

## Suppliers' Information Note

*For The Openreach Network*

---

# Protocol Implementation Conformance Statements (PICS) for ISDN 2e: Digital Select Services - Multiple Subscriber Number TECHNICAL INFORMATION FOR SUPPLIERS

Each SIN is the copyright of British Telecommunications plc. Reproduction of the SIN is permitted only in its entirety, to disseminate information on the Openreach Network within your organisation. You must not edit or amend any SIN or reproduce extracts. You must not remove Openreach trademarks, notices, headings or copyright markings.

This document does not form a part of any contract with Openreach customers or suppliers.

Users of this document should not rely solely on the information in this document, but should carry out their own tests to satisfy themselves that terminal equipment will work with the Openreach network.

Openreach reserves the right to amend or replace any or all of the information in this document.

Openreach shall have no liability in contract, tort or otherwise for any loss or damage, howsoever arising from use of, or reliance upon, the information in this document by any person.

Due to technological limitations a very small percentage of customer interfaces may not comply with some of the individual characteristics which may be defined in this document.

Publication of this Suppliers' Information Note does not give or imply any licence to any intellectual property rights belonging to British Telecommunications plc or others. It is your sole responsibility to obtain any licences, permissions or consents which may be necessary if you choose to act on the information supplied in the SIN.

Those BT services marked ® indicates it is a registered trade mark of British Telecommunications plc.

Those BT services marked ™ indicates it is a trade mark of British Telecommunications plc.

This SIN is available in Portable Document Format (pdf) from:  
<https://www.openreach.co.uk/orpg/home/helpandsupport/sins/sins.do>

Enquiries relating to this document should be directed to: [orsinsfa@openreach.co.uk](mailto:orsinsfa@openreach.co.uk)

## 1. Introduction

This document states the capabilities and options of the DSS1 Layer 3 protocol for Multiple Subscriber Number (MSN) Digital Select Service on the basic access interface which has been implemented in the ISDN 2e network.

The ETSI protocol specification used as a basis for this PICS proforma is ETS 300 052-1 [1].

The ETSI PICS proforma used as a basis for this PICS is ETS 300 052-2 [2].

## 2. References

- 1 ETS 300 052-1 (1991) Integrated Services Digital Network (ISDN); Multiple Subscriber Number (MSN) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification
- 2 ETS 300 052-2 (1995) Integrated Services Digital Network (ISDN); Multiple Subscriber Number (MSN) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification
- 3 ETS 300 102-1 Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".
- 4 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. Protocol Implementation Conformance Statement (PICS)

Using the relevant standard (see ref. 2), the PICS is given below. The section and table numbering as used in the ETSI standard has been maintained. Only those parts of the standard relevant to the network implementation are given. For guidance on the abbreviations and meaning of the completed PICS tables, see SIN 370, Part A.

Unless stated otherwise, the standard referred to in the **reference** column is the ETS given in reference 1. For glossary of terms used, see the referenced standards [1, 2].

### A.4 Identification of the protocol

This PICS proforma applies to the following standard:

**ETS 300 052-1 (1991):** "Integrated Services Digital Network (ISDN); Multiple Subscriber Number (MSN) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

NOTE: ETS 300 052-1 (1991) was initially published as ETS 300 052 (1991).

### A.5 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced standard?

[✓] 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. Explanations 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 ETS 300 052-1 [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
<b>Type of implementation</b>					
R 1	not used				
R 2.1	support user requirements?		O.1	9	[ ]Yes [✓]No
R 2.2	support network requirements?		O.1	9	[✓]Yes [ ]No
R 3	not used (note)				
R 4.1	support user requirements at the interface of the calling user?	R 2.1 NOT R 2.1	M N/A	9	[ ]Yes [ ]No [✓]N/A
R 4.2	support user requirements at the interface of the called user?	R 2.1 NOT R 2.1	M N/A	9	[ ]Yes [ ]No [✓]N/A
R 4.3	support network requirements at the interface of the calling user?	R 2.2 NOT R 2.2	M N/A	9	[✓]Yes [ ]No [ ]N/A
R 4.4	support network requirements at the interface of the called user?	R 2.2 NOT R 2.2	M N/A	9	[✓]Yes [ ]No [ ]N/A
O.1	Support of one, and only one, of these options is required.				
NOTE:	If the network implementation cannot distinguish between an access at the T reference point and an access at the coincident S and T reference point, then these requirements may also be applied at the T reference point.				
Comments:					

## 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.8 Network

The tables provided in this clause need only to be completed for network implementations, where item R 2.2 in table A.1 is supported.

