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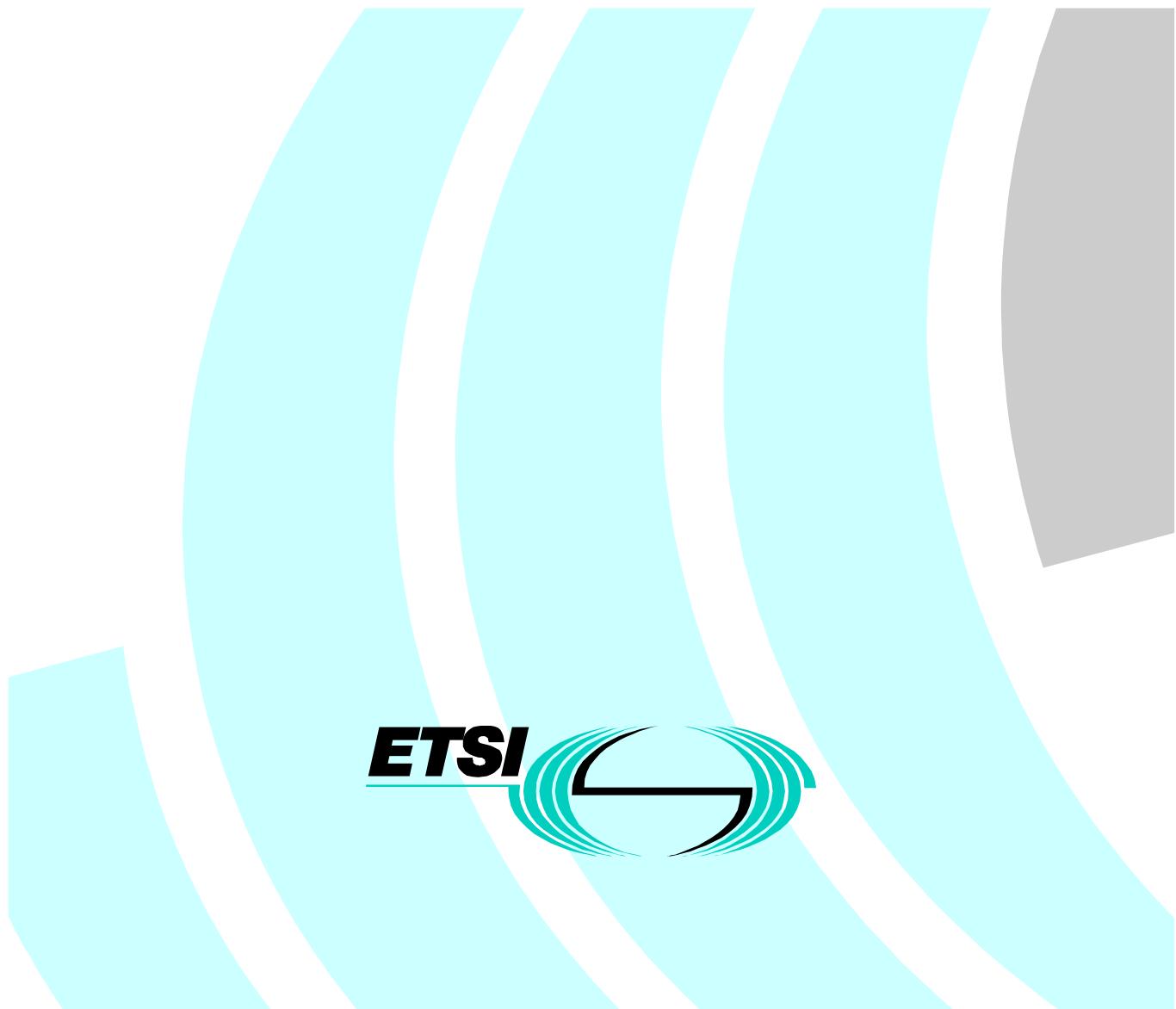
European Standard (Telecommunications series)

**Integrated Services Digital Network (ISDN);
Digital Subscriber Signalling System No. one (DSS1) and
Signalling System No.7 (SS7) protocols;
Signalling application for the mobility management service
on the alpha interface;
Part 2: Protocol Implementation Conformance
Statement (PICS) proforma specification**

Reference

DEN/SPS-05121-2

Keywords

CTM, DSS1, ISDN, PICS, SS7

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 1 of a multi-part deliverable covering the signalling application for the mobility management service on the alpha interface, as identified below:

Part 1:   "Protocol specification";

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

National transposition dates	
Date of adoption of this EN:	13 October 2000
Date of latest announcement of this EN (doa):	31 January 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 July 2001
Date of withdrawal of any conflicting National Standard (dow):	31 July 2001

Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (PICS).

