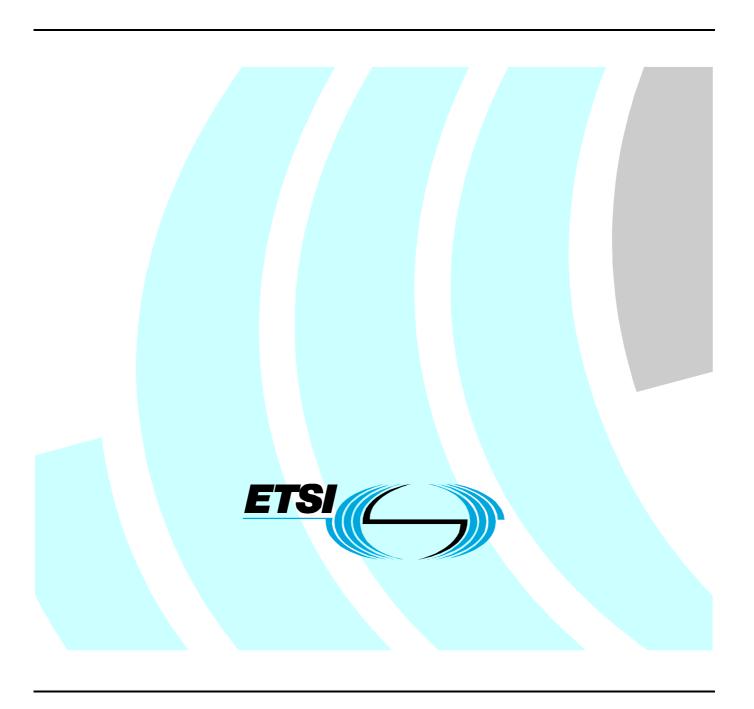
ETSITS 186 005-2 V1.1.1 (2006-07)

Technical Specification

Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN);
Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR)
Part 2: Test Suite Structure and Test Purposes (TSS&TP)



Reference DTS/TISPAN-06019-2-NGN

Keywords
TIP, TIR, testing, TSS&TP

ETSI

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from: <u>http://www.etsi.org</u>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2006. All rights reserved.

DECTTM, **PLUGTESTS**TM and **UMTS**TM are Trade Marks of ETSI registered for the benefit of its Members. **TIPHON**TM and the **TIPHON logo** are Trade Marks currently being registered by ETSI for the benefit of its Members. **3GPP**TM is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

Contents

Intell	lectual Property Rights	4
Forev	word	4
1	Scope	5
2	References	
2	References	
3	Definitions and abbreviations	6
3.1	Definitions	
3.2	Abbreviations	
4	Test Suite Structure (TSS)	
5	Test Purposes (TP)	8
5.1	Introduction	8
5.1.1	TP naming convention	8
5.2	User TPs for TIP	8
5.2.1	Syntax requirements	
5.2.1.	1 0111111111111111111111111111111111111	
5.2.1.		
5.2.2		
5.3	Signalling procedures	
5.3.1	Requirements on the destination network side	
5.3.2 5.3.3	Terminating Identification Restriction (TIR) Communication diversion services	
5.3.4	Requirements on the originating network side.	
5.3.5	Requirements on the interconnection with other IP network	
6	Compliance	
U	Compilance	
Anne	ex A (normative): Test purposes for the ISUP/SIP Interworking	24
A.1	Interworking from ISUP to SIP (Outgoing Call)	24
A.1.1		
A.1.2	Connected Line Identification Restriction (COLR)	27
A.2	Interworking from SIP to ISUP (Incoming Call)	29
A.2.1		
A.2.2		
Anne	ex B (informative): Bibliography	36
Histo	DITV	37

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 2 of a multi-part deliverable covering Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) as identified below:

Part 1: "PICS";

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

The present version updates the references to the basic call specifications.

NOTE: Some new parts will be developed in the future.

5

1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) of the Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) services. Within the TISPAN NGN Release 1 Next Generation Network (NGN) the TS 183 008 [9] Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) PSTN/ISDN simulation services is specified.

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document.

2 References

[13]

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 and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

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

•	
[1]	ETSI ES 283 003: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 [3GPP TS 24.229 (Release 7), modified]".
[2]	ETSI EN 300 089: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
[3]	ETSI EN 300 090: "Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Service description".
[4]	IETF RFC 3323: "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
[5]	IETF RFC 3325: "Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks".
[6]	IETF RFC 2396: "Uniform Resource Identifiers (URI): Generic Syntax".
[7]	IETF RFC 3966: "The tel URI for Telephone Numbers".
[8]	IETF RFC 3261: "SIP: Session Initiation Protocol".
[9]	ETSI TS 183 008: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services; Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR); Protocol specification".
[10]	ETSI ES 283 027: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Endorsement of the SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks [3GPP TS 29.163 (Release 7), modified]".
[11]	ITU Recommendation E.164: "The international public telecommunication numbering plan".
[12]	IETF RFC 2806: "URLs for Telephone Calls".

methodology and framework - Part 1: General concepts".

ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing

- [14] ISO/IEC 9646-3: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [15] ETSI TS 186 005-1: "Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) Part 1: PICS".

3 Definitions and abbreviations

3.1 Definitions

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

abstract test case: Refer to ISO/IEC 9646-1.

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1.

address identity: See Recommendation E.164 or/and RFC 2806.

call: See ITU-TRecommendation Q.9, definition 2201.

dialog: Refer to RFC 3261.

final response: Refer to RFC 3261.

header: Refer to RFC 3261.

header field: Refer to RFC 3261.

identity information: includes all the information (RFC 2806/RFC2396/E.164) identifying a user, including trusted

(network generated) and/or untrusted (user generated) addresses

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1.

implicit send event: Refer to ISO/IEC 9646-3.

lower tester: Refer to ISO/IEC 9646-1.

method: Refer to RFC 3261.

option-tag: Refer to RFC 3261.

PICS proforma: Refer to ISO/IEC 9646-1.

PIXIT proforma: Refer to ISO/IEC 9646-1.

point of control and observation: Refer to ISO/IEC 9646-1.

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1.

Protocol Implementation eXtra Information for Testing (PIXIT): Refer to ISO/IEC 9646-1.

provisional response: Refer to RFC 3261.

proxy, proxy server: Refer to RFC 3261.

request: Refer to RFC 3261.

response: Refer to RFC 3261.

session: Refer to RFC 3261.

(SIP) transaction: Refer to RFC 3261.

system under test: Refer to ISO/IEC 9646-1.

tag: Refer to RFC 3261.

