

**Integrated Services Digital Network (ISDN);
Supplementary service interactions;
Digital Subscriber Signalling System No. one (DSS1) protocol;
Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification**



Reference

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Keywords

ISDN, DSS1, supplementary service, interaction,
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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN), and is now submitted for the ETSI standards One-step Approval Procedure.

The present document is part 2 of a multi-part deliverable covering the Integrated Services Digital Network (ISDN); Supplementary service interactions; 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".

The present document is an extended and updated version of ETS 300 195-2 (1996) to cover the additional supplementary services Message Waiting Indication (MWI), Outgoing Call Barring (OCB), Completion of Calls on No Reply (CCNR) and Selective Call Forwarding (SCF).

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 Open Systems Interconnection (OSI) protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

1 Scope

The present document is applicable to the stage three of the supplementary service interactions 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 [5]) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol. Stage three identifies the protocol procedures and switching functions needed to support a telecommunication service, (see ITU-T Recommendation I.130 [4]).

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the ISDN DSS1 supplementary service interactions protocol as specified in EN 300 195-1 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3].

The supplier of a protocol implementation which is claimed to conform to EN 300 195-1 [1] 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 and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

- [1] ETSI EN 300 195-1 (V2.1.1): "Integrated Services Digital Network (ISDN); Supplementary service interactions; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [2] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [3] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [4] ITU-T Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [5] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 300 195-1 [1] 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 [2])

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 [2])

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 [2])

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)
O.n	Options, but support required for either at least one or only one of the options in the group labelled with the same numeral "n"
OR	Boolean "or"
Yes	supported

3.3 Abbreviations

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

3PTY	Three-Party
AOC	Advice of Charge
AOC-D	Advice of Charge During the call
AOC-E	Advice of Charge at the End of the call
AOC-S	Advice of Charge at call Set-up time
CCBS	Completion of Calls to Busy Subscriber
CCNR	Completion of Calls on No Reply
CD	Call Deflection
CFB	Call Forwarding Busy
CFNR	Call Forwarding on No Reply
CFU	Call Forwarding Unconditional
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
COLP	Connected Line Identification Presentation
COLR	Connected Line Identification Restriction
CONF	Conference call, add-on
CUG	Closed User Group
CW	Call Waiting
DDI	Direct Dialling In
DSS1	Digital Subscriber Signalling System No. one
ECT	Explicit Call Transfer
FPH	Freephone
HOLD	Call Hold
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
LH	Line Hunting
MC	Major Capabilities
MCID	Malicious Call Identification
MSN	Multiple Subscriber Number
MWI	Message Waiting Indication
NDUB	Network Determined User Busy
OCB	Outgoing Call Barring
OSI	Open Systems Interconnection
P	Parameters
PICS	Protocol Implementation Conformance Statement

R	Role
RC	Remote Control
SC	Subsidiary Capabilities
SCS	System Conformance Statement
SCF	Selective Call Forwarding
SUB	Sub-addressing
SUT	System Under Test
TP	Terminal Portability
UDUB	User Determined User Busy
UUS	User-to-User Signalling

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 300 195-1 [1];
- b) be a conforming ICS proforma which has been completed in accordance with the instructions for completion given in annex A, clause A.1;
- c) include the information necessary to uniquely identify both the supplier and the implementation.

Annex A (normative): PICS proforma for EN 300 195-1

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.
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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 [2] 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 [3].

The reference column contained in the tables gives reference to the appropriate part(s) of EN 300 195-1 [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 300 195-1 [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 [3], are used for the status column:

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

The following common notations, defined in ISO/IEC 9646-7 [3], are used for the support column:

Yes	for supported/implemented
No	for not supported/not implemented

A.2 Identification of the implementation

A.2.1 Date of the statement

A.2.2 Implementation Under Test (IUT) identification

IUT name:

.....

IUT version:

.....

A.2.3 System Under Test (SUT) identification

SUT name:

.....

Hardware configuration:

.....

Operating system:

.....

A.2.4 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

A.2.5 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

A.2.6 PICS contact person

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

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:

EN 300 195-1 (V2.1.1): "Integrated Services Digital Network (ISDN); Supplementary service interactions; 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. Explanations may be entered in the comments field at the bottom of each table or on attached pages.