1 Scope

The present document provides the Implementation Conformance Statement (PICS) proforma for the signalling application for the mobility management service on the alpha interface for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunication operators at the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [9]) 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 [8]).

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the signalling application for the mobility management service on the alpha interface as specified in EN 301 144-1 [5] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [7].

The supplier of a protocol implementation which is claimed to conform to EN 301 144-1 [5] 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, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1] EN 300 196-1 (V1.2): "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".

[2] 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".

[3] EN 300 403-2: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 2: Specification and Description Language (SDL) diagrams".

[4] EN 300 403-1 (V1.2): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".

[5] EN 301 144-1 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) and Signalling System No.7 protocols; Signalling application for the mobility management service on the alpha interface; Part 1: Protocol specification".

[6] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[7] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[8] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".

[9]   ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - references configurations".

[10]   EN 300 195-2: "Integrated Services Digital Network (ISDN); Supplementary service interactions; Digital Subscriber Signalling System No. one (DDS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".

3   Definitions

For the purposes of the present document, the following terms and definitions apply:

- terms defined in EN 301 144-1 [5];

- terms defined in ISO/IEC 9646-1 [6] and in ISO/IEC 9646-7 [7].

In particular, the following terms defined in ISO/IEC 9646-1 [6] apply:

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented. The PICS can take several forms: protocol PICS, profile PICS, profile specific PICS, information object PICS, etc

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

Protocol ICS (PICS): an ICS for an implementation or system claimed to conform to a given protocol specification

4   Abbreviations

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

CTM	Cordless Terminal Mobility
DECT	Digital Enhanced Cordless Telecommunication
DSS1	Digital Subscriber Signalling System No. One
GFP	Generic Functional Protocol
GSM	Global System for Mobile Communication
ICS	Implementation Conformance Statement
ID	Identifier
IE	Information Element
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
LE	Local Exchange
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PLMN	Public Land Mobile Network
PSTN	Public Switched Telecommunication Network
ROSE	Remote Operations Service Element
SCS	System Conformance Statement
SUT	System Under Test

5   Conformance to this PICS proforma specification

If it claims to conform to the present document, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

An PICS which conforms to the present document shall be a conforming PICS proforma completed in accordance with the guidance for completion given in clause A.1.

Annex A (normative):
PICS proforma for EN 301 144-1

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.

A.1 Guidance for completing the PICS proforma

A.1.1 Purposes and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in EN 301 144-1 [5] may provide information about the implementation in a standardized manner.

The PICS proforma is subdivided into subclauses for the following categories of information:

- guidance for completing the PICS proforma;

- identification of the implementation;

- identification of the protocol;

- global statement of conformance;

- physical entity;

- external interfaces;

- application contexts;

- operations;

- arguments, results and errors;

- timers;

- range constants.

A.1.2 Abbreviations and conventions

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 [7].

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Status column

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

m	mandatory - the capability is required to be supported.
o	optional - the capability may be supported or not.
n/a	not applicable - in the given context, it is impossible to use the capability.
x	prohibited (excluded) - there is a requirement not to use this capability in the given context.
o.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following 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 an unique conditional status expression which is defined immediately following the table.
c:o	conditional optional - the capability may be supported or not if the hierarchically preceding capability is supported.
c:m	conditional mandatory - the capability is required to be supported if the hierarchically preceding capability is supported.

Reference column

The reference column makes reference to EN 301 144-1 [5], except where explicitly stated otherwise.

Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [7], are used for the support column:

Y or y	supported by the implementation.
N or n	not supported by the implementation.
N/A, n/a or -	no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status).

If this PICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (e.g. ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE: ?3: IF prof1 THEN Y ELSE N

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

NOTE: As stated in ISO/IEC 9646-7 [7], support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

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 by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.