Test Purpose (TP): Refer to ISO/IEC 9646-1.

trusted identity: network generated user address information

untrusted identity: user generated user address information

voice session: existing voice connection between two terminal equipments

EXAMPLE: Via RTP.

3.2 Abbreviations

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

AS Application Server CDIV Communication Diversion

CLIP Calling Line Identification Presentation
CLIR Calling Line Identification Restriction

CN Core Network

COLP Connected Line Identification Presentation
COLR Connected Line Identification Restriction

CS Circuit Switched

CSCF Call Session Control Function

IM IP Multimedia IP Internet Protocol

ISDN Integrated Service Data Network MGCF Media Gateway Control Function

n/a not applicable

NGN Next Generation Network

OIP Originating Identification Presentation
OIR Originating Identification Restriction

P-CSCF Proxy - CSCF

PSTN Public Switched Telephone Network

SDP Session Description Protocol SIP Session Initiation Protocol

TP Test Purposes
TSS Test Suite Structure
UA User Agent
UAC User Agent Client
UE User Equipment

URI Universal Resource Identifier URL Universal Resource Locator

4 Test Suite Structure (TSS)

Syntax		
	Term_P-CSCF	TIP_N01_xxx
	TermUserE	TIP_U01_xxx
	OrigUserE	TIP_U02_xxx
Signaling		
	DestNetw	TIP_N02_xxx
	TIR	TIP_N03_xxx
	CDIV	TIP_N04_xxx
	OrigNetw	TIP_N05_xxx
	OtherNetw	TIP_N06_xxx

Figure 1: Test suite structure

Test Purposes (TP) 5

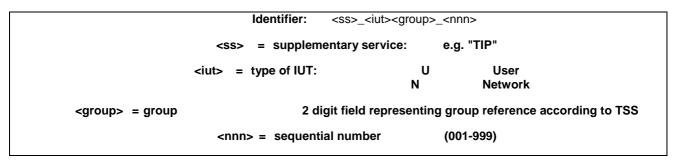
Introduction 5.1

For each test requirement a TP is defined.

TP naming convention 5.1.1

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).

Table 1: TP identifier naming convention scheme



5.2 User TPs for TIP

All PICS items referred to in this clause are as specified in TS 186 005-1 [15] unless indicated otherwise by another numbered reference.

5.2.1 Syntax requirements

5.2.1.1 Terminating P-CSCF

TSS	•	TP	TIP/TIR	reference	Selection expression
Syntax/Term_P-CSCF	-	TIP_N01_001	4.4		-
Test purpose:					
The P-CSCF sends a P-Asserted-Ident					
Ensure that the IUT in order to present	the identity	y of the terminatir	ng party ι	upon receipt of	a non - 100 response from
the terminating user the IUT (P-CSCF)	shall send	in a non 100 res	oonse m	essage defined	as SIP_MESSAGE_VA the
P-Asserted-Identity header containing v	/alid 'tel' or	r/and sip URI in th	ne interna	ational number	format e.g. tel: global
number.					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
SIP MESSAGE VA	←		←	SIP_MESSA	GE VA
		Conversation	1		_
BYE	→	Conversation	· →	BYE	_

	Values for tests purposes TIP_N01_001							
VA_01	180 Ringing							
VA_02	183 Session progress							
VA_03	200 OK							

Selection expression

PICS 1/2

5.2.1.2 Terminating user equipment

TSS	TP	TIP/TIR reference	Selection expression			
Syntax/TermUserE	TIP_U01_001	Annex A	PICS 1/2			
Test purpose:						
The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format.						
de la calle de des la collection de la calle de la cal	1 (11 1	4 11 44 41 11	0 DD (111 0			

Ensure that the Terminating UE in order to present a complete called party identity contained in the P-Preferred Identity header sends in a non 100 response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI in the **local number format** e.g. tel: local number.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments: UA C		SUT		UA S	
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)	

TIP/TIR reference

200 OK (BYE)

Test purpose:							
The Terminating UE sends a P-P	referred-Identity as	'tel' or 'sip' URI i	n the	international number format.			
Ensure that the Terminating UE in	order to present a	complete called	party	identity contained in the P-Preferred Ident	ity		
header sends in a non 100 respon	nse message define	ed as SIP_MESS	SAGE	_VA containing a valid 'tel' and/or sip URI i	n		
the international number forma	t e.g. tel: global nun	nber.					
The P-CSCF removes the P-Prefe	erred Identity heade	er from the respo	nse n	nessage.			
Comments:							
UA C		SUT		UA S			
INVITE	→		→	INVITE			
SIP_MESSAGE_VA	←		←	SIP_MESSAGE_VA			
	(Conversation					
BYE	→		→	BYE			

TIP_U01_002

		•	
Syntax/TermUserE	TIP_U01_003	4.4	PICS 1/2
TSS	TP	TIP/TIR reference	Selection expression

Test purpose:

200 OK (BYE)

TSS

Syntax/TermUserE

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format; phone context=particular phone prefox.

←

Ensure that the Terminating UE in order to present a complete called party identity contained in the P-Preferred Identity header sends in a non 100 response message defined as SIP_MESSAGE_VA containing a valid 'tel' or/and sip URI in the format: tel: **local number**; **phone-context= particular phone prefix**.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments:		<u></u>			
UA C		SUT		UA S	
INVITE	→		→	INVITE	
SIP_MESSAGE_VA	←		←	SIP_MESSAGE_VA	
		Conversation			
BYE	→		→	BYE	
200 OK (BYE)	←		←	200 OK (BYE)	
, ,				, ,	

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_004	4.4	PICS 1/2

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format; phone context=domain name

Ensure that the Terminating UE in order to present a complete called party identity contained in the P-Preferred Identity header sends in a non 100 response message defined as SIP_MESSAGE_VA a valid 'tel' URI in the format: tel: **local number**; **phone-context= domain name** e.g. tel: 4711; phone-context=example.com.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments:

UA C		SUT		UA S	
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→ ←	Conversation	→	BYE 200 OK (BYE)	

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_005	4.5	PICS 1/2

Test purpose:

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the global number format; isup=ISDN subaddress.

Ensure that the Terminating UE in order to present a complete called party identity contained in the P-Preferred Identity header sends a in a non 100 response message defined as SIP_MESSAGE_VA containing a valid 'tel' URI in the format: tel: **global number**; **isub**= ISDN Subadress.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments: UA C	·	SUT		UA S	
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)	

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_006	4.4	PICS 1/2

Test purpose:

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format; isup=ISDN subaddress.