A.6 Roles

Table A.1: Type of implementation

Item	Major role: Does the implementation	Conditions for status	Status	Reference	Support
R 2.1	support user requirements?		O.1		[]Yes []No
R 2.2	support network requirements?		O.1		[]Yes []No
O.1	Support of one and only one of these options is required.				
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.7.1 Major capabilities

Table A.2: Major capabilities - user

Item	Major capability: Does the implementation support...	Conditions for status	Status	Reference	Support
MC 1.1	the CLIP supplementary service interactions with other implemented supplementary services?		O.2	5, 5.38, 5.59	[]Yes []No
MC 1.2	the CLIR supplementary service interactions with other implemented supplementary services?		O.2	5, 5.39, 5.60	[]Yes []No
MC 1.3	the DDI supplementary service interactions with other implemented supplementary services?		O.2	5	[]Yes []No
MC 1.4	the MSN supplementary service interactions with other implemented supplementary services?		O.2	5, 5.41, 5.49, 5.51, 5.63	[]Yes []No
MC 1.5	the TP supplementary service interactions with other implemented supplementary services?		O.2	5, 5.10, 5.14, 5.30, 5.31, 5.45, 5.48	[]Yes []No
MC 1.6	the CW supplementary service interactions with other implemented supplementary services?		O.2	5, 5.47, 5.58	[]Yes []No
MC 1.7	the CCBS supplementary service interactions with other implemented supplementary services?		O.2	5, 5.3, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 5.47, 5.50, 5.62	[]Yes []No
MC 1.8	the CUG supplementary service interactions with other implemented supplementary services?		O.2	5, 5.12, 5.33, 5.40, 5.44, 5.61	[]Yes []No
MC 1.9	the UUS supplementary service interactions with other implemented supplementary services?		O.2	5, 5.16, 5.20, 5.23, 5.26, 5.29, 5.36, 5.37, 5.48, 5.65	[]Yes []No
MC 1.10	the SUB supplementary service interactions with other implemented supplementary services?		O.2	5, 5.42, 5.64	[]Yes []No
MC 1.11	the 3PTY supplementary service interactions with other implemented supplementary services?		O.2	5, 5.8, 5.15, 5.30, 5.32, 5.33, 5.35	[]Yes []No
MC 1.12	the AOC-S supplementary service interactions with other implemented supplementary services?		O.2	5, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 1.13	the AOC-D supplementary service interactions with other implemented supplementary services?		O.2	5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 1.14	the AOC-E supplementary service interactions with other implemented supplementary services?		O.2	5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 1.15	the COLP supplementary service interactions with other implemented supplementary services?		O.2	5, 5.18, 5.21, 5.24, 5.27, 5.43	[]Yes []No
MC 1.16	the COLR supplementary service interactions with other implemented supplementary services?		O.2	5, 5.19, 5.22, 5.25, 5.28	[]Yes []No

Item	Major capability: Does the implementation support...	Conditions for status	Status	Reference	Support
MC 1.17	the MCID supplementary service interactions with other implemented supplementary services?		O.2	5, 5.34, 5.46	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.18	the CONF supplementary service interactions with other implemented supplementary services?		O.2	5, 5.9, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.46	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.19	the FPH supplementary service interactions with other implemented supplementary services?		O.2	5, 5.43	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.20	the ECT supplementary service interactions with other implemented supplementary services?		O.2	5, 5.2, 5.17, 5.34, 5.35, 5.36, 5.44, 5.45	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.21	the CFB supplementary service interactions with other implemented supplementary services?		O.2	5, 5.5, 5.21, 5.22, 5.23, 5.52	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.22	the CFNR supplementary service interactions with other implemented supplementary services?		O.2	5, 5.6, 5.24, 5.25, 5.26, 5.53	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.23	the CFU supplementary service interactions with other implemented supplementary services?		O.2	5, 5.7, 5.27, 5.28, 5.29, 5.54	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.24	the CD supplementary service interactions with other implemented supplementary services?		O.2	5, 5.4, 5.18, 5.19, 5.20, 5.55	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.25	the HOLD supplementary service interactions with other implemented supplementary services?		O.2	5, 5.11, 5.31, 5.32	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.26	the MWI supplementary service interactions with other implemented supplementary services?		O.2	5, 5.49	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.27	the OCB supplementary service interactions with other implemented supplementary services?		O.2	5, 5.50, 5.51, 5.52, 5.53, 5.54, 5.56, 5.55, 5.66, 5.67	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.28	the CCNR supplementary service interactions with other implemented supplementary services?		O.2	5, 5.57, 5.58, 5.59, 5.60, 5.61, 5.62, 5.63, 5.64, 5.65, 5.66	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.29	the SCF supplementary service interactions with other implemented supplementary services?		O.2	5, 5.67 (Note)	<input type="checkbox"/> Yes <input type="checkbox"/> No
MC 1.30	the LH supplementary service interactions with other implemented supplementary services?			5, 5.68, 5.69, 5.70, 5.71, 5.72, 5.73, 5.74	
MC 1.31	the RC supplementary service interactions with other implemented supplementary services?		O.2	5	<input type="checkbox"/> Yes <input type="checkbox"/> No
O.2 Support of at least two of these options is required.					
NOTE: Depending on the type of forwarding which is performed, the interactions between supplementary services and CFU, CFB or CFNR apply.					
Comments:					