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.

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 clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

# A.1.3	Instructions for completing the PICS proforma

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support or supported column boxes provided, using the notation described in subclause A.1.2.

If necessary, the supplier may provide additional comments in space at the bottom of the tables, or separately on sheets of paper.

More detailed instructions are given at the beginning of the different subclauses of the PICS proforma.

A.2   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.

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:

....

E-mail address:

....

Additional information:

....

....

....

A.2.5   Client (if different from product supplier)

Name:

....

Address:

....

....

....

Telephone number:

....

Facsimile number:

....

E-mail address:

....

Additional information:

....

....

A.2.6   PICS contact person

(A person to contact if there are any queries concerning the content of the PICS)

Name:

....

Telephone number:

....

Facsimile number:

....

E-mail address:

....

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

The PICS proforma applies to EN 301 144-1 [5].

EN 301 144-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System no. one (DSS1) and Signalling System No. 7 (SS7) protocols; Signalling application for the mobility management service on the alpha interface; 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, on pages attached to the PICS proforma.

A.6 Roles

Table A.1: Roles

Item	Major role: Does the implementation ...	Condition for status	Status	Reference	Support
	Type of implementation				
R 1.1	support of the CTM mode?		O.1	6, 9	[ ]Yes [ ]No
R 1.2	support of the DECT access to GSM mode?		O.1	6, 9	[ ]Yes [ ]No
R 2.1	support of user requirements?		O.2	9	[ ]Yes [ ]No
R 2.2	support of network requirements?		O.2	9	[ ]Yes [ ]No
O.1	Support of at least one of these options is required.				
O.2	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 implemented 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 role: Does the implementation ...	Condition for status	Status	Reference	Support
	Type of implementation				
MC 1	support of the subscription registration procedure?	R 1.1 NOT R1.1	O N/A	9	[ ]Yes [ ]No [ ]N/A
MC2	support of the subscription deregistration procedure?	R 1.1 NOT R 1.1	O N/A	9	[ ]Yes [ ]No [ ]N/A
MC 3	support of the portable initiated ciphering procedure?	R 1.1 NOT R1.1	O N/A	9	[ ]Yes [ ]No [ ]N/A
MC 4	support of the location cancellation procedure	R 1.1 NOT R1.1	M O	9	[ ]Yes [ ]No [ ]N/A
Comments:					

A.7.2 Subsidiary Capabilities

No items requiring response.