Ensure that the Terminating UE in order to present a complete calling party identity contained in the P-Preferred Identity header sends a in a non 100 response message defined as SIP_MESSAGE_VA containing a valid 'tel' URI in the format: tel: **local number; isub**= ISDN Subadress.

The P-CSCF removes the P-Preferred Identity header from the response message

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	seeage.
SUT		UA S
•	→	INVITE
	_	
=	←	SIP_MESSAGE_VA
Conversation		
•	→	BYE
•	←	200 OK (BYE)
		` '
<u> </u>	SUT	Conversation

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_007	4.4	PICS 1/2

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format; isup=ISDN subaddress; phone context=particular phone prefix.

Ensure that the Terminating UE in order to present a complete calling party identity contained in the P-Preferred Identity header sends in a non 100 response message defined as SIP_MESSAGE_VA message containing a valid 'tel' URI in the format: tel: **local number; isub**= ISDN Subadress; **phone-context**= particular phone prefix.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments:

UA C		SUT		UA S	
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→ ←	Conversation	→	BYE 200 OK (BYE)	

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_008	4.4	PICS 1/2

Test purpose:

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the local number format; phone context=domain name.

Ensure that the Terminating UE in order to present a complete calling party identity contained in the P-Preferred Identity header sends in a non 100 response message defined as SIP_MESSAGE_VA containing a valid 'tel' URI in the format: tel: **local number**; **phone-context= domain name** e.g. tel: 4711 **isub=** ISDN Subadress; phone-context=example.com.

The P-CSCF removes the P-Preferred Identity header from the response message.

Comments: UA C SUT UA S INVITE → → INVITE SIP_MESSAGE_VA ← ← SIP_MESSAGE_VA Conversation → BYE

TSS	TP	TIP/TIR reference	Selection expression
Syntax/TermUserE	TIP_U01_009	4.5.2.5	PICS 1/2

200 OK (BYE)

Test purpose:

200 OK (BYE)

The Terminating UE sends a P-Preferred-Identity as 'tel' or 'sip' URI in the URI_USER format. Privacy is indicated with Privacy header field value 'id'.

Ensure that the Terminating UE to request its identity to be kept private from the originating user shall include a Privacy header with the privacy type of 'id' in any non 100 response message defined as SIP_MESSAGE_VA with a 'tel' and/or sip URI defined as URI_USER.

Co	mr	ne	nts:	

UA C		SUT		UA S	
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)	

	Values for test purpose TIP_U01_009					
	URI_USER					
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?headers					
VA_7_	sip URI: local number @host:port;uri-parameters?headers					
VA_8	sip URI: global number @host:port;uri-parameters?headers					
VA_9	Sip URI: local number; phone-context= particular phone prefix @host:port;uri-parameters?headers					

TSS		TP	T	IP/TIR reference	Selection expression			
Syntax/TermUserE		TIP_U01_010	4.	.5.2.5	PICS 1/2			
Test purpose:								
The Terminating UE request privacy in a	a provisiona	al or final response						
Ensure that the Terminating UE to keep	private is s	ending the priv va	lue 'ic	d' in any non 100 res	sponse message defined			
as SIP_MESSAGE_VA					_			
Comments:								
UA C		SUT		UA S				
INVITE	→		→	INVITE				
SIP_MESSAGE_VA	←		←	SIP_MESSAGE_	_VA			
		Conversation						
BYE	→		→	BYE				
200 OK (BYE)	←		←	200 OK (BYE)				

Values for tests purposes TIP_U01_001 to TIP_U01_010						
VA_01	180 Ringing					
VA_02	183 Session progress					
VA_03	200 OK					

5.2.2 Originating user equipment

TSS		TP	Т	IP/TIR reference	Selection expression					
Syntax/OrigUserE		TIP_U02_001	4	.5.2.1	PICS 1/1					
Test purpose:										
The originating UE receives a P-Ass	The originating UE receives a P-Asserted-Identity.									
Ensure that the Originating UE, rece	iving any non 1	00 response mess	age	defined as SIP_ME	SSAGE_VA containing					
a P-Asserted-Identity heeder with a	valid 'tel' and/or	sip URI.			_					
accepts the call following the basic re	equest handling	procedures.								
Comments:										
UA C		SUT		UA S						
INVITE	→		→	INVITE						
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	_VA					
		Conversation								
BYE	→		→	BYE						
200 OK (BYE)	←		←	200 OK (BYE)						
, ,				, ,						

TSS		TP		IP/TIR reference	Selection expression
Syntax/OrigUserE		TIP_U02_002	4	.5.2.1	PICS 1/1
Test purpose:					
The originating UE receives more	then one P-Asse	rted-Identities			
Ensure that the Originating UE, re	eceiving any non	100 response mes	sage	defined as SIP_ME	SSAGE_VA containing
more P-Asserted-Identity heeders			Ū	_	_
accepts the call following the basi					
Comments:		5			
UA C		SUT		UA S	
INVITE	→		→	INVITE	
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	_VA
		Conversation			
BYE	→		→	BYE	
200 OK (BYE)	←		←	200 OK (BYE)	
,				,	

TSS	TP	TI	P/TIR reference	Selection expression					
Syntax/OrigUserE	TIP_U02_003	4.	5.2.1	PICS 1/1					
Test purpose:									
The TIR service applies at the Terminating UE. The	ne Privacy header fie	eld va	lue 'id' indicates th	e service.					
Ensure that the Originating UE, receiving any non	100 response mess	age o	defined as SIP_ME	SSAGE_VA without					
P-Asserted-Identity headers, but a Privacy header	with privacy type of	"id" i	is present, accepts	the call following the					
basic request handling procedures.									
Comments:									
UA C	SUT		UA S						
INVITE →		→	INVITE						
SIP MESSAGE VA		-	SIP MESSAGE	VA					
	Conversation			_					
BYE →		→	BYE						
200 OK (BYE) ←		←	200 OK (BYE)						

TSS		TP		IP/TIR reference	Selection expression
Syntax/OrigUserE		TIP_U02_004	4	.5.2.1	PICS 1/1
Test purpose:					
Privacy service applies at the Ten	minating UE. Neith	er P-Asserted-Id	entity	nor Privacy header	received.
Ensure that the Originating UE, re	ceiving any non 10	00 response mes	sage	defined as SIP_ME	SSAGE_VA without
P-Asserted-Identity headers nor a	Privacy header w	ith privacy type o	f "iď" a	accepts the call follo	owing the basic request
handling procedures.	•	. , , , , ,		·	
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	_VA
		Conversation			
BYE	→		→	BYE	

Values for tests purposes TIP_U02_001 to TIP_U02_004							
VA_01	180 Ringing						
VA_02	183 Session progress						
VA 03	200 OK						

5.3 Signalling procedures

5.3.1 Requirements on the destination network side

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_001	4.5.2.1; 4.5.2.11	-

Test purpose:

The P-CSCF adds a P-Asserted- Identity header with the same value as saved from the P-Called-Party-ID field in the response without Privacy.

Ensure that the IUT acting as terminating P-CSCF, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER without a Privacy header. Includes the identity of the terminating party, in the form of a P-Asserted-Identity header. The contents of the P-Asserted-Identity header shall be the same as the saved P-Called-Party-ID information.

Once a 2xx response is received, the P-Asserted-Identity header field of the first 2xx response is used.

Comments: UA C		SUT		UA S
0.0000000000000000000000000000000000000	→	Convergation	→	INVITE SIP_MESSAGE_VA
	→	Conversation	→	BYE 200 OK (BYE)

	Values for test purposes TIP_N02_001							
	URI_USER							
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?headers							
VA_7_	sip URI: local number @host:port;uri-parameters?headers							
VA_8	sip URI: global number @host:port;uri-parameters?headers							
VA_9	Sip URI: local number; phone-context= particular phone prefix @host:port;uri-parameters?headers							

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_002	4.5.2.11	-

Test purpose:

The P-CSCF adds a P-Asserted- Identity header with the same value as saved from the P-Called-Party-ID field in the response with Privacy 'none'.

Ensure that the IUT acting as terminating P-CSCF, receiving 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' or SIP URI defined as URI_USER with the priv-value component set to "none" includes the identity of the terminating party, in the form of a P-Asserted-Identity header. The contents of the P-Asserted-Identity header shall be the same as the saved P-Called-Party-ID information.

Precondition

The another SIP based network is a trusted network

Comments: UA C		SUT		UA S
INVITE SIP_MESSAGE_VA	→ ←	Conversation	→	INVITE SIP_MESSAGE_VA
BYE 200 OK (BYE)	→ ←	Conversation	→	BYE 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_003	4.5.2.11	-

The P-CSCF adds a P-Asserted- Identity header with the same value as saved from the P-Called-Party-ID field in the response with Privacy 'id'.

Ensure that the IUT acting as terminating P-CSCF, receiving a1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the priv-value component set to "id" includes the identity of the terminating party, in the form of a P-Asserted-Identity header. The contents of the P-Asserted-Identity header shall be the same as the saved P-Called-Party-ID information.

SUT

Conversation

UAS

Precondition:

The another SIP based network is a trusted network Comments:

•••••••	
UA C	

INVITE → INVITE
SIP_MESSAGE_VA ← SIP_MESSAGE_VA

BYE → BYE

200 OK (BYE) ← 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_005	4.5.2.9	PICS 2/2

Test purpose:

The AS inserts the Privacy id value in the response if the response does not contain any Privacy. The user subscribes TIR in permanent mode.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and /or sip URI defined as URI_USER without a Privacy header for a terminating user that subscribes to TIR in "permanent mode" the AS shall insert a Privacy header with privacy type "id".

Comments: UA C	s	UT	UA S	
INVITE SIP_MESSAGE_VA	→ ← Conv	→ ← ersation	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→ ←	ersation → ←	BYE 200 OK (BYE)	

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_006	4.5.2.9	PICS 2/4

Test purpose:

The AS inserts the Privacy id value in the response if the response does not contain any Privacy. The user subscribes TIR temporary mode presentation restricted.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or URI defined as URI_USER with the without a Privacy header for a terminating user that subscribes to TIR in "temporary mode" with default value 'presentation restricted" the AS shall insert a Privacy header with privacy value "id".

moon a r mady mader with privacy value				
Comments: UA C		SUT		UA S
INVITE SIP_MESSAGE_VA	→	Commention	→	INVITE SIP_MESSAGE_VA
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_007	4.5.2.9	PICS 2/3

The AS does not insert the Privacy id value in the response if the response does not contain any Privacy. The user subscribes TIR temporary mode presentation not restricted.

Ensure that the IUT acting as AS serving the terminating user, receiving a, 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel'and/or sip URI defined as URI_USER without a Privacy header for an terminating user that subscribes to TIR in temporary mode with default value "presentation not restricted" the AS shall not insert priv value "id".

Comments: UA C		SUT		UA S
INVITE SIP_MESSAGE_VA	→ ←	Commonation	→	INVITE SIP_MESSAGE_VA
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_008	4.5.2.9	PICS 2/2

Test purpose:

The AS does not insert any Privacy in the response if the response contains the Privacy 'none'. The user subscribes TIR in permanent mode.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the priv-value component set to "none" for a terminating user that subscribes to TIR in "permanent mode" the AS shall not insert the priv value "id". The received value is sent.

Comments: UA C		SUT		UA S
INVITE SIP_MESSAGE_VA	→	Conversation	→	INVITE SIP_MESSAGE_VA
BYE 200 OK (BYE)	→	Conversation	→	BYE 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_009	4.5.2.9	PICS 2/4

Test purpose:

The AS does not insert any Privacy in the response if the response contains the Privacy 'none'. The user subscribes TIR in temporary mode presentation restricted.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the with the priv-value component set to "none " for an terminating user that subscribes to TIR in "temporary mode" with default value 'presentation restricted" the AS shall not insert the priv value "id". The received value is sent

Comments:	shall not insert the priv value	id . The rece	ived value is sent.	
UA C	SUT		UA S	
INVITE	→	→	INVITE	
SIP_MESSAGE_VA	←	←	SIP_MESSAGE_VA	
	Convers	ation		
BYE	→	→	BYE	
200 OK (BYE)	←	←	200 OK (BYE)	ļ
·				ļ

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_010	4.5.2.9	PICS 2/3

The AS does not insert any Privacy in the response if the response contains the Privacy 'none'. The user subscribes TIR in temporary mode presentation not restricted.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as TEL_URI with the with the priv-value component set to "none "for an terminating user that subscribes to TIR in temporary mode with default value "presentation not restricted" the AS shall not insert a privacy value "id". The received value is sent.

Precondition:

Comments: **UAC** SUT **UAS** INVITE **INVITE** SIP_MESSAGE_VA SIP_MESSAGE_VA Conversation BYE BYE 200 OK (BYE) 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_011	4.5.2.9	PICS 2/2

Test purpose:

The AS does not insert any Privacy in the response if the response contains the Privacy 'id'. The user subscribes TIR in permanent mode.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the priv-value component set to "id " for an terminating user that subscribes to TIR in "permanent mode" the AS shall not insert the priv value "id". The received value is sent.

