist/c757c894-1863-4046-af6e-a91934b0a776/sist-en-301-005-2-2000>
 - [2] ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
 - [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".

3 Definitions and abbreviations

3.1 Definitions

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

- terms defined in EN 301 005-1 [1];
- terms defined in ISO/IEC 9646-1 [3] and in ISO/IEC 9646-7 [4].

In particular, the following terms defined in ISO/IEC 9646-1 [3] apply:

Protocol Implementation Conformance Statement (PICS): a 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, information object ICS, etc.

ICS proforma: a document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS.

Protocol ICS (PICS): an ICS for an implementation or system claimed to conform to a given protocol specification.

static conformance review: a review of the extent to which the static conformance requirements are met by the Implementation Under Test (IUT), accomplished by comparing the PICS with the static conformance requirements expressed in the relevant standard(s) (see ISO/IEC 9646-1 [3]).

3.2 Abbreviations

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

AAL1	ATM Adaptation Layer type 1
AAL5	ATM Adaptation Layer type 5
ABR	Available Bit Rate
ABT	ATM Block Transfer
AIS	Alarm Indication Signal
AN	Access Network
ATC	ATM Transfer Capability
ATM	Asynchronous Transfer Mode
B-AN	Broadband Access Network
B-ISDN	Broadband Integrated Services Digital Network
B-UNI	Broadband User Network Interface
DBR	Deterministic Bit Rate
DT	Delayed Transmission
EFCI	Explicit Forward Congestion Indication
GFC	Generic Flow Control
ICS	Implementation Conformance Statements
ID	Identification
IT	Immediate Transmission
IUT	Implementation Under Test
LSP	Logical Service Port
NNI	Network-to-Network Interface
NPC	Network Parameter Control
OAM	Operations Administration and Maintenance
PDH	Plesiochronous Digital Hierarchy
PICS	Protocol Implementation Conformance Statement
ptm	point to multipoint
ptp	point to point
QoS	Quality of Service
RDI	Remote Defect Indication
RTMC	Real Time Management Co-ordination (protocol)
SBR	Statistical Bit Rate
SCS	System Conformance Statement
SDH	Synchronous Digital Hierarchy
SN	Service Node
SSCF	Service Specific Co-ordination Function
SSCOP	Service Specific Connection Oriented Protocol
STM	Synchronous Transport Module
SUT	System Under Test
TC	Termination Convergence
UNI	User Network Interface
UPC	Usage Parameter Control
VC	Virtual Channel
VCCT	Virtual Channel Connection Termination
VCE	Virtual Channel Entity
VCI	Virtual Channel Identifier
VCME	Virtual Channel Multiplex Entity
VP	Virtual Path

VPC	Virtual Path Connection
VPCI	Virtual Path Connection Identifier
VPCT	Virtual Path Connection Termination
VPE	Virtual Path Entity
VPI	Virtual Path Identifier
VPME	Virtual Path Multiplex Entity

4 Conformance to this PICS proforma specification

If it claims to conform to the present document the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

An PICS which conforms to the present document shall be a conforming PICS proforma completed in accordance with the guidance for completion given in annex A, clause A.1.

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Annex A (normative): PICS proforma for EN 301 005-1

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 Purposes 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 301 005-1 [1] may provide information about the implementation in a standardized manner.

The PICS proforma is subdivided into subclauses for the following categories of information:

- guidance for completing the PICS proforma;
- identification of the implementation;
- identification of the protocol;
- global statement of conformance.

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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 number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Status column

The following notations, defined in ISO/IEC 9646-7 [4], 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.
x	prohibited (excluded) - there is a requirement not to use this capability in the given context.
o.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.
ci	conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table.

Reference column

The reference column makes reference to EN 301 005-1 [1], except where explicitly stated otherwise.

Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [4], are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A, n/a or - no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status).

If this PICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (e.g. ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE: ?3: IF prof1 THEN Y ELSE N

It is also possible to provide a comment to an answer in the space provided at the bottom of the table.

NOTE: As stated in ISO/IEC 9646-7 [4], support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

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Values allowed column

The values allowed column contains the type, the list, the range or the length of values allowed. The following notations are used:

- range of values: <min value> .. <max value>
example: 5 .. 20
- list of values: <value1>, <value2>,, <valueN>
example: 2, 4, 6, 8, 9
example: '1101'B, '1011'B, '1111'B
example: '0A'H, '34'H, '2F'H
- list of named values: <name1>(<val1>), <name2>(<val2>),, <nameN>(<valN>)
example: reject(1), accept(2)
- length: size (<min size> .. <max size>)
example: size (1 .. 8)