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 ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 1.1	CTMAccessRightsRequest return result?	MC1￼NOT MC1	M￼N/A	9.1.1.1	[ ]Yes [ ]No￼[ ] N/A
P 1.2	CTMAccessRightsRequest return error?	MC 1￼NOT MC 1	M￼N/A	9.1.1.2	[ ]Yes [ ]No￼[ ] N/A
P 2	CTMAccessRightsTerminate invoke?	MC2￼NOT MC 2	M￼N/A	9.1.2.1	[ ]Yes [ ]No￼[ ] N/A
P 3.1	CTMLocationRegistration return result?	R1.1￼NOT R1.1	M￼N/A	9.2.1.1	[ ]Yes [ ]No￼[ ] N/A
P 3.2	CTMLocationRegistration return error?	R1.1￼NOT R1.1	M￼N/A	9.2.1.2	[ ]Yes [ ]No￼[ ] N/A
P 4	CTMLocationCancellation invoke?	R 1.1￼NOT R 1.1	M￼N/A	9.2.2.1	[ ]Yes [ ]No￼[ ] N/A
P5	CTMLocationRegistrationSuggest invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.1.1	[ ]Yes [ ]No￼[ ] N/A
P 6	CTMTerminalAuthentication invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.2.1	[ ]Yes [ ]No￼[ ] N/A
P 7.1	CTMNetworkAuthentication return result?	R1.1￼NOT R1.1	M￼N/A	9.3.3.1	[ ]Yes [ ]No￼[ ] N/A
P 7.2	CTMNetworkAuthentication return error?	R1.1￼NOT R1	M￼N/A	9.3.3.2	[ ]Yes [ ]No￼[ ] N/A
P 8	CTMCiphering invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.4.1	[ ]Yes [ ]No￼[ ] N/A
P 9	CTMCipheringSuggest return error?	MC 3￼NOT MC 3	M￼N/A	9.3.5.2	[ ]Yes [ ]No￼[ ] N/A
P 10	CTMKeyAllocate invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.7.1	[ ]Yes [ ]No￼[ ] N/A
P 11	CTMIdentityRequest invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.8.1	[ ]Yes [ ]No￼[ ] N/A
P 12	CTMOutgoingCallMobilityManagementInfo return error?	R1.1￼NOT R1	M￼N/A	9.3.9.2	[ ]Yes [ ]No￼[ ] N/A
P 13	CTMIncomingCallMobilityManagementInfo invoke?	R1.1￼NOT R1.1	M￼N/A	9.3.10.1	[ ]Yes [ ]No￼[ ] N/A
P 14.1	GSMLocationRegistration return result?	R1.2￼NOT R1.2	M￼N/A	9.2.1.1	[ ]Yes [ ]No￼[ ] N/A
P 14.2	GSMLocationRegistration return error?	R1.2￼NOT R1.2	M￼N/A	9.2.1.2	[ ]Yes [ ]No￼[ ] N/A
P 15	GSMLocationCancellation invoke?	MC 4￼NOT MC 4	M￼N/A	9.2.2.1	[ ]Yes [ ]No￼[ ] N/A
P 16.1	GSMTerminalAuthentication invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.2.1	[ ]Yes [ ]No￼[ ] N/A
P 16.2	GSMTerminalAuthenticationReject invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.2.2	[ ]Yes [ ]No￼[ ] N/A
P 17	GSMCiphering invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.4.1	[ ]Yes [ ]No￼[ ] N/A
P 18.1	GSMAssignIdentity invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.6.1.1	[ ]Yes [ ]No￼[ ] N/A
P 18.2	GSMLinkedAssignIdentity invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.6.1.2	[ ]Yes [ ]No￼[ ] N/A
P 19	GSMIdentityRequest invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.8.1	[ ]Yes [ ]No￼[ ] N/A
P 20.1	GSMIncomingCallMobilityManagementInfo invoke?	R1.2￼NOT R1.2	M￼N/A	9.3.10.1	[ ]Yes [ ]No￼[ ] N/A
P 20.2	GSMOutgoingCallMobilityManagementInfo return error?	R1.2￼NOT R1.2	M￼N/A	9.3.9.2	[ ]Yes [ ]No￼[ ] N/A
Comments:					

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

Item	Facility information element components: Does the implementation support ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 21	CTMAccessRightsRequest invoke?	MC 1	M	9.1.1.1, 9.1.1.2	[ ]Yes [ ]No
		NOT MC 1	N/A		[ ] N/A
P 22.1	CTMAccessRightsTerminate return result?	MC 2	M	9.1.2.1	[ ]Yes [ ]No