Precondition:

The another SIP based network is a trusted network

Comments:	
UA C	

UA C	SUT		UA S
INVITE SIP_MESSAGE_VA	→ ← Conversation	→	INVITE SIP_MESSAGE_VA
BYE 200 OK (BYE)	→ ←	→	BYE 200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/DestNetw	TIP_N02_012	4.5.2.9	PICS 2/4

Test purpose:

The AS does not insert any Privacy in the response if the response contains the Privacy 'id'. The user subscribes TIR in temporary mode presentation restricted.

Ensure that the IUT acting as AS serving the terminating user, receiving a 1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the priv-value component set to "id "for an terminating user that subscribes to TIR in "temporary mode" with default value 'presentation restricted" the AS shall not insert the priv value "id". The received value is sent.

)	_		m	_	4	_	_
اء ا	n	m	m	e	nt	S	-

UA C	SUT		UA S	
INVITE SIP_MESSAGE_VA	→ ← Conversation	→	INVITE SIP_MESSAGE_VA	
BYE 200 OK (BYE)	→ ←	→	BYE 200 OK (BYE)	

TSS Simplify at Material	TP NOS 040		Selection expression
Signaling/DestNetw	TIP_N02_013	4.5.2.9	PICS 2/3
Test purpose:			
The AS does not insert any Privacy in the response if the response contains the Privacy 'id'. The user subscribes TIR			
in temporary mode presentation not restricted.			

Ensure that the IUT acting as AS serving the terminating user, receiving a,1xx or 2xx response message defined as SIP_MESSAGE_VA containing a valid 'tel' and/or sip URI defined as URI_USER with the priv-value component set to "id "for an terminating user that subscribes to TIR in temporary mode with default value "presentation not restricted"

the AS shall not insert the priv value "id". The received value is sent.

Comments: UA C	SUT UA S
INVITE SIP_MESSAGE_VA	→ INVITE ← SIP_MESSAGE_VA Conversation
BYE 200 OK (BYE)	→ BYE ← 200 OK (BYE)

	Values for test purposes TIP_N02_001 to TIP_N02_013			
	URI_USER			
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?headers			
VA_7_	sip URI: local number @host:port;uri-parameters?headers			
VA_8	sip URI: global number @host:port;uri-parameters?headers			
VA_9	Sip URI: local number; phone-context= particular phone prefix @host:port;uri-parameters?headers			

	Values for tests purposes TIP_N02_001 to TIP_N02_013
VA_01	180 Ringing
VA_02	183 Session progress
VA_03	200 OK

5.3.2 Terminating Identification Restriction (TIR)

TSS		TP		IP/TIR reference	Selection expression
Signaling/TIR		TIP_N03_001	4	.6.3	PICS 2/5
Test purpose:					
TIR, the origination user has overr	ide category				
Ensure that the IUT can take prece	edence over the	TIR service when	the or	iginating user has a	an override category.
Precondition: "TIR override"					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	E_VA
		Conversation			
BYE	→		→	BYE	
200 OK (BYE)	←		←	200 OK (BYE)	

	Values for tests purposes TIP_N03_001			
VA_01	180 Ringing			
VA_02	183 Session progress			
VA_03	200 OK			

5.3.3 Communication diversion services

TSS	TP	TIP/TIR reference	Selection expression
Signaling/CDIV	TIP_N04_002	4.6.8	PICS 3/1
-			

Test purpose:

The Originating UE does not receive diverting notification and does not receive terminating user information according the option the originating user is not notified.

Ensure that if the served (diverting) user selects the option that the **originating user is not notified** of communication diversion, then the originating user shall receive no diversion notification. In addition, **the originating user shall not receive the terminating user's identity** in any response to the request, unless the originating user has override capability.

Comments: UA C		SUT		UA S
INVITE	→		_	
181 Call is being forwarded	←		→	INVITE
SIP_MESSAGE_VA	←		←	SIP_MESSAGE_VA
		Conversation		
BYE	→		→	BYE
200 OK (BYE)	-		←	200 OK (BYE)
, ,				· ·

TSS	TP	TIP/TIR reference	Selection expression
Signaling/CDIV	TIP_N04_003	4.6.8	PICS 3/1 AND
			PICS 2/5

Test purpose:

The originating user receives all terminating user information due to override category.

Ensure that if the served (diverting) user selects the option that the **originating user** is **not notified** of communication diversion, then the originating user shall receive no diversion notification. In addition, **the originating user shall** receive the terminating user's identity in any response to the request. The originating user has override capability; the originating user receives the terminating user identity.

Precondition:

Comments:
UA C

SUT

UA S

INVITE

181 Call is being forwarded
SIP_MESSAGE_VA

Conversation

BYE
200 OK (BYE)

SUT

UA S

INVITE

SIP_MESSAGE_VA

Conversation

BYE
200 OK (BYE)

TSS	TP	TIP/TIR reference	Selection expression
Signaling/CDIV	TIP_N04_004	4.6.8	PICS 3/2

Test purpose:

The originating user receives diversion notification without terminating user identity.

Ensure that if the served (diverting) user selects the option that the **originating user is notified**, but **without the diverted-to user identity**, then the originating user shall not receive any non 100 response message defined as SIP_MESSAGE_VA with the terminating user's identity when the call is answered.

Comments:		•			
UA C		SUT		UA S	
INVITE					
	7		_	INIV/ITE	
181 Call is being forwarded	~		→	INVITE	
SIP_MESSAGE_VA	←		←	SIP_MESSAGE_VA	
		Conversation			
BYE	→		→	BYE	
200 OK (BYE)	←		←	200 OK (BYE)	
, ,				,	

TIP/TIR reference | Selection expression

TSS Signaling/CDIV		TP TIP_N04_005		P/TIR reference 6.8	Selection expression PICS 3/1 AND PICS 2/5
Test purpose:	•		•		
The originating user receives divers					
Ensure that if the served (diverting)					
diverted-to user identity, then the ori					
SIP_MESSAGE_VA with the terminate			is ans	swered. The origina	ating user has override
capability; the originating user receive	es the terminatin	g user identity.			
Precondition:					
		-			
Comments:					
UA C		SUT		UA S	
INDUITE	→				
	7				
INVITE	_		_	INI\/ITE	
181 Call is being forwarded	(→	INVITE	
	-		→	INVITE SIP_MESSAGE	_VA
181 Call is being forwarded	-	onversation	_		_VA

