



SLOVENSKI STANDARD
SIST ETS 300 438-2:1999

01-maj-1999

**Širokopasovno digitalno omrežje z integriranimi storitvami (B-ISDN) -
Signalizacijska prilagodilna plast ATM (SAAL) - Storitveno specifična usklajevalna
funkcija (SSCF) za podporo signalizacije v vmesniku omrežnega vozlišča (NNI) - 2.
del: Izjava o skladnosti izvedbe protokola (PICS) - Proforma specifikacije**

Broadband Integrated Services Digital Network (B-ISDN); Signalling ATM Adaptation
Layer (SAAL); Service Specific Co-ordination Function (SSCF) for support of signalling at
the Network Node Interface (NNI); 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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**Broadband Integrated Services Digital Network (B-ISDN);
Signalling ATM Adaptation Layer (SAAL);
Service Specific Co-ordination Function (SSCF) for
support of signalling at the Network Node Interface (NNI);
Part 2: Protocol Implementation Conformance Statement (PICS)
proforma specification**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is part 2 of a multi-part standard covering the Service Specific Co-ordination Function (SSCF) for support of signalling at the Network Node Interface (NNI) for the Broadband Integrated Services Digital Network (B-ISDN) as described below:

Part 1: "Specification of SSCF at NNI [ITU-T Recommendation Q.2140, modified]";

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

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

Transposition dates	
Date of adoption of this ETS:	3 April 1998
Date of latest announcement of this ETS (doa):	31 July 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 January 1999
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Introduction

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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 a Protocol Implementation Conformance Statement (PICS).

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1 Scope

This second part of ETS 300 438 provides the Protocol Implementation Conformance Statement (PICS) proforma for the Service Specific Co-ordination Function (SSCF) at the Signalling ATM Adaptation Layer (SAAL) for support of signalling at the Network Node Interface (NNI) for the Broadband Integrated Services Digital Network (B-ISDN) as specified in ETS 300 438-1 [2] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4].

This PICS proforma applies to the B-ISDN SSCF for NNI signalling and the Service Specific Connection-Oriented Protocol (SSCOP, see ETS 300 436-1 [1]) implementation used to support it. Certain mandatory SSCOP functions are not necessary for the support of NNI signalling, but may be needed to support other SSCFs. This PICS proforma identifies such mandatory functions as optional for NNI signalling.

The supplier of a protocol implementation that is claimed to conform to ETS 300 438-1 [2] is required to complete a copy of the PICS proforma provided in annex A of this ETS and is required to provide the information necessary to identify both the supplier and the implementation.

2 Normative references

This ETS incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 436-1: "Broadband Integrated Services Digital Network (B-ISDN); Signalling ATM Adaptation Layer (SAAL); Service Specific Connection-Oriented Protocol (SSCOP); Part 1: Protocol specification [ITU-T Recommendation Q.2110 (1995), modified]".
- [2] ETS 300 438-1: "Broadband Integrated Services Digital Network (B-ISDN); Signalling ATM Adaptation Layer (SAAL); Service Specific Co-ordination Function (SSCF) for support of signalling at the Network Node Interface (NNI); Part 1: Specification of SSCF at NNI [ITU-T Recommendation Q.2140 (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".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the definitions in 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): 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 (PICS), profile ICS, profile specific ICS, and information object ICS.

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

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

3.2 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

AA-...	Signal across the boundary between SSCF and SSCOP
AAL-...	Primitive across the boundary between SAAL and SAAL user
AAL	ATM Adaptation Layer
ATM	Asynchronous Transfer Mode
B-ISDN	Broadband Integrated Services Digital Network
BGAK	Begin Acknowledge (PDU)
BGN	Begin (PDU)
BGREJ	Begin Reject (PDU)
c	Conditional
CC	Connection Control
END	End (PDU)
ENDAK	End Acknowledge (PDU)
ER	Error Recovery (PDU)
ERAK	Error Recovery Acknowledge (PDU)
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
M	Mandatory
MaxCC	Maximum value for the Connection Control state variable VT(CC) (count)
MaxPD	Maximum value for the Poll Data state variable VT(PD) (count)
MaxSTAT	Maximum number of list elements placed in STAT PDU (count)
MD	Management Data (PDU)
N/A	Not Applicable
O	Optional
O.<n>	Optional, but, if chosen, support is required for either at least one or only one of the options in the group labelled by the same numeral <n>
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation Extra Information for Testing
POLL	Poll (PDU)
RESYNC	Resynchronization (primitive)
RS	Resynchronization (PDU)
RSAK	Resynchronization Acknowledge (PDU)
SAAL	Signalling ATM Adaptation Layer
SCS	System Conformance Statement
SD	Sequenced Data (PDU)
SDU	Service Data Unit
SSCF	Service Specific Co-ordination Function
SSCOP	Service Specific Connection-Oriented Protocol
STAT	Status (PDU)
SUT	System Under Test
Timer_CC	Timer which protects the protocol against loss during establishment (BGN PDU), release (END PDU), resynchronization (RS PDU), or error recovery (ER PDU) of the connection
Timer_IDLE	Timer which assures that the peer receiver is polled with the lowest permissible polling rate via POLL PDUs when there are no outstanding acknowledgements or new data pending receipt of credit (idle phase)
Timer_KEEP-ALIVE	Timer which assures that the peer receiver is polled via POLL PDUs when there are no outstanding acknowledgements or new data pending receipt of credit (transient phase)
Timer_NO-RESPONSE	Timer which indicates the maximum time interval during which at least one STAT PDU needs to be received
Timer_POLL	Timer which assures that the peer receiver is polled often enough in the via POLL PDUs when there are outstanding acknowledgements or new data pending receipt of credit (active phase)
U-NNI	Upper boundary of SSCF at the NNI
UD	Unit Data (PDU)
USTAT	Unsolicited Status (PDU)
UU	User-to-User
X	Excluded

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 ETS 300 438-1 [2];
- 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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