		NOT MC 2	N/A		[ ] N/A
P 22.2	CTMAccessRightsTerminate return error?	MC2	M	9.1.2.2	[ ]Yes [ ]No
		NOT MC2	N/A		[ ] N/A
P 23	CTMLocationRegistration invoke?	R1.1	M	9.2.1.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 24.1	CTMLocationCancellation return result?	R1.1	M	9.2.2.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 24.2	CTMLocationCancellation return error?	R1.1	M	9.2.2.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 25	CTMLocationRegistrationSuggest return errror?	R1.1	M	9.3.1.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 26.1	CTMTerminalAuthentication return result?	R1.1	M	9.3.2.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 26.2	CTMTerminalAuthentication return error?	R1.1	M	9.3.2.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 27	CTMNetworkAuthentication invoke?	R1.1	M	9.3.3.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 28.1	CTMCiphering return result?	R1.1	M	9.3.4.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 28.2	CTMCiphering return error?	R1.1	M	9.3.4.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 29	CTMCipheringSuggest invoke?	MC 3	M	9.3.5.1	[ ]Yes [ ]No
		NOT MC 3	N/A		[ ] N/A
P 30.1	CTMKeyAllocate return result?	R1.1	M	9.3.7.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 30.2	CTMKeyAllocate return error?	R1.1	M	9.3.7.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 31.1	CTMIdentityRequest return result?	R1.1	M	9.3.8.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 31.2	CTMIdentityRequest return error?	R1.1	M	9.3.8.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 32.1	CTMOutgoingCallMobilityManagementInfo return invoke?	R1.1	M	9.3.9.1	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 32.2	CTMIncomingCallMobilityManagementInfo return error?	R1.1	M	9.3.10.2	[ ]Yes [ ]No
		NOT R1.1	N/A		[ ] N/A
P 33	GSMLocationRegistration invoke?	R1.2	M	9.2.1.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 34	GSMDetach invoke?	R1.2	M	9.2.3.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 35.1	GSMTerminalAuthentication return result?	R1.2	M	9.3.2.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 35.2	GSMTerminalAuthentication return error?	R1.2	M	9.3.2.2	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 36.1	GSMCiphering return result?	R1.2	M	9.3.4.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 36.2	GSMCiphering return error?	R1.2	M	9.3.4.2	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 37.1	GSMAssignIdentity return result?	R1.2	M	9.3.6.1.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 37.2	GSMLinkedAssignIdentity return result?	R1.2	M	9.3.6.1.2	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 38.1	GSMIdentityRequest return result?	R1.2	M	9.3.8.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 38.2	GSMIdentityRequest return error?	R1.2	M	9.3.8.2	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 39.1	GSMIncomingCallMobilityManagementInfo return error?	R1.2	M	9.3.10.2	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A
P 39.2	GSMOutgoingCallMobilityManagementInfo invoke?	R1.2	M	9.3.9.1	[ ]Yes [ ]No
		NOT R1.2	N/A		[ ] N/A