## A.8.1 Major capabilities

**Table A.5: Major capabilities - network**

Item	Major capability: Does the implementation support...	Conditions for status	Status	Reference	Support
MC 3	<b>Destination network</b>				
MC 3.1	the insertion of the MSN of the called user in the Called party number information element?		M	9.2, [3] 4.5.8	[ <input checked="" type="checkbox"/> ]Yes [ ]No
MC 4	<b>Originating network</b>				
MC 4.1	the procedures associated with the receipt of the MSN of the calling user in the Calling party number information element?		M	9.3	[ <input checked="" type="checkbox"/> ]Yes [ ]No
Comments:					

## A.8.2 Subsidiary capabilities

**Table A.6: Subsidiary capabilities - network**

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 3	<b>Destination network</b>				
SC 3.1	the insertion of a full ISDN number in the Called party number information element		O.5	9.2	[ <input checked="" type="checkbox"/> ]Yes [ ]No
SC 3.2	the insertion of a partial ISDN number in the Called party number information element		O.5	9.2	[ <input checked="" type="checkbox"/> ]Yes [ ]No
SC 4	<b>Originating network</b>				
SC 4.1	the use of the information in the Calling party number information element to identify the calling terminal, if MSN has been provided to the calling user?		O	6.2	[ <input checked="" type="checkbox"/> ]Yes [ ]No
SC 4.2	the checking of the Calling party number information element for validity when no special arrangement exists?		O	9.3.1	[ <input checked="" type="checkbox"/> ]Yes [ ]No
O.5	Support of at least one of these options is required.				
Comments:					

## A.8.3 Protocol data units

No items requiring response.

## A.8.4 Protocol data unit parameters

NOTE 1: This subclause provides the part of the structure of the Called party number information element and the Calling party number information element required for implementations supporting ETS 300 052-1 [1]. This structure is currently not included in the basic call PICS proforma. However, it is provided here as a temporary solution in the format of a normal PICS table with a support column to be completed. It is intended that this table is contributed as part of a proposal for an amendment to the basic call PICS proforma. Once the basic call PICS proforma are amended, the relevant table(s) will revert to RL format (support column removed/basic call status column inserted). This is considered as a temporary solution in the sense of ISO/IEC 9646-7 [4], subclause 8.7.2.

NOTE 2: A table detailing the receipt by the Network at the side of the calling user of the Calling party number information element is not included as there are no relevant options.

**Table A.7: SETUP PDU/Called party number information element parameters sent by the network at the side of the called user**

Item	Does the implementation support... the Called party number information element parameters and values...	Sent by the network			
		SS conditions for status	SS status	Reference	Support
P 2.1	TON		M	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No
P 2.1.1	unknown	SC 3.2 NOT SC 3.2	M N/A	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No [ ]N/A
P 2.1.2	international	SC 3.1 NOT SC 3.1	O.6 N/A	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No [ ]N/A
P 2.1.3	national	SC 3.1 NOT SC 3.1	O.6 N/A	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No [ ]N/A
P 2.1.4	subscriber number	SC 3.1 NOT SC 3.1	O.6 N/A	[3] 4.5.10	[ ]Yes [ <input checked="" type="checkbox"/> ]No [ ]N/A
P 2.2	NPI		M	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No
P 2.2.1	unknown		O.7	[3] 4.5.10	[ ]Yes [ <input checked="" type="checkbox"/> ]No
P 2.2.2	ISDN/Telephony		O.7	[3] 4.5.10	[ <input checked="" type="checkbox"/> ]Yes [ ]No
O.6	Support of at least one of these options is required.				
O.7	Support of at least one of these options is required.				
NOTE:	This table only contains parameters of relevance to ETS 300 052-1 [1]. Additional parameters may be required for support of basic call (ETS 300 102-1 [3]).				
Comments:					

#### A.8.5 Timers

No items requiring response.

#### A.8.6 Call states

No items requiring response.

## 4. History

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