A.7.2 Subsidiary capabilities

Table A.3: Subsidiary capabilities - user

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 0	Ordering of checks				
SC 0.1	in case of 2 or more supplementary service interactions and for each of these supplementary services a condition has to be met to allow the related basic call procedures to proceed, are the procedure(s) of the network independent of their order? (Note)	MC 1 NOT MC 1	M N/A	6.2	[]Yes []No []N/A
NOTE: Only required if the ordering of the checks is not demanded by service requirements.					

A.7.3 Protocol data units

No items requiring response.

A.7.4 Protocol data unit parameters

Table A.4: Facility information element components received by the user

Item	Facility information element components: Does the implementation support...	Conditions for status	Status	Reference	Support
P 1	IdentificationOfCharge return error?	MC 1.14 AND (MC 1.20 OR MC 1.24) NOT (MC 1.14 AND (MC 1.20 OR MC 1.24))	O N/A	5.2.2.1.2, 5.4.2.1.2, 5.4.3.2.2	[]Yes []No []N/A
P 2	IdentifyConferee invoke?	MC 1.18 AND (MC 1.5 OR MC 1.9 OR MC 1.25) NOT (MC 1.18 AND (MC 1.5 OR MC 1.9 OR MC 1.25))	M N/A	5.11.2.2.1, 5.13.2.3.1, 5.14.2.2.1, 5.15.2.4.1, 5.16.2.2.1, 5.17.2.2.1	[]Yes []No []N/A
Comments:					

Table A.5: Facility information element components sent by the user

Item	Facility information element components: Does the implementation support...	Conditions for status	Status	Reference	Support
P 3	IdentificationOfCharge invoke?	MC 1.14 AND (MC 1.20 OR MC 1.24) NOT (MC 1.14 AND (MC 1.20 OR MC 1.24))	O N/A	5.2.1, 5.2.2.1.1, 5.2.2.1.2, 5.4.2.1.1, 5.4.3.2.1	[]Yes []No []N/A
P 4	UUSRequest invoke? (Note)	MC 1.9 NOT MC 1.9	O N/A	5.23.1, 5.23.3.2.1	[]Yes []No []N/A
NOTE: This item is only applicable if partial rerouting is supported by the network. This question is to be answered in the PICS of the corresponding individual protocol standard.					
Comments:					

A.7.5 Timers

No items requiring response.

A.7.6 Call states

No items requiring response.

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.6: Major capabilities - network