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 implemented 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 role: Does the implementation ...	Condition for status	Status	Reference	Support
	Type of implementation				
MC 5	offer the subscription registration procedure ?	R 1.1 NOTR 1.1	O N/A	9.1.1	[ ]Yes [ ]No [ ]N/A
MC 6	offer the subscription deregistration procedure?	R 1.1 NOT R.1.1	O N/A	9.1.2	[ ]Yes [ ]No [ ]N/A
MC 7	offer the identity request procedure?	R 1.1 NOT R.1.1	O N/A	9.3.8	[ ]Yes [ ]No [ ]N/A
MC 8	support the portable initiated ciphering procedure?	R 1.1 NOT R 1.1	O N/A	9.3.5	[ ]Yes [ ]No [ ]N/A
MC 9	support the location registration suggest procedure ?	R 1.1 NOT R 1.1	O N/A	9.3.1	[ ]Yes [ ]No [ ]N/A
MC10	offer the location cancellation procedure	R1.1 NOT R1.1	M O	9.2.2	[ ]Yes [ ]No
MC11	offer the linked temporary identity assignement procedure	R1.2 NOT R1.2	O N/A	9.3.6.1.2, 9.3.6.2.2	[ ]Yes [ ]No [ ]N/A
Comments:					

A.8.2 Subsidiary capabilities

Table A.6: Subsidiary capabilities - network

Item	Major role: Does the implementation ...	Condition for status	Status	Reference	Support
	Type of implementation				
SC 1	release the call in case of unsuccessful terminal authentication?	R 1.1 NOT R 1.1	O N/A	9.3.9.2, 9.3.10.2	[ ]Yes [ ]No [ ]N/A
SC 2	release the call in case of ciphering procedure failure?	R 1.1 NOT R 1.1	O N/A	9.3.9.2, 9.3.10.2	[ ]Yes [ ]No [ ]N/A
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 ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 40	CTMAccessRightsRequest invoke?	MC 5 NOT MC5	M N/A	9.1.1.1, 9.1.1.2	[ ]Yes [ ]No [ ] N/A
P 41.1	CTMAccessRightsTerminate return result?	MC 6 NOT MC 6	M N/A	9.1.2.1	[ ]Yes [ ]No [ ] N/A
P 41.2	CTMAccessRightsTerminate return error?	MC 6 NOT MC 6	M N/A	9.1.2.2	[ ]Yes [ ]No [ ] N/A
P 42	CTMLocationRegistration invoke?	R1.1 NOT R1.1	M N/A	9.2.1.1	[ ]Yes [ ]No [ ] N/A
P 43.1	CTMLocationCancellation return result?	R1.1 NOT R1.1	M N/A	9.2.2.1	[ ]Yes [ ]No [ ] N/A
P 43.2	CTMLocationCancellation return error?	R1.1 NOT R1.1	M N/A	9.2.2.2	[ ]Yes [ ]No [ ] N/A
P 44	CTMLocationRegistrationSuggest return error ?	MC 9 NOT MC 9	M N/A	9.3.1.2	[ ]Yes [ ]No [ ] N/A
P 45.1	CTMTerminalAuthentication return result?	R1.1 NOT R1.1	M N/A	9.3.2.1	[ ]Yes [ ]No [ ] N/A
P 45.2	CTMTerminalAuthentication return error?	R1.1 NOT R1.1	M N/A	9.3.2.2	[ ]Yes [ ]No [ ] N/A
P 46	CTMNetworkAuthentication invoke?	R1.1 NOT R1.1	M N/A	9.3.3.1	[ ]Yes [ ]No [ ] N/A
P 47.1	CTMCiphering return result?	R1.1 NOT R1.1	M N/A	9.3.4.1	[ ]Yes [ ]No [ ] N/A
P 47.2	CTMCiphering return error?	R1.1 NOT R1.1 AND R3)	M N/A	9.3.4.2	[ ]Yes [ ]No [ ] N/A
P 48	CTMCipheringSuggest invoke?	MC 8 NOT MC 8	M N/A	9.3.5.1	[ ]Yes [ ]No [ ] N/A
P 49.1	CTMKeyAllocate return result?	R1.1 NOT R1.1	M N/A	9.3.7.1	[ ]Yes [ ]No [ ] N/A
P 49.2	CTMKeyAllocate return error?	R1.1 NOT R1.1	M N/A	9.3.7.2	[ ]Yes [ ]No [ ] N/A
P 50.1	CTMIdentityRequest return result?	MC 7 NOT MC7	M N/A	9.3.8.1	[ ]Yes [ ]No [ ] N/A
P 50.2	CTMIdentityRequest return error?	MC 7 NOT MC 7	M N/A	9.3.8.2	[ ]Yes [ ]No [ ] N/A
P 51.1	CTMOutgoingCallMobilityManagementInfo return invoke?	R1.1 NOT R1.1	M N/A	9.3.9.1	[ ]Yes [ ]No [ ] N/A
P 51.2	CTMIncomingCallMobilityManagementInfo return error?	R1.1 NOT R1.1	M N/A	9.3.10.2	[ ]Yes [ ]No [ ] N/A
P 52	GSMLocationRegistration invoke?	R1.2 NOT R1.2	M N/A	9.2.1.1	[ ]Yes [ ]No [ ] N/A
P 53	GSMDetach invoke?	R1.2 NOT R1.2	M N/A	9.2.3.1	[ ]Yes [ ]No [ ] N/A
P 54.1	GSMTerminalAuthentication return result?	R1.2 NOT R1.2	M N/A	9.3.2.1	[ ]Yes [ ]No [ ] N/A
P 54.2	GSMTerminalAuthentication return error?	R1.2 NOT R1.2	M N/A	9.3.2.2	[ ]Yes [ ]No [ ] N/A
P 55.1	GSMCiphering return result?	R1.2 NOT R1.2	M N/A	9.3.4.1	[ ]Yes [ ]No [ ] N/A
P 55.2	GSMCiphering return error?	R1.2 NOT R1.2	M N/A	9.3.4.2	[ ]Yes [ ]No [ ] N/A
P 56.1	GSMAssignIdentity return result?	R1.2 NOT R1.2	M N/A	9.3.6.1.1	[ ]Yes [ ]No [ ] N/A