	Values for tests purposes TIP_N04_001 to TIP_N04_018					
VA_01	180 Ringing					
VA_02	183 Session progress					
VA_03	200 OK					

5.3.4 Requirements on the originating network side

Signaling/OrigNetw	TIP_N05_001	4.3.2	PICS 2/1			
Test purpose:						
The originating user receives the terminating user identity due to TIR service.						
Ensure that for originating users that subscribe to TIP, if network provided identity information about the terminator is available, and if presentation is not restricted, the network shall include that information in any non 100 response						
message defined as SIP_MESSAGE_VA. Comments:						
UA C	SUT	UA S				
OA C	301	UAS				
INVITE →	-	→ INVITE				
SIP_MESSAGE_VA	•	SIP_MESSAG	iE_VA			
	Conversation					
BYE →	•	→ BYE				
200 OK (BYE) ←	•	€ 200 OK (BYE)				

TSS	TP	TIP/TIR reference	Selection expression
Signaling/OrigNetw	TIP_N05_002	4.3.2; 4.5.2.1	PICS 2/1

Test purpose:

TSS

The originating user does not receive the terminating user identity due to the TIR service subscribed by the terminating user.

Ensure that if the presentation of the network asserted identity is restricted due to the TIR supplementary service, then the originating user shall receive an indication that the network provided identity was not sent because of restriction in any non 100 response message defined as SIP_MESSAGE_VA.

Comments: UA C	SUT		UA S	
INVITE SIP_MESSAGE_VA	→	→	INVITE SIP_MESSAGE_VA	
BYE	Conversat →	:ion →	BYE	
200 OK (BYE)	-	-	200 OK (BYE)	
200 011 (212)	-	-	200 011 (212)	

TSS		TP	TI	P/TIR reference	Selection expression		
Signaling/OrigNetw		TIP_N05_003	4.	3.2; 4.5.2.1	PICS 2/1		
Test purpose:							
The originating user does not receive the terminating due to it was not available							
Ensure that if the network asserted	d identity is not ava	ailable at the origi	nating	g network (for reaso	ons such as		
interworking), then the network sh	all indicate to the t	erminating user tl	nat th	e network asserted	identity was not		
included for reasons other than re-	striction in any nor	100 response m	essag	ge defined as SIP_I	MESSAGE_VA.		
Comments:							
UA C		SUT		UA S			
INDUITE			_	INIV/ITE			
INVITE	→		→	INVITE			
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	_VA		
		Conversation	_				
BYE	→		→	BYE			
200 OK (BYE)	←		←	200 OK (BYE)			

TSS		TP	T	IP/TIR reference	Selection expression		
Signaling/OrigNetw		TIP_N05_004	4	.5.2.4	NOT PICS 2/1		
Test purpose:							
The originating user does not subscribe to the TIR service. No terminating user identity is received.							
Ensure that the originating user does							
P-Asserted-Identity header fields or P	rivacy header	fields included in	the S	IP response define	d as		
SIP_MESSAGE_VA.							
Comments:							
UA C		SUT		UA S			
	_		_				
INVITE	→		→	INVITE			
SIP_MESSAGE_VA	←		←	SIP_MESSAGE	_VA		
		Conversation					
BYE	→		→	BYE			
200 OK (BYE)	←		←	200 OK (BYE)			

	Values for tests purposes TIP_N05_001 to TIP_N05_003				
VA_01	180 Ringing				
VA_02	183 Session progress				
VA_03	200 OK				

5.3.5 Requirements on the interconnection with other IP network

TSS		TP	T	IP/TIR reference	Selection expression			
Signaling/OtherNetw	TIP_N06_001	4	.5.2.7	PICS 1/3				
Test purpose:								
Interworking with a trusted network	; receiving							
Ensure that a SIP response defined	as SIP MESS	AGE VA including	P-As	serted-Identity hea	der fields from a trusted			
network is received the outgoing IB		•	•	•				
the response.								
Comments:								
UA C		SUT		UA S				
o A G		001		O/CO				
INVITE	→		→	INVITE				
SIP MESSAGE VA	É		←	SIP MESSAGE	VA			
	-	Conversation	-	011 _111200/102	_*/`			
BYE	→		→	BYE				
200 OK (BYE)	É		÷	200 OK (BYE)				
200 OK (BTL)	•		•	200 OK (DTL)				

TSS		TP		IP/TIR reference	Selection expression				
Signaling/OtherNetw		TIP_N06_002	4	.5.2.7	PICS 1/4				
Test purpose:									
Interworking with an un-trusted network; i	receiving								
Ensure that a SIP response defined as SI									
un-trusted network is received the outgoir	ng IBCF sh	all remove the P	-Asse	rted-Identity header	fields received in the				
response if they are restricted.									
Comments:									
UA C		SUT		UA S					
INVITE	→		→	INVITE					
SIP_MESSAGE_VA	←		-	SIP_MESSAGE	_VA				
Conversation									
BYE	→		→	BYE					
200 OK (BYE)	←		←	200 OK (BYE)					

TSS	TP	Т	IP/TIR reference	Selection expression PICS 1/3	
Signaling/OtherNetw	TIP_N06_003	4	.5.2.8		
Test purpose:	<u>.</u>	•		•	
Interworking with a trusted netwo	ork; sending				
	established with a-trusted network a _MESSAGE_VA the incoming IBCF n the response message.				
Comments:					
UA C	SUT		UA S		
INVITE	→	→	INVITE		
SIP_MESSAGE_VA	←	←	SIP_MESSAGE	_VA	
	Conversation				
BYE	→	→	BYE		
200 OK (BYE)	←	←	200 OK (BYE)		

TSS	=	P NOS 004	TIP/TIR reference	Selection expression PICS 1/4
Signaling/OtherNetw		TP_N06_004	4.5.2.8	PICS 1/4
Test purpose:				
Interworking with an un-trusted	network; sending			
Ensure that a communication is	established with an un	-trusted network	and P-Asserted-Ident	ity header fields are
included in SIP responses defin				
header fields from the SIP response				
Comments:	<u> </u>			
UA C		SUT	UA S	
OA C		301	OA O	
	→	-	INVITE	
INI\/ITE				
	_	=	- CID MESSACI	- \/A
INVITE SIP_MESSAGE_VA	-	•	SIP_MESSAGE	E_VA
SIP_MESSAGE_VA	← Co	onversation		E_VA
	-	•	BYE	E_VA

Values for tests purposes TIP_N06_001 to TIP_N06_004					
VA_01	180 Ringing				
VA_02	183 Session progress				
VA 03	200 OK				

6 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 5;
- b) use a TSS which is an appropriate subset of the whole of the TSS specified in clause 4;
- c) use the same naming conventions for the test groups and test cases;
- d) maintain the relationship specified in clause 5 between the test groups and TPs and the entries in the PICS proforma to be used for test case deselection;
- e) comply with ISO/IEC 9646-2.

