

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**Q.3943.3**

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SERIES Q: SWITCHING AND SIGNALLING

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

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**Conformance tests specification for the  
originating identification presentation and  
originating identification restriction using the IP  
multimedia core network subsystem – Part 3:  
User side – Test suite structure and test  
purposes**

Recommendation ITU-T Q.3943.3

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## **Recommendation ITU-T Q.3943.3**

### **Conformance tests specification for the originating identification presentation and originating identification restriction using the IP multimedia core network subsystem – Part 3: User side – Test suite structure and test purposes**

#### **Summary**

Recommendation ITU-T Q.3943.3 specifies the test suite structure and test purposes (TSS&TP) for the user side of the originating identification presentation (OIP) and originating identification restriction (OIR) NGN basic service (ETSI TS 124 607).

#### **History**

Edition	Recommendation	Approval	Study Group
1.0	ITU-T Q.3943.3	2013-04-29	11

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## Recommendation ITU-T Q.3943.3

### Conformance tests specification for the originating identification presentation and originating identification restriction using the IP multimedia core network subsystem – Part 3: User side – Test suite structure and test purposes

#### 1 Scope

This Recommendation specifies the test suite structure and test purposes (TSS&TP) for the user side of the originating identification presentation (OIP) and originating identification restriction (OIR) NGN basic service, [ETSI TS 124 607].

#### 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 Q.3943.1] Recommendation ITU-T Q.3943.1 (2013), *Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) Conformance Tests Specification; Part 1: Protocol Implementation Conformance Statement (PICS)*.
- [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).
- [ETSI TS 124 607] ETSI TS 124 607 (V8.0.4) (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 8.0.4 Release 8)*.
- [IETF RFC 3323] IETF RFC 3323 (2002), *A Privacy Mechanism for the Session Initiation Protocol (SIP)*.

#### 3 Definitions

This Recommendation uses the following terms defined elsewhere:

- 3.1 abstract test suite (ATS):** [ITU-T X.290].
- 3.2 implementation under test (IUT):** [ITU-T X.290].
- 3.3 PICS proforma:** [ITU-T X.290].
- 3.4 point of control and observation:** [ITU-T X.290].
- 3.5 protocol implementation conformance statement (PICS):** [ITU-T X.290].
- 3.6 system under test (SUT):** [ITU-T X.290].
- 3.7 test purpose (TP):** [ITU-T X.290].

## 4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ATS	Abstract Test Suite
IUT	Implementation Under Test
NNI	Network-Network Interface
PICS	Protocol Implementation Conformance Statement
SUT	System Under Test
TSS	Test Suite Structure
TP	Test Purpose

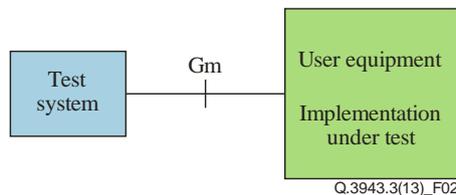
## 5 Test suite structure (TSS)

User			
	CallingUser		OIP_U01_XXX
	CalledUser		OIP_U02_XXX

**Figure 1 – Test suite structure**

### 5.1 Configuration

The scope of this Recommendation is to test the signalling and procedural aspects of the stage 3 requirements as described in [ETSI TS 124 607]. There are special clauses in the protocol standard describing the procedures that apply at the originating and terminating user equipment. Therefore, the test configuration in Figure 2 has been chosen.



**Figure 2 – Applicable configuration to test UE functionalities**

## 6 Test purposes (TP)

### 6.1 Introduction

For each test requirement, a TP is defined.

#### 6.1.1 TP naming convention

Tps are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see Table 1).



<b>Preconditions:</b> The user registers the public user identity. The user has subscribed to OIR temporary mode, default value 'presentation restricted'.	
<b>Comments:</b>	
<b>User equipment</b> INVITE	→
<b>Test equipment</b> INVITE	

User/Calling_User	<b>TP</b> OIP_U01_003	<b>OIP reference</b> clause 4.5.2.1	<b>Selection expression</b> PICS 1/1, 2/3
<b>Test purpose:</b> <i>Originating user sends an 'anonymous' From header and wishes to override the default setting 'Presentation not restricted'.</i> Ensure that the IUT, in order to override the OIR default settings of 'presentation not restricted', sends an INVITE message not containing a <b>P-Preferred-Identity</b> header and containing a Privacy header set to " <b>id</b> " or " <b>header</b> " and containing an anonymous From header. The convention for configuring an anonymous From header is described in [IETF RFC 3323] and should be followed; i.e., From: "Anonymous" <sip:anonymous@anonymous.invalid>;tag= xxxxxx.			
<b>Preconditions:</b> The user has subscribed to OIR temporary mode, default value 'presentation restricted'.			
<b>Comments:</b>			
<b>User equipment</b> INVITE	→	<b>Test equipment</b> INVITE	

See Table 2 for the values for test purposes from OIP\_U02\_001 to OIP\_U02\_003.