Item	Facility information element components: Does the implementation support ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 56.2	GSMLinkedAssignIdentity return result?	MC11 NOT MC11	M N/A	9.3.6.1.2	[ ]Yes [ ]No [ ] N/A
P 57.1	GSMIdentityRequest return result?	R1.2 NOT R1.2	M N/A	9.3.8.1	[ ]Yes [ ]No [ ] N/A
P 57.2	GSMIdentityRequest return error?	R1.2 NOT R1.2	M N/A	9.3.8.2	[ ]Yes [ ]No [ ] N/A
P 58.1	GSMIncomingCallMobilityManagementInfo return error?	R1.2 NOT R1.2	M N/A	9.3.10.2	[ ]Yes [ ]No [ ] N/A
P 58.2	GSMOutgoingCallMobilityManagementInfo invoke?	R1.2 NOT R1.2	M N/A	9.3.9.1	[ ]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 ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 59.1	CTMAccessRightsRequest return result?	MC 5 NOT MC 5	M N/A	9.1.1.1	[ ]Yes [ ]No [ ] N/A
P 59.2	CTMAccessRightsRequest return error?	MC 5 NOT MC 5	M N/A	9.1.1.2	[ ]Yes [ ]No [ ] N/A
P 60	CTMAccessRightsTerminate invoke?	MC 6 NOT MC 6	M N/A	9.1.2.1	[ ]Yes [ ]No [ ] N/A
P 61.1	CTMLocationRegistration return result?	R1.1 NOT R1.1	M N/A	9.2.1.1	[ ]Yes [ ]No [ ] N/A
P 61.2	CTMLocationRegistration return error?	R1.1 NOT R1.1	M N/A	9.2.1.2	[ ]Yes [ ]No [ ] N/A
P 62	CTMLocationCancellation invoke?	R 1.1 NOT R 1.1R1.1	M N/A	9.2.2.1	[ ]Yes [ ]No [ ] N/A
P63	CTMLocationRegistrationSuggest invoke?	MC 9 NOT MC 9	M N/A	9.3.1.1	[ ]Yes [ ]No [ ] N/A
P 64	CTMTerminalAuthentication invoke?	R1.1 NOT R 1.1	M N/A	9.3.2.1	[ ]Yes [ ]No [ ] N/A
P 65.1	CTMNetworkAuthentication return result?	R1.1 NOT R1.1	M N/A	9.3.3.1	[ ]Yes [ ]No [ ] N/A
P 65.2	CTMNetworkAuthentication return error?	R1.1 NOT R1.1	M N/A	9.3.3.2	[ ]Yes [ ]No [ ] N/A
P 66	CTMCiphering invoke?	R1.1 NOT R1.1	M N/A	9.3.4.1	[ ]Yes [ ]No [ ] N/A
P 67	CTMCipheringSuggest return error?	MC 8 NOT MC 8	M N/A	9.3.5.2	[ ]Yes [ ]No [ ] N/A
P 68	CTMKeyAllocate invoke?	R1.1 NOT R1.1	M N/A	9.3.7.1	[ ]Yes [ ]No [ ] N/A
P 69	CTMIdentityRequest invoke?	MC 7 NOT MC 7	M N/A	9.3.8.1	[ ]Yes [ ]No [ ] N/A
P 70.1	CTMOutgoingCallMobilityManagementInfo return error?	R1.1 NOT R1.1	M N/A	9.3.9.2	[ ]Yes [ ]No [ ] N/A
P 70.2	CTMIncomingCallMobilityManagementInfo invoke?	R1.1 NOT R1.1	M N/A	9.3.10.1	[ ]Yes [ ]No [ ] N/A
P 71.1	GSMLocationRegistration return result?	R1.2 NOT R1.2	M N/A	9.2.1.1	[ ]Yes [ ]No [ ] N/A
P 71.2	GSMLocationRegistration return error?	R1.2 NOT R1.2	M N/A	9.2.1.2	[ ]Yes [ ]No [ ] N/A
P 72	GSMLocationCancellation invoke?	MC 10 NOT MC 10	M N/A	9.2.2.1	[ ]Yes [ ]No [ ] N/A
P 73.1	GSMTerminalAuthentication invoke?	R1.2 NOT R1.2	M N/A	9.3.2.1	[ ]Yes [ ]No [ ] N/A

