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**Integrated Services Digital Network (ISDN);  
Completion of Calls to Busy Subscriber (CCBS)  
supplementary service;  
Digital Subscriber Signalling System No. one (DSS1) protocol;  
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 Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Completion of Calls to Busy Subscriber (CCBS) supplementary service, as described 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: "TSS&TP specification for the network";

Part 6: "ATS and partial PIXIT proforma specification for the network".

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).

Transposition dates	
Date of adoption of this ETS:	29 September 1995
Date of latest announcement of this ETS (doa):	31 December 1995
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	30 June 1996
Date of withdrawal of any conflicting National Standard (dow):	30 June 1996

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## 1 Scope

This second part of ETS 300 359 is applicable to the stage three of the Completion of Calls to Busy Subscriber (CCBS) supplementary service 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 [12]) 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 telecommunications service (see CCITT Recommendation I.130 [11]).

This ETS provides the Protocol Implementation Conformance Statement (PICS) proforma for the ISDN DSS1 CCBS supplementary service protocol as specified in ETS 300 359-1 [8] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [10].

The supplier of a protocol implementation which is claimed to conform to ETS 300 359-1 [8] 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 and 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 300 102-1: "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".
  - [2] ETS 300 195-1 (1995): "Integrated Services Digital Network (ISDN); Supplementary service interactions; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
  - [3] ETS 300 195-2: "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".
  - [4] ETS 300 196-1 (1993): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1 Protocol specification".
- NOTE: ETS 300 196-1 (1993) was initially published as ETS 300 196 (1993).
- [5] ETS 300 196-2: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
  - [6] I-ETS 300 314 (1994): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1); Protocol Implementation Conformance Statement (PICS) proforma specification for the network layer signalling protocol for circuit-mode basic call control (basic access, user)".
  - [7] I-ETS 300 315 (1994): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1); Protocol Implementation Conformance Statement (PICS) proforma specification for the network layer signalling protocol for circuit-mode basic call control (primary rate access, user)".

- [8] ETS 300 359-1 (1995): "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [9] ISO/IEC 9646-1: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [10] ISO/IEC 9646-7: "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [11] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [12] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".

### 3 Definitions

For the purposes of this ETS, the following definitions apply, in addition to those given in ETS 300 359-1 [8]:

**Protocol Implementation Conformance Statement (PICS):** A 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 [9]).

**PICS proforma:** A 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 [9]).

**static conformance review:** A 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 [9]).

### 4 Symbols and abbreviations

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

AND	Boolean "and"
C	Conditional requirement (to be observed if the relevant conditions apply)
CCBS	Completion of Calls to Busy Subscriber
DSS1	Digital Subscriber Signalling System No. one
IET	Information Elements Transmitted
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
M	Mandatory requirement (to be observed in all cases)
MC	Major Capabilities
MT	Messages Transmitted
N/A	Not applicable, not supported or the conditions for status are not met
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"
OSI	Open Systems Interconnection
P	Parameters
PICS	Protocol Implementation Conformance Statement
R	Role
RL	Requirements List
SC	Subsidiary Capabilities
SCS	System Conformance Statement
SS	Supplementary Service
SUT	System Under Test
TM	Timers
Yes	supported

## 5 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 ETS 300 359-1 [8];
- b) be a conforming ICS 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.

## Annex A (normative): PICS proforma

Notwithstanding the provisions of the copyright clause related to the text of this ETS, ETSI grants that users of this ETS 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 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 SCS as defined in ISO/IEC 9646-1 [9] is a document supplied by the client or product supplier that summarizes which OSI International Standards, ITU-T (CCITT) Recommendations, ETSs or other standards are implemented and to which conformance is claimed. The PICS/SCS subclause 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 subclause is "Yes", all subsequent subclauses should be completed to facilitate selection of test cases for optional functions.

If the answer to the statement in this subclause is "No", all subsequent subclauses 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 sheets of paper.