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 5 shall be included in a compliant ATS.

Annex A (normative): Test purposes for the ISUP/SIP Interworking

A.1 Interworking from ISUP to SIP (Outgoing Call)

A.1.1 Connected Line Identification Presentation (COLP)

TP101001		ISUP reference: [10] clause 7.4.2.2				
TSS reference:	ISUP-SIP/SS/COLP					
ISUP selection criteria:	NOT OutIntE					
Test purpose:	Ensure that the SUT in Idle state, on receipt of an IAM message where the COLP service has been requested by the calling party by parsing the "Optional Forward Call Indicators' field and the "Connected Line Identity Request indicator" is set to "requested", on receipt of a 1XX or 2XX message defined as SIP_MESSAGE_VA with					
	NDC+ SN has been received and the	ng a URI with an identity in the format '+' CC+ rivacy header field was received and the priv-value				
	in the ANM or CON is included the Connec If CC encoded in the URI is equal to the CC next BICC/ISUP node is located in the same	of the country where MGCF is located AND the				
	Address presentation restricted parameter = Nature of address indicator = National (sign	nificant) number				
	Numbering plan indicator = ISDN/Telephony Screening indicator = Network Provided Address signals in the format: NDC+SN	numbering plan				
	Generic number parameter not present					
SIP Parameter values:	1XX or 2XX response: P-Asserted-Identity I format '+'CC+NDC+SN	eader field Tel URL containing an URI in the				
ISUP Parameter values:	IAM: Optional Forward Call Indicators, Connected Line Identity Request indicator" = "requested" ANM; Connected number parameter Address presentation restricted parameter = '00'B Nature of address indicator = '0000011'B Numbering plan indicator = '001'B Screening indicator = '11'B Address signals = PIXIT					
Comments:	ISUP IAM →	MGCF SIP → INVITE				
		← SIP_MESSAGE_VA				
	CASE A					
	ACM ←					
	ANM ←					
	CASE B					
	CON ← Cor	versation				
	REL →	→ BYE				
	RLC ←	€ 200 OK BYE				

TP101002		ISUP reference: [10] clause 7.4.2.2				
TSS reference:	ISUP-SIP/SS/COLP	[10] 0.4400 11.11212				
ISUP selection	OutIntE					
criteria:						
Test purpose:	Ensure that the SUT in Idle state, on receipt of an IAM message where the COLP service has been requested by the calling party by parsing the "Optional Forward Call Indicators' field and the "Connected Line Identity Request indicator" is set to "requested", on receipt of a 1XX or 2XX message defined as SIP_MESSAGE_VA with the P-Asserted-Identity header field containing a URI with an identity in the format '+' CC+ NDC+ SN has been received and the no Privacy header field was received or a Privacy header field was received and the priv-value					
	in the ANM or CON is included the Connected number Parameter. If CC encoded in the URI is no equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then Address presentation restricted parameter = Presentation allowed Nature of address indicator = International number Numbering plan indicator = ISDN/Telephony numbering plan Screening indicator = Network Provided Address signals in the format: CC+NDC+SN					
SIP Parameter	Generic number parameter not present					
values:	1XX or 2XX response: P-Asserted-Identity header field Tel URL containing an URI in the format '+'CC+NDC+SN					
ISUP Parameter		ected Line Identity Request indicator" -				
values:	IAM: Optional Forward Call Indicators, Connected Line Identity Request indicator" = "requested" ANM; Connected number parameter Address presentation restricted parameter = '00'B Nature of address indicator = '0000011'B Numbering plan indicator = '001'B Screening indicator = '11'B Address signals = PIXIT					
Comments:						
	IAM →	MGCF SIP → INVITE ← SIP_MESSAGE_VA				
	CASE A					
	ACM ←					
	CASE B					
	CON +					
		versation → BYE				
	RLC	← 200 OK BYE				

TP101003		ISUP reference:			
		[10] clause 7.4.2.2			
TSS reference:	ISUP-SIP/SS/COLP				
ISUP selection	OutIntE				
criteria:					
Test purpose:	Ensure that the SUT in Idle state, on receipt of an IAM message where the COLP service has been requested by the calling party by parsing the "Optional Forward Call Indicators' field and the "Connected Line Identity Request indicator" is set to "requested", on receipt of a 1XX or 2XX message defined as SIP_MESSAGE_VA with no P-Asserted-Identity header field				
	In the ANM or CON is included the Connecte	ed number Parameter.			
	Address presentation restricted parameter = A Screening indicator = Network Provided Address signals omitted	Address not available			
	Generic number parameter not present				
SIP Parameter	1XX or 2XX response: P-Asserted-Identity he	eader field Tel URL containing an URI in the			
values:	format '+'CC+NDC+SN	-			
ISUP Parameter values:	IAM: Optional Forward Call Indicators, Connerrequested" ANM; Connected number parameter Address presentation restricted parameter = 'Nature of address indicator = '0000000'B Numbering plan indicator = '000'B Screening indicator = '11'B Address signals = not presented				
Comments:					
	ISUP N IAM →	IGCF SIP → INVITE ← SIP_MESSAGE_VA			
	CASE A				
	ACM ←				
	ANM ←				
	CASE B				
	CON ←				
		versation			
	REL → RLC ←	→ BYE← 200 OK BYE			
L	<u> </u>				

	Values for tests purposes TP101001 to TP101003				
VA_01	VA_01 180 Ringing				
VA_02	183 Session progress				
VA_03	/A_03 200 OK				

A.1.2 Connected Line Identification Restriction (COLR)