**Table 2**

Values for test purposes OIP_U02_001 to OIP_U02_003	
	USER_URI
VA_1	tel: local number
VA_2	tel: global number
VA_3	tel: local number; phone-context= particular phone prefix
VA_4	tel: local number; phone-context= domainname
VA_5	tel: local number; isub= ISDN Subadress
VA_6	SIP URI sip:user:password@host:port;uri-parameters
VA_7	sip URI: local number @host:port;uri-parameters
VA_8	sip URI: global number @host:port;uri-parameters
VA_9	sip URI: local number; phone-context= particular phone prefix @host:port;uri-parameters

## 6.2.2 Called user

<b>TSS</b> User/Called_User	<b>TP</b> OIP_U02_001	<b>OIP reference</b>	<b>Selection expression</b> PICS 1/2						
<b>Test purpose:</b> <i>Terminating user receives a P-Asserted identity header field.</i> Ensure that the terminating UE, receiving a valid and compatible INVITE message containing one <b>P-Asserted-Identity</b> header indicating a public user identity defined as URI_USER, accepts the call following the basic call procedures.									
<b>Comments:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><b>User equipment</b></td> <td style="width: 33%; text-align: center;"><b>←</b></td> <td style="width: 33%;"><b>Test equipment</b></td> </tr> <tr> <td>INVITE</td> <td></td> <td>INVITE</td> </tr> </table>				<b>User equipment</b>	<b>←</b>	<b>Test equipment</b>	INVITE		INVITE
<b>User equipment</b>	<b>←</b>	<b>Test equipment</b>							
INVITE		INVITE							

<b>TSS</b> User/Called_User	<b>TP</b> OIP_U02_002	<b>OIP reference</b>	<b>Selection expression</b> PICS 1/2						
<b>Test purpose:</b> <i>Terminating user receives a P-Asserted identity header field.</i> Ensure that the terminating UE, receiving a valid and compatible INVITE message containing two <b>P-Asserted-Identity</b> headers indicating public user identities defined as URI_USER accepts the call following the basic call procedures.									
<b>Comments:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><b>User equipment</b></td> <td style="width: 33%; text-align: center;"><b>SUT</b></td> <td style="width: 33%;"><b>Test equipment</b></td> </tr> <tr> <td>INVITE</td> <td style="text-align: center;"><b>←</b></td> <td>INVITE</td> </tr> </table>				<b>User equipment</b>	<b>SUT</b>	<b>Test equipment</b>	INVITE	<b>←</b>	INVITE
<b>User equipment</b>	<b>SUT</b>	<b>Test equipment</b>							
INVITE	<b>←</b>	INVITE							

See Table 3 for the values for test purposes for OIP\_U02\_001 and OIP\_U02\_002.

**Table 3**

Values for test purposes OIP_U02_001 and OIP_U02_002	
	USER_URI
VA_1	tel: local number
VA_2	tel: global number
VA_3	tel: local number; phone-context= particular phone prefix.
VA_4	tel: local number; phone-context= domainname
VA_5	tel: local number; isub= ISDN Subadress
VA_6	SIP URI sip:user:password@host:port;uri-parameters
VA_7	sip URI: local number @host:port;uri-parameters
VA_8	sip URI: global number @host:port;uri-parameters
VA_9	Sip URI: local number ; phone-context= particular phone prefix @host:port;uri-parameters

## 7 Compliance

An ATS which complies with this TSS&TP specification shall:

- a) consist of a set of test cases corresponding to the set or to a subset of the TPs specified in clause 6;

- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 5;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 6 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection.

In the case of a) or b) above, a subset shall be used only where a particular abstract test method (ATM) makes some TPs untestable. All testable TPs from clause 6 shall be included in a compliant ATS.



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