#### A.1.3 Explanation of PICS proforma subclauses

The PICS proforma contains a Roles clause and thereafter is presented in two parts (for user and network) with the following subclauses, 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 subclause 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 (RL) 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 [10].

The reference column contained in the tables gives reference to the appropriate part(s) of ETS 300 359-1 [8] 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 ETS 300 359-1 [8] 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 [10], 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 [10], are used for the support column:

Y	for supported/implemented
N	for not supported/not implemented

### A.2 Identification of the implementation

#### A.2.1 Implementation Under Test (IUT) identification

IUT name:

.....  
.....

IUT version:

.....

#### A.2.2 System Under Test (SUT) identification

SUT name:

.....  
.....

Hardware configuration:

.....  
.....  
.....

Operating system:

.....  
.....

**A.2.3 Product supplier**

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

**A.2.4 Client**

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

**A.2.5 PICS contact person**

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

**A.3 PICS/System Conformance Statement (SCS)**

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:

**ETS 300 359-1 (1995):** "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

### 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 sheets of paper.

In the tabulations which follow, all references are to ETS 300 359-1 [8] unless another numbered reference is explicitly indicated.

### A.6 Roles

Table A.1: Roles

Item	Major role: Does the implementation...	Conditions for status	Status	Reference	Support
<b>Type of implementation</b>					
R 1	support the CCBS supplementary service? (note)		O	5	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 2.1	support user requirements?		O.1	9	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 2.2	support network requirements?		O.1	9	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 3.1	support requirements at the coincident S and T reference point?	R 2.2 R 2.1	O.2 O.3	9	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 3.2	support procedures for interworking with private ISDN at the T reference point?	R 2.2 R 2.1	O.2 O.3	10	<input type="checkbox"/> Yes <input type="checkbox"/> No
R 4.1	support user requirements at the interface of the called (remote) user	R 2.1 AND R 3.1 R 2.1 AND R 3.2 NOT R 2.1	O M N/A	9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
R 4.2	support user requirements at the interface of the calling (served) user	R 2.1 NOT R 2.1	M N/A	9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
R 4.3	support network requirements at the interface of the called (remote) user	R 2.2 NOT R 2.2	M N/A	9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
R 4.4	support network requirements at the interface of the calling (served) user	R 2.2 NOT R 2.2	M N/A	9, 10	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
O.1	Support of one and only one of these options is required.				
O.2	Support of at least one of these options is required.				
O.3	Support of one and only one of these options is required.				
NOTE:	ETS 300 359-1 [8] contains requirements that can be implemented independently of the support of the supplementary service.				
Comments:					

## A.7 User

### 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	the offering of CCBS recall to all compatible terminals (global recall)?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	6.1, 9.1.1	[ ]Yes [ ]No [ ]N/A
MC 2	the offering of CCBS recall to terminals which have activated the CCBS service (specific recall)?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	6.1	[ ]Yes [ ]No [ ]N/A
MC 3	the call information retention procedure?	R 3.1 NOT R 3.1	M N/A	9.6, 9.1.1	[ ]Yes [ ]No [ ]N/A
MC 4	the CCBS request retention option?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	O N/A	6.1, 10.1.2.1, 10.1.6.2, 10.2.2.1, 10.2.6.2	[ ]Yes [ ]No [ ]N/A
Comments:					

### A.7.2 Subsidiary Capabilities

**Table A.3: Subsidiary capabilities - user side**

Item	Subsidiary capability: Does the implementation support...	Conditions for status	Status	Reference	Support
SC 1	the retention of the CallLinkageID on receipt of CallInfoRetain invoke component?	R 3.1 NOT R 3.1	O N/A	9.6.1	[ ]Yes [ ]No [ ]N/A
Comments:					

### A.7.3 Protocol data units

No items requiring response.

A.7.4 Protocol data unit parameters

Table A.3: 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	CCBSRemoteUserFree invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.1.1, 9.4.2.1, 9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 2	CCBSStopAlerting invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.2.1, 9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 3	CCBSErase invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.4.1	[ ]Yes [ ]No [ ]N/A
P 4	CCBSBFree invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.5.1	[ ]Yes [ ]No [ ]N/A
P 5	CCBSStatusRequest invoke? (note 1)	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.6.1, annex B	[ ]Yes [ ]No [ ]N/A
P 6.1	CallInfoRetain invoke? (note 2)	R 3.1 NOT R 3.1	M N/A	9.6.1	[ ]Yes [ ]No [ ]N/A
P 6.2	EraseCallLinkageID invoke? (note 2)	R 3.1 NOT R 3.1	M N/A	9.6.1	[ ]Yes [ ]No [ ]N/A
P 7.1	CCBSRequest return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.1	[ ]Yes [ ]No [ ]N/A
P 7.2	CCBSRequest return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.2	[ ]Yes [ ]No [ ]N/A
P 8.1	CCBSDeactivate return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.1	[ ]Yes [ ]No [ ]N/A
P 8.2	CCBSDeactivate return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.2	[ ]Yes [ ]No [ ]N/A
P 9.1	CCBSInterrogate return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.1.1, 9.3.2.1	[ ]Yes [ ]No [ ]N/A
P 9.2	CCBSInterrogate return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.1.2, 9.3.2.2	[ ]Yes [ ]No [ ]N/A
P 10	CCBSCall return error?	R 1 AND R 3.1 NOT R 3.1	M N/A	9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 11	CCBS-T-Available invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.1.1, 10.1.6.2	[ ]Yes [ ]No [ ]N/A
P 12	CCBS-T-RemoteUserFree invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.3.1	[ ]Yes [ ]No [ ]N/A
P 13.1	CCBS-T-Request return result?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.1	[ ]Yes [ ]No [ ]N/A
P 13.2	CCBS-T-Request return error?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.2	[ ]Yes [ ]No [ ]N/A
P 14	CCBS-T-Request invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.1, 10.2.2.2	[ ]Yes [ ]No [ ]N/A
P 15	CCBS-T-Suspend invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.4.1	[ ]Yes [ ]No [ ]N/A
P 16	CCBS-T-Resume invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.5.1	[ ]Yes [ ]No [ ]N/A
P 17	CCBS-T-Call invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.6.1	[ ]Yes [ ]No [ ]N/A
NOTE 1:	Support of the status request procedures is mandatory for any implementation conforming to ETS 300 359-1 [8] that provides a circuit-mode basic telecommunication service that is not an existing service (i.e. that is not solely associated with speech, 3,1 kHz audio or 64 kbit/s unrestricted bearer capabilities).				
NOTE 2:	The call information retention procedure is a generic procedure which can be supported independently from the CCBS supplementary service				
Comments:					



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

Item	Facility information element components: Does the implementation support...	Conditions for status	Status	Reference	Support
P 18	CCBSRequest invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.1	[ ]Yes [ ]No [ ]N/A
P 19	CCBSDeactivate invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.1	[ ]Yes [ ]No [ ]N/A
P 20	CCBSInterrogate invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.3.1, 9.3.2.1	[ ]Yes [ ]No [ ]N/A
P 21	CCBSCall invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.2.1, 9.4.3.1	[ ]Yes [ ]No [ ]N/A
P 22	CCBSStatusRequest return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.6.1, 9.4.6.2	[ ]Yes [ ]No [ ]N/A
P 23	CCBS-T-Request invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.1, 10.1.2.2	[ ]Yes [ ]No [ ]N/A
P 24	CCBS-T-Suspend invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.4.1	[ ]Yes [ ]No [ ]N/A
P 25	CCBS-T-Resume invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.5.1	[ ]Yes [ ]No [ ]N/A
P 26	CCBS-T-Call invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.6.1	[ ]Yes [ ]No [ ]N/A
P 27	CCBS-T-Available invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.1.1, 10.2.6.2	[ ]Yes [ ]No [ ]N/A
P 28	CCBS-T-RemoteUserFree invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.3.1	[ ]Yes [ ]No [ ]N/A
P 29.1	CCBS-T-Request return result?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.1	[ ]Yes [ ]No [ ]N/A
P 29.2	CCBS-T-Request return error?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.2	[ ]Yes [ ]No [ ]N/A
Comments:					

**A.7.5 Timers**

No items requiring response.

**A.7.6 Call States**

No items requiring response.

## A.8 Network

### A.8.1 Major capabilities

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

Item	Major capability: Does the implementation...	Conditions for status	Status	Reference	Support
MC 5	provide the call information retention procedure?	R 3.1 NOT R 3.1	M N/A	9.1.1, 9.6	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
MC 6	support CCBS request retention option?	R 1 NOT R 1	O N/A	9.4.3.2, 10.1.2.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
MC 7.1	offer the CCBS recall to all compatible terminals (global recall)?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	O.4 N/A	6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
MC 7.2	offer the CCBS recall to the terminal which has activated the CCBS supplementary service (specific recall)?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	O.4 N/A	6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
MC 8	support check for identical calls option?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	O N/A	6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
O.4	Support of at least one of these options is required				
Comments:					

### A.8.2 Subsidiary capabilities

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

Item	Subsidiary capability: Does the implementation...	Conditions for status	Status	Reference	Support
SC 1	<b>Call information retention</b>				
SC 1.1	support the restriction of the number of calls being subject to the retention procedure?	R 3.1 NOT R 3.1	O N/A	9.6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
SC 1.2	support the release of retained call information prior to the expiry of timer T-RETENTION, if it has knowledge that no other supplementary service will need this information?	R 3.1 NOT R 3.1	O.5 N/A	9.6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
SC 1.3	support the retention of call information until timer T-RETENTION expires?	R 3.1 NOT R 3.1	O.5 N/A	9.6.1	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
SC 1.4	support, on receipt of a reject component including invoke identifier, the release of retained call information prior to the expiry of timer T-RETENTION?	R 3.1 NOT R 3.1	O.6 N/A	9.6.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
SC 1.5	support, on receipt of a reject component including invoke identifier, the retention of call information until timer T-RETENTION expires?	R 3.1 NOT R 3.1	O.6 N/A	9.6.2	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
O.5	Support of one and only one of these options is required				
O.6	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.7: Facility information element components received by the network**

Item	Facility information element components: Does the implementation support the ...	Conditions for status	Status	Reference	Support
P 30	CCBSRequest invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.1	[ ]Yes [ ]No [ ]N/A
P 31	CCBSDeactivate invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.1	[ ]Yes [ ]No [ ]N/A
P 32	CCBSInterrogate invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.1.1, 9.3.2.1	[ ]Yes [ ]No [ ]N/A
P 33	CCBSCall invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.2.1, 9.4.3.1	[ ]Yes [ ]No [ ]N/A
P 34	CCBSStatusRequest return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.6.1, 9.4.6.2	[ ]Yes [ ]No [ ]N/A
P 35	CCBS-T-Request invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.1, 10.1.2.2	[ ]Yes [ ]No [ ]N/A
P 36	CCBS-T-Suspend invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.4.1	[ ]Yes [ ]No [ ]N/A
P 37	CCBS-T-Resume invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.5.1	[ ]Yes [ ]No [ ]N/A
P 38	CCBS-T-Call invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.6.1	[ ]Yes [ ]No [ ]N/A
P 39	CCBS-T-Available invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.1.1, 10.2.6.2	[ ]Yes [ ]No [ ]N/A
P 40	CCBS-T-RemoteUserFree invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.3.1	[ ]Yes [ ]No [ ]N/A
P 41.1	CCBS-T-Request return result?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.1	[ ]Yes [ ]No [ ]N/A
P 41.2	CCBS-T-Request return error?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.2	[ ]Yes [ ]No [ ]N/A
Comments:					

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

Item	Facility information element components: Does the implementation support the ...	Conditions for status	Status	Reference	Support
P 42	CCBSRemoteUserFree invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.1.1, 9.4.2.1, 9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 43	CCBSStopAlerting invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.2.1, 9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 44	CCBSErase invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.4.1	[ ]Yes [ ]No [ ]N/A
P 45	CCBSBFree invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.5.1	[ ]Yes [ ]No [ ]N/A
P 46	CCBSStatusRequest invoke?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.6.1	[ ]Yes [ ]No [ ]N/A
P 47	CallInfoRetain invoke? (note)	R 3.1 NOT R 3.1	M N/A	9.6.1	[ ]Yes [ ]No [ ]N/A
P 48	EraseCallLinkageID invoke? (note)	R 3.1 NOT R 3.1	M N/A	9.6.1	[ ]Yes [ ]No [ ]N/A
P 49.1	CCBSRequest return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.1	[ ]Yes [ ]No [ ]N/A
P 49.2	CCBSRequest return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.2	[ ]Yes [ ]No [ ]N/A
P 50.1	CCBSDeactivate return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.1	[ ]Yes [ ]No [ ]N/A
P 50.2	CCBSDeactivate return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.2.2	[ ]Yes [ ]No [ ]N/A
P 51.1	CCBSInterrogate return result?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.1.1, 9.3.2.1	[ ]Yes [ ]No [ ]N/A
P 51.2	CCBSInterrogate return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.3.1.2, 9.3.2.2	[ ]Yes [ ]No [ ]N/A
P 52	CCBSCall return error?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.2.2	[ ]Yes [ ]No [ ]N/A
P 53	CCBS-T-Available invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.1.1, 10.1.6.2	[ ]Yes [ ]No [ ]N/A
P 54	CCBS-T-RemoteUserFree invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.3.1	[ ]Yes [ ]No [ ]N/A
P 55.1	CCBS-T-Request return result?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.1	[ ]Yes [ ]No
P 55.2	CCBS-T-Request return error?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.2	[ ]Yes [ ]No
P 56	CCBS-T-Request invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.2.1, 10.2.2.2	[ ]Yes [ ]No
P 57	CCBS-T-Suspend invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.4.1	[ ]Yes [ ]No
P 58	CCBS-T-Resume invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.5.1	[ ]Yes [ ]No
P 59	CCBS-T-Call invoke?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.2.6.1	[ ]Yes [ ]No
NOTE:	The call information retention procedure is a generic procedure which can be supported independently from the CCBS supplementary service				
Comments:					

**A.8.5 Timers**

**Table A.9: Timers - network**

Item	Timer: Does the implementation support...	Conditions for status	Status	Reference	Support
TM 1	T-CCBS1?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.6.1, 9.4.6.2, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 2	T-CCBS2?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.1.1, 9.1.2, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 3	T-CCBS3?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.4.1.1, 9.4.1.2, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 4	T-CCBS4?	R 1 AND R 3.1 NOT (R 1 AND R 3.1)	M N/A	9.5.3.1, 9.5.3.2, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 5	T-CCBS5?	R 1 AND R 3.2 NOT (R 1 AND R 3.12)	M N/A	10.2.2.1, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 6	T-CCBS6?	R 1 AND R 3.2 NOT (R 1 AND R 3.2)	M N/A	10.1.2.1, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
TM 7	T-RETENTION?	MC 5 NOT MC 5	M N/A	9.6.1, 9.6.2, 13	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Comments:					

**A.8.6 Call states**

No items requiring response.

## Annex B (normative): Requirements list

This annex repeats in the form of a requirements list some items of the basic call, generic functional protocol and supplementary service interactions PICS proforma required for support of ETS 300 359-1 [8]. No support column is provided as the answers are to be entered in the relevant base PICS proforma.

In the tables which follow in this annex, the status of the base PICS proforma is indicated as "C" (conditional) or "O" (optional). The "C" status is used where the base PICS proforma contains a number of interdependent items which need not be repeated in this ETS. "O" indicates that the item in the base PICS proforma is dependent on one or more other items, at least one of which has an optional status. The exact interdependency is fully specified in the base PICS proforma specification.

### B.1 User

#### B.1.1 Requirements on items used in the basic call PICS

In the tabulations which follow in this subclause all item numbers are as contained in I-ETS 300 314 [6] and I-ETS 300 315 [7]. All references are to ETS 300 359-1 [8] unless otherwise stated.

**Table B.1: Major capabilities - user (from I-ETS 300 314 [6] and I-ETS 300 315 [7])**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MC 1	outgoing calls?	O	R 4.2 NOT R 4.2	M N/A	[1] 5.1
MC 2	incoming calls?	O	R 4.1 NOT R 4.1	M N/A	[1] 5.2

#### B.1.2 Requirements on items used in the generic functional protocol PICS

In the tabulations which follow in this subclause all item numbers are as contained in ETS 300 196-2 [5]. All references are to ETS 300 359-1 [8] unless otherwise stated.

**Table B.2: Major capabilities - user (from ETS 300 196-2 [5])**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MCu 2	the functional protocol (common information element category) for the control of supplementary services?	O	R 2.1 NOT R 2.1	M N/A	[4] 6.3, 8
MCu 2.1	bearer related supplementary service procedure?	O	R 2.1 NOT R 2.1	M N/A	9.4, 9.6, 10.1, 10.2, [4] 8.3.1
MCu 2.5	point-to-point (bearer independent) connection oriented transport mechanism?	O	R 2.1 AND R 3.2 NOT (R 2.1 AND R 3.2)	M N/A	10.1, 10.2, [4] 8.3.2.1
MCu 2.6	point-to-point (bearer independent) connectionless transport mechanism?	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	O.7 N/A	9.4, 9.6, [4] 8.3.2.2
MCu 2.7	broadcast (bearer independent) connectionless transport mechanism?	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	O.7 N/A	9.4, 9.6, [4] 8.3.2.4
MCu 5.1	activation?	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	M N/A	9.1, [4] 10.2.2
MCu 5.2	deactivation?	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	M N/A	9.2, [4] 10.2.3
MCu 5.3	interrogation?	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	M N/A	9.3, [4] 10.2.4

(continued)

**Table B.2 (concluded): Major capabilities - user (from ETS 300 196-2 [5])**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MCu 6	status request procedure? (note)	O	R 3.1 AND R 4.2 NOT (R 3.1 AND R 4.2)	M N/A	9.4, 9.5, annex B, [4] 10.3
O.7	Support of at least one of these options is required				
NOTE:	At the calling (served) user, the generic procedure of ETS 300 196-1 [4] is applicable, with the exception that the CCBSStatusRequest components are used instead of the components of the StatusRequest operation. At the called (remote) user, the generic procedure of ETS 300 196-1 [4] is applicable. Support of the generic status request procedures is mandatory for any implementation conforming to ETS 300 359-1 [8] that provides a circuit-mode basic telecommunication service that is not an existing service (i.e. that is not solely associated with speech, 3,1 kHz audio or 64 kbit/s unrestricted bearer capabilities).				

**Table B.3: Messages transmitted - user (from ETS 300 196-2 [5])**

Item	Message: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MTu 1	the inclusion of FACILITY?	C	R 2.1 NOT R 2.1	M N/A	[4] 8.3

**Table B.4: REGISTER PDU parameters transmitted - user**

Item	REGISTER PDU parameters: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
IETu 5.4	Facility?	O	R 3.2 AND R 4.2 NOT (R 3.2 AND R 4.2)	M N/A	10.1.2, 10.1.3, [] 8.3.2.1.1

### B.1.3 Requirements on items used in the supplementary service interactions PICS

In the tabulations which follow in this subclause all item numbers are as contained in ETS 300 195-2 [3]. All references are to ETS 300 359-1 [8] unless otherwise stated.

