

Suppliers' Information Note

For The Openreach Network

Protocol Implementation Conformance Statements (PICS) for ISDN 2e and ISDN 30e: Basic Call Control and Basic Services TECHNICAL INFORMATION FOR SUPPLIERS

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1. Introduction

This document is the first part of a multipart document defining using the internationally standardised Protocol Implementation Conformance Statements (PICS) the capabilities and options of the DSS1 protocol for basic call control on the basic and primary rate access interface which has been implemented in the ISDN 2e and ISDN 30e network respectively.

Note: These PICS should be read in conjunction with SIN261 which provides a detailed technical description of the BT ISDN 2e and ISDN 30e services.

This part of this SIN provides guidance on the meaning of the PICS tables given in the other parts of this SIN and provides the global statement of conformance.

2. References

- 1 ISO/IEC 9646-7 Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements.

For further information or copies of referenced sources, please see document sources at <https://www.openreach.co.uk/orpg/home/helpandsupport/sins/sins.do>

3. Guidance on Protocol Implementation Conformance Statement (PICS)

The ETSI standards that specify the PICS proforma provide the following guidance on completing the PICS proforma. The abbreviations and conventions used in the various ETSI standards that form the basis of the different parts of this SIN are slightly different (eg in the layer 1 PICS the **support column** uses letters Y, N, N/A etc to indicate the support of an item whereas in the layer 2 PICS the appropriate answer is ticked). The abbreviations and conventions used in the PICS in all parts of this SIN are given below.

The guidance given in the ETSI standards for completion of the PICS proforma has been followed in producing the other parts of this SIN.

3.1 **Guidance for completing the PICS proforma**

The purpose of a PICS proforma is to provide a mechanism whereby information about an implementation of the requirements defined in an ETSI standard may be provided in a standardized manner. In the subsequent parts of this SIN, only the PICS for the network role are provided. The section and table numbering as in the ETSI standard defining the PICS has been retained for ease of cross-reference back of the relevant ETSI standard.

3.1.1 **Symbols, abbreviations and conventions**

The PICS proforma contained in the other parts of this SIN is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [1].

Item column:

The item column contains a unique reference (a mnemonic plus a number) for each item within the PICS proforma.

Where provided, an additional lower case letter has been added to differentiate PICS items related to the user role (e.g. MCu) and PICS items related to the network role (e.g. MCn). In earlier PICS proformas both these cases were identified by the same mnemonic (e.g. MC).

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 [1], are used for the status column:

I	Irrelevant or out-of-scope - this capability is outside the scope of the ETS to which this PICS proforma applies and is not subject to conformance testing in this context.
M or m	Mandatory - the capability is required to be supported.
O or o	Optional - the capability may be supported or not.
N/A or n/a	Not Applicable - in the given context, it is impossible to use the capability.
X or x	eXcluded or prohibited - there is a requirement not to use this capability in a given context.
O.i or 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.
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 a unique conditional status expression which is defined immediately following the table.

NOTE: To support a capability means that the capability is implemented in conformance to the relevant reference ETSI standard.

Reference column:

Except where explicitly stated, the reference column refers to the appropriate parts of referenced ETSI standard quoted in that part of the SIN (eg ETS 300 402-2 for the layer 2 PICS is SIN 369 Parts D and E) describing the particular item.

NOTE: A reference indicates only the location of the most essential information about an item. All additional requirements contained in the referenced ETSI standard 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 [1], is used for the support column:

<input type="checkbox"/> Yes	Tick "Yes" if item is supported, or insert Y or y if no tick box provided
<input type="checkbox"/> No	tick "No" if item is not supported, or insert N or n if no tick box provided.
<input type="checkbox"/> N/A	Tick "N/A" if the item is "not applicable", or insert N/A, n/a or - if no tick box provided.

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

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)

Values supported column

The values supported column shall be filled in with the values or the ranges of values supported by the implementation.

References to items

For each possible item answer (answer in the support column) within the PICS proforma a unique reference exists, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns are discriminated by letters (a, b, etc.), respectively. Examples in SIN 369, Part C are:

EXAMPLE 1: A.5/4 is the reference to the answer of item 4 in table 5 of annex A.

EXAMPLE 2: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table 6 of annex A.

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.

4. Global statement of conformance

The implementation described in the PICS contained in other parts of this SIN fully conforms to the requirements of the referenced standards with the following minor exceptions:

- **ISDN 30e:** Layer 1 timers T1 and T2 on some switch implementations exceed maximum value (see SIN369, Part C, Table A.10)
- **ISDN2e Layer 3 basic access, point-to-multipoint configuration:** On some switch implementations, interworking notification is not as specified in ETS 300403-1 (see SIN 369, Part F, Table A.62, MCn2.6)
- **ISDN2e and ISDN 30e:** On some switch implementations, the status request procedures associated with 7kHz Telephony and Videotelephony teleservices are not supported (see SIN369, Part I, Table A.11, SC6.4)

5. Glossary

DSS1	- Digital Subscriber Signalling System No. one
ETSI	- European Telecommunications Standards Institute
PICS	- Protocol Implementation Conformance Statement

6. History

Issue 1	Error! Reference source not found.	First Issue
Issue 1.1	July 2014	Change SINet site references from http://www.sinet.bt.com to http://www.btplc.com/sinet/
Issue 1.2	October 2020	Changes to branding, from BT to Openreach including changes to reflect new Openreach SIN site and Openreach SIN email address
Issue 1.2	October 2021	Annual Review – no changes required – issue remains unchanged.