Item	Facility information element components: Does the implementation support ...	Condition for status	Status	Reference	Support
	Type of implementation				
P 73.2	GSMTerminalAuthenticationReject invoke?	R1.2 NOT R1.2	O N/A	9.3.2.2	[ ]Yes [ ]No [ ] N/A
P 74	GSMCiphering invoke?	R1.2 NOT R1.2	M N/A	9.3.4.1	[ ]Yes [ ]No [ ] N/A
P 75.1	GSMAssignIdentity invoke?	R1.2 NOT R1.2	M N/A	9.3.6.1.1	[ ]Yes [ ]No [ ] N/A
P 75.2	GSMLinkedAssignIdentity invoke?	MC11 NOT MC11	M N/A	9.3.6.1.2	[ ]Yes [ ]No [ ] N/A
P 76	GSMIdentityRequest invoke?	R1.2 NOT R1.2	M N/A	9.3.8.1	[ ]Yes [ ]No [ ] N/A
P 77.1	GSMIncomingCallMobilityManagementInfo invoke?	R1.2 NOT R1.2	M N/A	9.3.10.1	[ ]Yes [ ]No [ ] N/A
P 77.2	GSMOutgoingCallMobilityManagementInfo return error?	R1.2 NOT R1.2	M N/A	9.3.9.2	[ ]Yes [ ]No [ ] N/A
Comments:					

A.8.5   Timers

Table A.9: Timers - network

Item	Timers: Does the implementation support ...	Condition for status	Status	Reference	Support
TM 1	T-MM?		M N/A	9.1.2.1, 9.2.2.1, 9.2.2.2, 9.3.2.1, 9.3.2.2, 9.3.4.1, 9.3.4.2, 9.3.6.1.1, 9.3.6.1.2, 9.3.6.2.1, 9.3.6.2.2, 9.3.7.1, 9.3.7.2, 9.3.8.1, 9.3.8.2	[ ]Yes [ ]No [ ] 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 EN 301 144-1 [5]. 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 the present document. "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

The tables provided in this clause need only to be implemented for user implementations, where item R 2.1 in table A.1 is supported.

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 EN 300 403-2 [3]. All references are to EN 301 144-1 [5] unless otherwise stated.

Table B.1: Major capabilities - user (from EN 300 403-2 [3])

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MC 1	outgoing calls?		O	M	[4] 5.1
MC 2	incoming calls?		O	M	[4] 5.1
Comments:					

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 [2]. All references are to EN 301 144-1 [5] unless otherwise stated.

NOTE: EN 300 196-1 [1] and ETS 300 196-2 [2] are expected to be updated in the future with information for the enhanced Generic Functional Protocol (GFP). The items below are candidates for inclusion in the PICs proforma of the enhanced GFP [2].

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

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MCu 1	the functional protocol (networking facility extension) for the control of mobility management functions?		O	M	[2]
MCu 2.1	bearer related transport mechanism?		O	M	[2]
MCu 2.2	broadcast (connection-oriented bearer-independent transport mechanism)?		O	M	[2]
MCu 2.3	point-to-point (connection-oriented bearer-independent transport mechanism)?		O	M	[2]
Comments:					

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

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MTu 1	the inclusion of FACILITY?		C	M	[1]

Table B.4: FACILITY transmitted - user (from ETS 300 196-2 [2])

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
IETu 5.4	facility?		M	M	[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 EN 300 195-2 [10]. All references are to EN 301 144-1 [5] unless otherwise stated.

No items requiring response.

B.2 Network

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

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

In the tabulations which follow in this subclause all item numbers are as contained in EN 300 403-2 [3]. All references are to EN 301 144-1 [5] unless otherwise stated.

Table B.5: Major capabilities - network (from EN 300 403-2 [3])

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MC 3	outgoing calls?		O	M	[4] 5.1
MC 4	incoming calls?		O	M	[4] 5.1
Comments:					

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 [2]. All references are to EN 301 144-1 [5] unless otherwise stated.

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

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MCn 1	the functional protocol (networking facility extension) for the control of mobility management functions?		O	M	[2]
MCn 2.1	bearer related transport mechanism?		O	M	[2]
MCn 2.2	broadcast (connection-oriented bearer-independent transport mechanism)?		O	M	[2]
MCn 2.3	point-to-point (connection-oriented bearer-independent transport mechanism)?		O	M	[2]
Comments:					

Table B.7: Messages transmitted - network (from ETS 300 196-2 [2])

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
MTn 1	the inclusion of FACILITY?		C	M	[1]

Table B.8: FACILITY transmitted - user (from ETS 300 196-2 [2])

Item	Major role: Does the implementation ...	Condition for status	Status base	Status	Reference
IETn 5.4	facility?		M	M	[1]

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

No items requiring response.

History

Document history				
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