**Table B.5: Major capabilities - user**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MC 1.7	the CCBS supplementary service interactions with other implemented supplementary services?	O	R 1 AND R 2.1 NOT (R 1 AND R 2.1)	M N/A	9.1, 9.3.1, 9.5.4, 10.1.2, 10.2.2, 12, [2] 5.3, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 4.47

## B.2 Network

### B.2.1 Requirements on items used in the basic call PICS

No additional requirements.

### B.2.2 Requirements on items used in the generic functional protocol PICS

In the tabulations which follow in this subclause all item numbers are as contained in ETS 300 196-2 [5]. All references are to ETS 300 359-1 [8] unless otherwise stated.

**Table B.6: Major capabilities - network (from ETS 300 196-2 [5])**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MCn 2	the functional protocol (common information element category) for the control of supplementary services?	O	R 2.2 NOT R 2.2	M N/A	[4] 6.3, 8
MCn 2.1	bearer related supplementary service procedure?	O	R 2.2 NOT R 2.2	M N/A	9.4, 9.6, 10.1, 10.2, [4] 8.3.1
MCn 2.5	point-to-point (bearer independent) connection oriented transport mechanism?	O	R 2.2 AND R 3.2 NOT (R 2.2 AND R 3.2)	M N/A	10.1, 10.2, [4] 8.3.2.1
MCn 2.6	point-to-point (bearer independent) connectionless transport mechanism?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	O.8 N/A	9.4, 9.6, [4] 8.3.2.2
MCn 2.7	broadcast (bearer independent) connectionless transport mechanism?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	O.8 N/A	9.4, 9.6, [4] 8.3.2.4
MCn 5.1	activation?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.1, [4] 10.2.2
MCn 5.2	deactivation?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.2, [4] 10.2.3
MCn 5.3	interrogation?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.3, [4] 10.2.4
MCn 6	status request procedure? (note)	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.4, 9.5, annex B, [4] 10.3
O.8	Support of at least one of these options is required				
NOTE:	The generic procedure of ETS 300 196-1 [4] is applicable, with the exception that the CCBSStatusRequest components are used instead of the components of the StatusRequest operation.				

**Table B.7: REGISTER PDU parameters transmitted - network**

Item	REGISTER PDU parameters: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
IETn 5.4	Facility?	O	R 3.2 AND R 4.3 NOT (R 3.2 AND R 4.3)	M N/A	10.2.2, 10.2.3, [4] 8.3.2.1.1

**Table B.8: DISCONNECT PDU parameters transmitted - network**

Item	DISCONNECT PDU parameters: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
IETn 13.1	Facility?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.6.1

**Table B.9: RELEASE PDU parameters transmitted - network**

Item	RELEASE PDU parameters: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
IETn 16.1	Facility?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.6.1



**Table B.10: RELEASE COMPLETE PDU parameters transmitted - network**

Item	RELEASE COMPLETE PDU parameters: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
IETn 17.1	Facility?	O	R 3.1 AND R 4.4 NOT (R 3.1 AND R 4.4)	M N/A	9.6.1

**B.2.3 Requirements on items used in the supplementary service interactions PICS**

In the tabulations which follow in this subclause all item numbers are as contained in ETS 300 195-2 [3]. All references are to ETS 300 359-1 [8] unless otherwise stated.

**Table B.11: Major capabilities - network**

Item	Major capability: Does the implementation support...	Status base	SS conditions for status	SS status	Reference
MC 2.7	the CCBS supplementary service interactions with other implemented supplementary services?	O	R 1 AND R 2.2 NOT (R 1 AND R 2.2)	M N/A	9.1, 9.3.1, 9.5.4, 10.1.2, 10.2.2, 12, [2] 5.3, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 4.47

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