Item	Major capability: Does the implementation support...	Conditions for status	Status	Reference	Support
MC 2.1	the CLIP supplementary service interactions with other implemented supplementary services?		O.3	5, 5.38, 5.59	[]Yes []No
MC 2.2	the CLIR supplementary service interactions with other implemented supplementary services?		O.3	5, 5.39, 5.60	[]Yes []No
MC 2.3	the DDI supplementary service interactions with other implemented supplementary services?		O.3	5	[]Yes []No
MC 2.4	the MSN supplementary service interactions with other implemented supplementary services?		O.3	5, 5.41, 5.49, 5.51, 5.63	[]Yes []No
MC 2.5	the TP supplementary service interactions with other implemented supplementary services?		O.3	5, 5.10, 5.14, 5.30, 5.31, 5.45, 5.48	[]Yes []No
MC 2.6	the CW supplementary service interactions with other implemented supplementary services?		O.3	5, 5.47, 5.58	[]Yes []No
MC 2.7	the CCBS supplementary service interactions with other implemented supplementary services?		O.3	5, 5.3, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 5.47, 5.50, 5.62	[]Yes []No
MC 2.8	the CUG supplementary service interactions with other implemented supplementary services?		O.3	5, 5.12, 5.33, 5.40, 5.44, 5.61	[]Yes []No
MC 2.9	the UUS supplementary service interactions with other implemented supplementary services?		O.3	5, 5.16, 5.20, 5.23, 5.26, 5.29, 5.36, 5.37, 5.48, 5.65	[]Yes []No
MC 2.10	the SUB supplementary service interactions with other implemented supplementary services?		O.3	5, 5.42, 5.64	[]Yes []No
MC 2.11	the 3PTY supplementary service interactions with other implemented supplementary services?		O.3	5, 5.8, 5.15, 5.30, 5.32, 5.33, 5.35	[]Yes []No
MC 2.12	the AOC-S supplementary service interactions with other implemented supplementary services?		O.3	5, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 2.13	the AOC-D supplementary service interactions with other implemented supplementary services?		O.3	5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 2.14	the AOC-E supplementary service interactions with other implemented supplementary services?		O.3	5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.57	[]Yes []No
MC 2.15	the COLP supplementary service interactions with other implemented supplementary services?		O.3	5, 5.18, 5.21, 5.24, 5.27, 5.43	[]Yes []No
MC 2.16	the COLR supplementary service interactions with other implemented supplementary services?		O.3	5, 5.19, 5.22, 5.25, 5.28	[]Yes []No

Item	Major capability: Does the implementation support...	Conditions for status	Status	Reference	Support
MC 2.17	the MCID supplementary service interactions with other implemented supplementary services?		O.3	5, 5.34, 5.46	[]Yes []No
MC 2.18	the CONF supplementary service interactions with other implemented supplementary services?		O.3	5, 5.9, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.46	[]Yes []No
MC 2.19	the FPH supplementary service interactions with other implemented supplementary services?		O.3	5, 5.43	[]Yes []No
MC 2.20	the ECT supplementary service interactions with other implemented supplementary services?		O.3	5, 5.2, 5.17, 5.34, 5.35, 5.36, 5.44, 5.45	[]Yes []No
MC 2.21	the CFB supplementary service interactions with other implemented supplementary services?		O.3	5, 5.5, 5.21, 5.22, 5.23, 5.52	[]Yes []No
MC 2.22	the CFNR supplementary service interactions with other implemented supplementary services?		O.3	5, 5.6, 5.24, 5.25, 5.26, 5.53	[]Yes []No
MC 2.23	the CFU supplementary service interactions with other implemented supplementary services?		O.3	5, 5.7, 5.27, 5.28, 5.29, 5.54	[]Yes []No
MC 2.24	the CD supplementary service interactions with other implemented supplementary services?		O.3	5, 5.4, 5.18, 5.19, 5.20, 5.55	[]Yes []No
MC 2.25	the HOLD supplementary service interactions with other implemented supplementary services?		O.3	5, 5.11, 5.31, 5.32	[]Yes []No
MC 2.26	the MWI supplementary service interactions with other implemented supplementary services?		O.3	5, 5.49	[]Yes []No
MC 2.27	the OCB supplementary service interactions with other implemented supplementary services?		O.3	5, 5.50, 5.51, 5.52, 5.53, 5.54, 5.55, 5.56, 5.66, 5.67	[]Yes []No
MC 2.28	the CCNR supplementary service interactions with other implemented supplementary services?		O.3	5, 5.57, 5.58, 5.59, 5.60, 5.61, 5.62, 5.63, 5.64, 5.65, 5.66, 5.69	[]Yes []No
MC 2.29	the SCF supplementary service interactions with other implemented supplementary services?		O.3	5, 5.67 (Note)	[]Yes []No
MC 2.30	the LH supplementary service interactions with other implemented supplementary services?		O.3	5, 5.68, 5.69, 5.70, 5.71, 5.72, 5.73, 5.74	[]Yes []No
MC 2.31	the RC supplementary service interactions with other implemented supplementary services?		O.3	5	[]Yes []No
O.3	Support of at least two of these options is required				
NOTE:	Depending on the type of forwarding which is performed, the interactions between supplementary services and CFU, CFB or CFNR apply.				
Comments:					

