International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.3943.1

(04/2013)

SERIES Q: SWITCHING AND SIGNALLING

Signalling requirements and protocols for the NGN – Testing for next generation networks

Conformance tests specification for the originating identification presentation and originating identification restriction using the IP multimedia core network subsystem – Part 1: Protocol

Recommendation ITU-T Q.3943.1

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T Q.3943.1

Conformance tests specification for the originating identification presentation and originating identification restriction using the IP multimedia core network subsystem – Part 1: Protocol

Summary

Recommendation ITU-T Q.3943.1 specifies the protocol implementation conformance statement (PICS) for the originating identification presentation (OIP) and originating identification restriction (OIR) NGN basic service, (ETSI TS 124 607) applicable for network side and user side.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T Q.3943.1	2013-04-29	11

Keywords

OIP, OIR, PICS, TEST.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at http://www.itu.int/ITU-T/ipr/.

Table of Contents

Recommendation ITU-T Q.3943.1

Conformance tests specification for the originating identification presentation and originating identification restriction using the IP multimedia core network subsystem – Part 1: Protocol

1   Scope

This Recommendation specifies the protocol implementation conformance statement (PICS) for the originating identification presentation (OIP) and originating identification restriction (OIR) NGN basic service, [ETSI TS 124 607].

The OIP service provides the terminating party with the possibility to receive a trusted (network provided) identity of the originating party and is applicable to all session-based services of the NGN.

The OIR service enables the originating party to prevent presentation of any network provided identity to the terminating party and is applicable to all session-based services of the NGN.

2   References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T X.290]   Recommendation ITU-T X.290 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – General concepts* (twinned with ISO/IEC 9646-1).

[ITU-T X.296]   Recommendation ITU-T X.296 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Implementation conformance statements* (twinned with ISO/IEC 9646-7).

[ETSI TS 124 607] ETSI TS 124 607 (V8.4) (2010-01), *Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.607 version 8.4 Release 8).*

[IETF RFC 3325]   IETF RFC 3325 (2002), *Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks.*

3   Definitions

3.1   Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1   abstract test suite (ATS): [ITU-T X.290].

3.1.2   implementation under test (IUT): [ITU-T X.290].

3.1.3   PICS proforma: [ITU-T X.290].

3.1.4   point of control and observation (PCO): [ITU-T X.290].

3.1.5   protocol implementation conformance statement (PICS): [ITU-T X.296].

3.1.6   system under test (SUT): [ITU-T X.290].

3.1.7   test purpose (TP): [ITU-T X.290].

4   Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

AS	Application Server
ATS	Abstract Test Suite
CSCF	Call Session Control Function
IUT	Implementation Under Test
n/a	not applicable
NNI	Network-Network Interface
OIP	Originating Identification Presentation
OIR	Originating Identification Restriction
PICS	Protocol Implementation Conformance Statement
S-CSCF	Serving CSCF
SUT	System Under Test
TP	Test Purpose
TSS	Test Suite Structure

5   Conventions

–   <reference specification type> is "protocol";

–   <reference specification id> is "ETSI TS 124 607";

–   <reference specification title> is "*Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification*";

–   <reference specification description> is "*Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification*".

6   Guidance for completing the PICS proforma

6.1   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 [ETSI TS 124 607] 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 [ETSI TS 124 607];

–   global statement of conformance;

–   major capabilities;

–   OIP/OIR user capabilities.

6.1.2   Abbreviations and conventions

The PICS proforma contained in this clause is comprised of information in tabular form in accordance with the guidelines presented in [ITU-T X.296].

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 [ITU-T X.296], are used for the status column:

o   optional – the capability may be supported or not.

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.

n/a   not applicable – in the given context, it is impossible to use the capability.

Reference column

The reference column makes reference to [ETSI TS 124 607], 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 [ITU-T X.296], 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.

6.1.3   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 supported column boxes provided, using the notation described in clause 6.1.2.

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.

6.2 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.

6.2.1 Date of the statement

Date of the statement::	

6.2.2 Implementation under test (IUT) identification

IUT name:	
IUT version:	

6.2.3 System under test (SUT) identification

SUT name:	
Hardware configuration:	
Operating system:	

6.2.4 Product supplier

Name:	
Address:	
Telephone number:	
Facsimile number:	
E-mail address	
Additional information:	

6.2.5 Client (if different from product supplier)

Name:	
Address:	
Telephone number:	
Facsimile number:	
E-mail address	
Additional information:	

6.2.6 PICS contact person

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

Name:	
Address:	
Telephone number:	
Facsimile number:	
E-mail address	
Additional information:	

6.3 Identification of [ETSI TS 124 607]

This PICS proforma applies to the following standard:

ETSI TS 124 607 (V10.0.0): "*Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification*".

6.4 Global statement of conformance

	(Yes/No)
Are all mandatory capabilities implemented?	

NOTE – Answering "No" to this question indicates non-conformance to the [ETSI TS 124 607] 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.

6.5 Capabilities

6.5.1 Major capabilities

Table 1 – Roles and network capabilities

Item	Call direction	Reference	Status	Support
1	Is the implementation an originating user equipment?	4.5.2.1	o	
2	Is the terminating user a terminating user equipment?	4.5.2.12	o	
3	Is the implementation connected with a trusted network?	4.5.2.7, 4.5.2.8	o	
4	Is the implementation connected with an untrusted network?	4.5.2.7, 4.5.2.8	o	
5	The Application Server anonymise the contents of the From header if any P-Asserted-Identity or Privacy header fields included in the request is removed?	4.5.2.9	o	
6	Does the network insert the display-name in the P-Asserted-Identity?	4 [IETF RFC 3325]	o	

Table 1 – Roles and network capabilities

Item	Call direction	Reference	Status	Support
7	The Application Server serving the originating user set the From header field to the default public user identities if the received From header field does not match with one of the registered public user identities?	4.5.2.4	c1	
8	The AS, serving the terminating user, anonymise the contents of the From header by setting it to a default non-significant value?	4.5.2.9	o	
9	Is the S-CSCF able to add a second P-Asserted-Identity header containing an associated tel-URI for a SIP URI contained in the P-Asserted-Identity header received in the request?	4.5.2.3	o	
c1: IF 1/6 THEN o ELSE n/a.				

Comments:

6.5.2 OIP/OIR user capabilities

Table 2 – OIP/OIR user capabilities

Item	Call direction	Reference	Status	Support
1	Does the terminating user subscribe the OIP service?	4.3.1.1	o	
2	Does the originating user subscribe the OIR service in permanent mode?	4.3.1.2	o	
3	Does the originating user subscribe the OIR service in temporary mode with default value "presentation not restricted"?	4.3.1.2	o	
4	Does the originating user subscribe the OIR service in temporary mode with default value "presentation restricted"?	4.3.1.2	o	
5	Does the terminating user subscribe the override category for the OIR service?	4.5.2.9	o	
6	Does the originating user subscribe the "no screening" special arrangement?	4.3.2, 4.5.2.4	o	

Comments:

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
Series Q	**Switching and signalling**
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems