



**IMS Network Testing (INT);
Terminating Identification Presentation (TIP) and
Terminating Identification Restriction (TIR) using
IP Multimedia (IM) Core Network (CN) subsystem;
Conformance Test Specification;
Part 1: Protocol Implementation Conformance
Statement (PICS)**

Reference

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee IMS Network Testing (INT).

The present document is part 1 of a multi-part deliverable covering the Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification, as identified below:

Part 1: "Protocol Implementation Conformance Statement (PICS)";

Part 2: "Test Suite Structure and Test Purposes (TSS&TP)".

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 (ICS).

1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.608 Release 10) defined in TS 124 608 [1] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4] and ETS 300 406 [2].

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 124 608: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.608 Release 10)".
- [2] ETSI ETS 300 406 (1995): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [3] ISO/IEC 9646-1: "Information technology -- Open systems interconnection -- Conformance testing methodology and framework -- Part 1: General concepts".
- [4] ISO/IEC 9646-7: "Information technology -- Open systems interconnection -- Conformance testing methodology and framework -- Part 7: Implementation Conformance Statements".
- [5] ETSI TS 124 604: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Communication Diversion (CDIV) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.604 Release 10)".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

Not applicable.

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 124 608 [1], ETS 300 406 [2], ISO/IEC 9646-1 [3], ISO/IEC 9646-7 [4] and the following 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

NOTE: The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, API ICS, etc.

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

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

3.2 Symbols

For the purposes of the present document, the symbols given in TS 124 608 [1] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TS 124 608 [1] and the following apply:

ICS	Implementation Conformance Statement
IUT	Implementation Under Test
PICS	Protocol ICS
SCS	System Conformance Statement
SUT	System Under Test

4 PICS proforma for TS 124 608

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 clause so that it can be used for its intended purposes and may further publish the completed PICS.

4.1 Guidance for completing the PICS proforma

4.1.1 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 TS 124 608 [1] may provide information about the implementation in a standardized manner.

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

- guidance for completing the PICS proforma;
- identification of the implementation;
- identification of the TS 124 608 [1];
- global statement of conformance;
- roles;

- user role:
 - major capabilities;
- network role:
 - major capabilities;
 - CDIV capabilities.

4.1.2 Abbreviations and conventions

The PICS proforma contained in this clause is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

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 [4], 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.
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.

Reference column

The reference column makes reference to TS 124 608 [1], 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 [4], 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).

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.

4.1.3 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 column boxes provided, using the notation described in clause 4.1.2.

However, the tables containing in "user role" clause shall only be completed for user implementations, and the tables containing in "network role" clause shall only be completed for network implementations.

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

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

4.2 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.

4.2.1 Date of the statement

.....

4.2.2 Implementation Under Test (IUT) identification

IUT name:

.....

.....

IUT version:

.....

4.2.3 System Under Test (SUT) identification

SUT name:

.....

.....

Hardware configuration:

.....

.....

.....

Operating system:

.....

4.2.4 Product supplier

Name:

.....

Address:

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

4.2.5 Client (if different from product supplier)

Name:

.....

Address:

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

4.2.6 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:

.....

4.3 Identification of the TS 124 608

This PICS proforma applies to the following standard:

TS 124 608 [1]: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.608 Release 10)".

4.4 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No)

NOTE: Answering "No" to this question indicates non-conformance to the <reference specification type> 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.

4.5 Roles

Table 4.5.1: Roles

Item	Role	Reference	Status	Support
1	Is the implementation an originating user equipment?	4.5.2.1	o	
2	Is the implementation a terminating user equipment?	4.5.2.12	o	
3	Is the implementation an Application Server serving the Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR)	4.5.2.9	o	

Comments:

4.6 User role

This clause contains the PICS proforma tables related to the user role. They need to be completed only for user equipment implementations:

Prerequisite: 4.5.1/1 -- user role

4.6.1 Major capabilities

Table 4.6.1: User Equipment capabilities

Item	Call direction	Reference	Status	Support
1	Does the user equipment support the "from-change" tag in the Supported header?	4.5.2.12	c21	
2	[2/6] Does the terminating user equipment send an UPDATE request if a "from-change" tag was received in the initial INVITE?	4.5.2.12	c22	
c21: IF 4.5.1/1 THEN o ELSE n/a.				
c22: IF 4.5.1/2 THEN o ELSE n/a.				
Comments:				

4.7 Network role

This clause contains the PICS proforma tables related to the network role. They need to be completed only for Application Server implementations:

Prerequisite: 4.5.1/2 -- user role

4.7.1 Major capabilities

Table 4.7.1: Network capabilities

Item	Call direction	Reference	Status	Support
1	Is the network able to divert a call?	TS 124 604 [5]	o	
2	Does the network support the "special arrangement" for the terminating user?	4.5.2.9	o	
3	Does the network support the Terminating Identification Presentation (TIP) service?	4.3.1.1	o	
4	Does the network support the Terminating Identification Restriction (TIR) service?	4.3.1.2	o	
5	Does the network support the "TIR service in temporary mode"?	4.3.1.2	o	
6	Does the network support the "TIR service in permanent mode"?	4.3.1.2	o	
7	Does the network support the "override category for the TIR service"?	4.6.3	o	
8	Does the network support the "special arrangement" for the terminating user?	4.5.2.9	o	
Comments:				

Prerequisite: 4.7.1/4 --Major capabilities

4.7.2 CDIV capabilities

Table 4.7.2: CDIV Network capabilities

Item	Call direction	Reference	Status	Support
1	Is the subscription option " <i>Originating</i> user receives notification that his communication has been diverted (forwarded or deflected)" supported?	4.3.1 [5]	c31	
2	Is the subscription option "Served user allows the presentation of diverted to URI to <i>originating</i> user in diversion notification" supported?	4.3.1 [5]	c32	
c31: IF 4.7.1/4 THEN o ELSE n/a.				
c32: IF 4.7.1/4 AND 4.7.2/1 THEN o ELSE n/a.				
Comments:				

History

Document history		
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