A.8.2 Subsidiary capabilities

Table A.7: Subsidiary capabilities - network

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 1	Interactions between the TP and AOC-D supplementary services				
SC 1.1	sending of cumulative AOC-D charging information to the served user in the SUSPEND ACKNOWLEDGE message?	MC 2.5 AND MC 2.13 NOT (MC 2.5 AND MC 2.13)	O N/A	5.10.2.1.1	[]Yes []No []N/A
SC 1.2	sending of AOC-D charging information to the served user in the RESUME ACKNOWLEDGE message?	MC 2.5 AND MC 2.13 NOT (MC 2.5 AND MC 2.13)	O N/A	5.10.2.2.1	[]Yes []No []N/A
SC 1.3	sending of AOC-D charging information to the served user in the RESUME REJECT message?	MC 2.5 AND MC 2.13 NOT (MC 2.5 AND MC 2.13)	O N/A	5.10.2.2.1	[]Yes []No []N/A
SC 2	Interactions between the UUS and CD supplementary services				
SC 2.1	the restriction of the deflection of UUI and/or UUS supplementary service requests to deflecting users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.24 NOT (MC 2.9 AND MC 2.24)	O N/A	5.20.2.1.1, 5.20.2.2.1.1, 5.20.2.2.2.1, 5.20.2.2.4.1	[]Yes []No []N/A
SC 2.2	the inhibition of call deflection after alerting on acceptance of a preferred explicit UUS 1 service request?	MC 2.9 AND MC 2.24 NOT (MC 2.9 AND MC 2.24)	O.4 N/A	5.20.2.2.2.1	[]Yes []No []N/A
SC 2.3	the invocation of call deflection after alerting though a preferred explicit UUS 1 service request has been accepted?	MC 2.9 AND MC 2.24 NOT (MC 2.9 AND MC 2.24)	O.4 N/A	5.20.2.2.2.1	[]Yes []No []N/A
SC 2.4	the restriction of the rerouteing of UUI and/or UUS supplementary service requests to users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.24 NOT (MC 2.9 AND MC 2.24)	O N/A	5.20.3.2.1	[]Yes []No []N/A
SC 3	Interactions between the UUS and CFB supplementary services				
SC 3.1	the restriction of the forwarding of UUI and/or UUS supplementary service requests to forwarding users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.21 NOT (MC 2.9 AND MC 2.21)	O N/A	5.23.2.1	[]Yes []No []N/A
SC 3.2	the restriction of the rerouteing of UUI and/or UUS supplementary service requests to users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.21 NOT (MC 2.9 AND MC 2.21)	O N/A	5.23.3.2.1	[]Yes []No []N/A
SC 4	Interactions between the UUS and CFNR supplementary services				
SC 4.1	the restriction of the forwarding of UUI and/or UUS supplementary service requests to forwarding users who subscribe to the UUS 1 supplementary service?	MC 2.9 AND MC 2.22 NOT (MC 2.9 AND MC 2.22)	O N/A	5.26.2.1.1, 5.26.2.2.1, 5.26.2.4.1	[]Yes []No []N/A
SC 4.2	the inhibition of call forwarding on no reply on acceptance of a preferred explicit UUS 1 service request?	MC 2.9 AND MC 2.22 NOT (MC 2.9 AND MC 2.22)	O.5 N/A	5.26.2.2.1	[]Yes []No []N/A
SC 4.3	the invocation of call forwarding on no reply though a preferred explicit UUS 1 service request has been accepted?	MC 2.9 AND MC 2.22 NOT (MC 2.9 AND MC 2.22)	O.5 N/A	5.26.2.2.1	[]Yes []No []N/A
SC 4.4	the restriction of the rerouteing of UUI and/or UUS supplementary service requests to users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.22 NOT (MC 2.9 AND MC 2.22)	O N/A	5.26.3.2.1	[]Yes []No []N/A
SC 5	Interactions between the UUS and CFU supplementary services				
SC 5.1	the restriction of the forwarding of UUI and/or UUS supplementary service requests to forwarding users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.23 NOT (MC 2.9 AND MC 2.23)	O N/A	5.29.2.1,	[]Yes []No []N/A
SC 5.2	the restriction of the rerouteing of UUI and/or UUS supplementary service requests to users who subscribe to the relevant UUS supplementary service?	MC 2.9 AND MC 2.23 NOT (MC 2.9 AND MC 2.23)	O N/A	5.29.3.2, 5.29.3.2.1	[]Yes []No []N/A

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 6	Interactions between the AOC-E and ECT supplementary services				
SC 6.1	the sending of AOC-E type charging information for transferred calls?	MC 2.14 AND MC 2.20 NOT (MC 2.14 AND MC 2.20)	O N/A	5.2.2.1.1	[]Yes []No []N/A
SC 7	Interactions between the AOC-E and CD supplementary services				
SC 7.1	the sending of AOC-E type charging information pertaining to a deflected call when a deflected call is released ?	MC 2.14 AND MC 2.24 NOT (MC 2.14 AND MC 2.24)	O N/A	5.4.2, 5.4.3.1, 5.4.3.2	[]Yes []No []N/A
SC 8	Interactions between the AOC-E and CFB supplementary services				
SC 8.1	the sending of AOC-E charging information to the forwarding (i.e. served) user when a forwarded call is released?	MC 2.14 AND MC 2.21 NOT (MC 2.14 AND MC 2.21)	O N/A	5.5.2, 5.5.3.1	[]Yes []No []N/A
SC 9	Interactions between the AOC-E and CFNR supplementary services				
SC 9.1	the sending of AOC-E charging information to the forwarding (i.e. served) user when a forwarded call is released?	MC 2.14 AND MC 2.22 NOT (MC 2.14 AND MC 2.22)	O N/A	5.6	[]Yes []No []N/A
SC 10	Interactions between the AOC-E and CFU supplementary services				
SC 10.1	the sending of AOC-E charging information to the forwarding (i.e. served) user when a forwarded call is released?	MC 2.14 AND MC 2.23 NOT (MC 2.14 AND MC 2.23)	O N/A	5.7	[]Yes []No []N/A
SC 11	Interactions between the AOC and 3PTY supplementary services				
SC 11.1	the sending of AOC charging information to the served user for the use of the 3-way conference bridge?	(MC 2.12 OR MC 2.13 OR MC 2.14) AND MC 2.11 NOT ((MC 2.12 OR MC 2.13 OR MC 2.14) AND MC 2.11)	O N/A	5.8.2.1	[]Yes []No []N/A
SC 12	Interactions between the AOC and CONF supplementary services				
SC 12.1	the sending of AOC charging information to the served user in conjunction with the CONF supplementary service?	(MC 2.12 OR MC 2.13 OR MC 2.14) AND MC 2.18 NOT ((MC 2.12 OR MC 2.13 OR MC 2.14) AND MC 2.18)	O N/A	5.9.2.2	[]Yes []No []N/A
SC 13	Interactions between the LH and CCBS supplementary services				
SC 13.1	checking the subscription of a line hunting group to CCBS invoke?	MC 2.7 AND MC 2.30 NOT (MC 2.7 AND MC 2.30)	O N/A	5.68	[]Yes []No []N/A
SC 13.2	checking which calling address is being used to invoke CCBS, the individual address or the hunting group address?	MC 2.7 AND MC 2.30 NOT (MC 2.7 AND MC 2.30)	O N/A	5.68	[]Yes []No []N/A
SC 14	Interactions between the LH and CCNR supplementary services				
SC 14.1	checking the subscription of a line hunting group to CCnr invoke?	MC 2.28 AND MC 2.30 NOT (MC 2.7 AND MC 2.30)	O N/A	5.69	[]Yes []No []N/A
SC 14.2	checking which calling address is being used to invoke CCNR, the individual address or the hunting group address?	MC 2.28 AND MC 2.30 NOT (MC 2.7 AND MC 2.30)	O N/A	5.69	[]Yes []No []N/A
SC 15	Interactions between the LH and CFU supplementary services				
SC 15.1	When activated, CFU has precedence over LH?	MC 2.23 AND MC 2.30 NOT (MC 2.23 AND MC 2.30)	O N/A	5.70	[]Yes []No []N/A
SC 15.2	When activated, CFU shall not send a notification that it has been activated to the served user of LH?	MC 2.23 AND MC 2.30 NOT (MC 2.23 AND MC 2.30)	O N/A	5.70	[]Yes []No []N/A
SC 15	Interactions between the LH and CFU supplementary services				
SC 15.1	When activated, CFU has precedence over LH?	MC 2.23 AND MC 2.30 NOT (MC 2.23 AND MC 2.30)	O N/A	5.70	[]Yes []No []N/A
SC 15.2	When activated, CFU shall not send a notification that it has been activated to the served user of LH?	MC 2.23 AND MC 2.30 NOT (MC 2.23 AND MC 2.30)	O N/A	5.70	[]Yes []No []N/A
SC 16	Interactions between the LH and CFB supplementary services				
SC 16.1	When activated, the invocation of CFB when all accesses either are NDUB or the selected user access is UDUB?	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 16.2	When activated, and CFB invoked as a result of UDUB, a notification of CFB invocation shall not be given to the served user?	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
SC 16.3	When activated, and CFB invoked as a result of UDUB, a notification of CFB invocation is given to the access where the call is being presented?	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
SC 17	Interactions between the LH and SCF supplementary services				
SC 17.1	When SCF activated and criteria for invocation are met, SCF takes precedence over LH?	MC 2.29 AND MC 2.30 NOT (MC 2.29 AND MC 2.30)	O N/A	5.74	[]Yes []No []N/A
SC 17.2	When SCF activated, invocation of SCF when either all accesses are either NDUB or withdrawn from the hunt group or the selected access is UDUB?	MC 2.29 AND MC 2.30 NOT (MC 2.29 AND MC 2.30)	O N/A	5.74	[]Yes []No []N/A
SC 17.3	When SCF activated, invocation of SCF when all accesses are NDUB does not result in a notification of call forwarding to the served user?	MC 2.29 AND MC 2.30 NOT (MC 2.29 AND MC 2.30)	O N/A	5.74	[]Yes []No []N/A
SC 17.4	When SCF activated, invocation of SCF when the selected access is UDUB results in a notification being sent to the access to which the call is being presented?	MC 2.29 AND MC 2.30 NOT (MC 2.29 AND MC 2.30)	O N/A	5.74	[]Yes []No []N/A
SC 16	Interactions between the LH and CFB supplementary services				
SC 16.1	When activated, the invocation of CFB when all accesses either are NDUB or the selected user access is UDUB?	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
SC 16.2	When activated, and CFB invoked as a result of UDUB, a notification of CFB invocation shall not be given to the served user	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
SC 16	Interactions between the LH and CFB supplementary services				
SC 16.1	When activated, the invocation of CFB when all accesses either are NDUB or the selected user access is UDUB?	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
SC 16.2	When activated, and CFB invoked as a result of UDUB, a notification of CFB invocation shall not be given to the served user	MC 2.21 AND MC 2.30 NOT (MC 2.21 AND MC 2.30)	O N/A	5.71	[]Yes []No []N/A
O.4	Support of one and only one of these options is required.				
O.5	Support of one and only one of these options is required.				
Comments					

A.8.3 Protocol data units

No items requiring response.

A.8.4 Protocol data unit parameters

Table A.8: Facility information element components received by the network

Item	Facility information element components: Does the implementation support...	Conditions for status	Status	Reference	Support
P 5	IdentificationOfCharge invoke?	SC 6.1 OR SC 7.1 NOT (SC 6.1 OR SC 7.1)	M N/A	5.2.1, 5.2.2.1.1, 5.2.2.1.2, 5.4.2.1.1, 5.4.3.2.1	[]Yes []No []N/A
P 6	UUSRequest invoke? (Note)	MC 2.9 NOT MC 2.9	M N/A	5.23.1, 5.23.3.2.1	[]Yes []No []N/A
NOTE: This item is only applicable if partial rerouteing is supported by the network. This question is to be answered in the PICS of the corresponding individual protocol standard.					
Comments:					

Table A.9: Facility information element components sent by the network

Item	Facility information element components: Does the implementation support...	Conditions for status	Status	Reference	Support
P 7	IdentificationOfCharge return error?	SC 6.1 OR SC 7.1 NOT (SC 6.1 OR SC 7.1)	M N/A	5.2.2.1.2, 5.4.2.1.2, 5.4.3.2.2	[]Yes []No []N/A
P 8	IdentifyConferee invoke?	MC 2.18 AND (MC 2.5 OR MC 2.9 OR MC 2.25) NOT (MC 2.18 AND (MC 2.5 OR MC 2.9 OR MC 2.25))	M N/A	5.11.2.2.1, 5.13.2.3.1, 5.14.2.2.1, 5.15.2.4.1, 5.16.2.2.1, 5.17.2.2.1	[]Yes []No []N/A
Comments:					

A.8.5 Timers

No items requiring response.

A.8.6 Call states

No items requiring response.

History

Document history		
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