TP102001				SUP reference: 0] clause 7.4.2.2	
TSS reference:	ISUP-SIP/SS/COLP		<u> </u>		
ISUP selection	NOT OutIntE				
criteria:					
Test purpose:	Ensure that the SUT in Idle state, on receipt of an IAM message where the COLP service has been requested by the calling party by parsing the "Optional Forward Call Indicators' field and the "Connected Line Identity Request indicator" is set to "requested", on receipt of a 1XX or 2XX message defined as SIP_MESSAGE_VA with the P-Asserted-Identity header field containing a URI with an identity in the format '+' CC+ NDC+ SN has been received and the a Privacy header field was received and the priv-value is set to PRIV_VALUE in the ANM or CON is included the Connected number Parameter. If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then Address presentation restricted parameter = Presentation restricted Nature of address indicator = National (significant) number Numbering plan indicator = ISDN/Telephony numbering plan Screening indicator = Network Provided Address signals in the format: NDC+SN				
	Generic number parameter not present				
SIP Parameter values:	1XX or 2XX response: P-Asserted-Identity he format '+'CC+NDC+SN			•	
ISUP Parameter	IAM: Optional Forward Call Indicators, Conne	ected Line	Identity	Request indicator" =	
values:	"requested" ANM; Connected number parameter Address presentation restricted parameter = Nature of address indicator = '0000011'B Numbering plan indicator = '001'B Screening indicator = '11'B Address signals = PIXIT	'01'B			
Comments:	IOUE	1005			
	IAM → CASE A	MGCF	→	SIP INVITE SIP_MESSAGE_VA	
	ACM ←				
	CASE B				
	CON ←				
	REL +	versation	→	BYE 200 OK BYE	

TP102002				-	SUP reference:	
TSS reference:				[1	0] clause 7.4.2.2	
ISUP selection	ISUP-SIP/SS/COLP					
criteria:	OutIntE					
Test purpose:	Ensure that the SUT in Idle state, on receipt of an IAM message where the COLP service has					
rest purpose.	been requested by the calling party by parsing the "Optional Forward Call Indicators' field and the "Connected Line Identity Request indicator" is set to "requested", on receipt of a 1XX or 2XX message defined as SIP_MESSAGE_VA with					
	the P-Asserted-Identity header field of NDC+ SN has been received and the a Privacy header field was received a)			•	
		•			_	
	in the ANM or CON is included the C If CC encoded in the URI is no equa the next BICC/ISUP node is located in the next BICC/ISUP node is located in the next BICC/ISUP node is located in the ANM or CON is included the C If CON is in	to the C	C of the co	ountry v		
	Address presentation restricted paral Nature of address indicator = Interna Numbering plan indicator = ISDN/Tel Screening indicator = Network Providents	i <mark>tional ηι</mark> ephony η	umber		tricted	
	Address signals in the format: CC+N	DC+SN				
	Generic number parameter not pre-					
SIP Parameter	1XX or 2XX response: P-Asserted-Id	entity nea	ader field	i ei URi	L containing an URI in the	
values: ISUP Parameter	format '+'CC+NDC+SN	. 0	-411:1	- +:4	Decreed in direct of	
values:	IAM: Optional Forward Call Indicators "requested"	s, Connec	sted Line i	aentity	Request indicator" =	
values.	ANM;					
	Connected number parameter					
	Address presentation restricted para	meter - 'C)1'B			
	Nature of address indicator = '00000'		71 0			
	Numbering plan indicator = '001'B	110				
	Screening indicator = '11'B					
	Address signals = PIXIT					
Comments:						
	ISUP	M	GCF		SIP	
	IAM →			→	INVITE	
				←	SIP_MESSAGE_VA	
	CASE A					
	ACM ←					
	ANM ←					
	CASE B					
	CON +					
		Conve	ersation			
	REL →			→	BYE	
	RLC ←			←	200 OK BYE	

	Values for tests purposes TP102001 to TP102003		
VA_01	180 Ringing		
VA_02	/A_02 183 Session progress		
VA_03	/A_03 200 OK		

Values for test purpose TP102001 to TP102002			
VA	PRIV_VALUE		
VA_1	ld		
VA_2	User		
VA 3	Header		

A.2 Interworking from SIP to ISUP (Incoming Call)

A.2.1 Connected Line Identification Presentation (COLP)

TP103001			SUP reference:		
		[10	0] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP				
Test purpose:	Ensure that the SUT, on receipt of an ANM message with a:				
	Connected number parameter coded				
	Connected number parameter coded Address presentation restricted parameter =	procontation allow	yod.		
	Nature of address indicator = national number		reu		
	Numbering plan indicator = ISDN/Telephony				
	Screening indicator = ISUP_SI				
	Address signals in the format: NDC+SN				
	and without the Generic number parameter				
	sends a 200 OK INVITE to the UAC with a:				
	P-Asserted-Identity header field containing a				
	e the MGCF is located) to				
	Connected PN address signals to construct E.164 number in URI. Prefix number with '+'.				
SIP Parameter	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format				
values: ISUP Parameter	'+'CC+NDC+SN				
values:	ANM; Connected number parameter				
values.	Address presentation restricted parameter = '00'B				
	Nature of address indicator = '0000011'B				
	Numbering plan indicator = '001'B				
	Screening indicator = ISUP_SI				
	Address signals = PIXIT				
	Generic number parameter not present				
Comments:		IGCF	ISUP		
	INVITE →	→	IAM		
	180 Ringing	(ACM		
	200 OK INVITE ←	+	ANM		
	ACK →				
		ersation	D.E.I		
	BYE -	→	REL		
	200 OK BYE ←	+	RLC		
	<u> </u>				

TP103002		ISUP reference:	
		[10] clause 7.4.2.1	
TSS reference:	SIP-ISUP/SS/COLP		
Test purpose:	Ensure that the SUT, on receipt of an ANM me	essage with a:	
	Nature of address indicator = international nur	Address presentation restricted parameter = presentation allowed Nature of address indicator = international number Numbering plan indicator = ISDN/Telephony numbering plan Screening indicator = ISUP_SI	
	and without the Generic number parameter ,		
	sends a 200 OK INVITE to the UAC with a:		
	P-Asserted-Identity header field containing a URI with an identity in the format '+' CC+ NDC+ SN has been received and the no Privacy header field is sent or the priv-value component is set to "none".		
SIP Parameter	200 OK INVITE: P-Asserted-Identity header fie	eld Tel URL containing an URI in the format	
values:	'+'CC+NDC+SN		

TP103002					UP reference:] clause 7.4.2.1
ISUP Parameter	ANM;				
values:	Connected number parame	ter			
	Address presentation restricted	ed parameter	= '00'B		
	Nature of address indicator =	'0000100'B			
	Numbering plan indicator = '001'B				
	Screening indicator = ISUP_S	31			
	Address signals = PIXIT				
	Generic number parameter	not present			
Comments:	SIP		MGCF		ISUP
	INVITE	→		→	IAM
	180 Ringing	←		←	ACM
	200 OK INVITE	←		←	ANM
	ACK	→			
		Cor	nversation		
	BYE	→		→	REL
	200 OK BYE	←		←	RLC

TP103003		ISUP reference:		
		[10] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP			
Test purpose:	Ensure that the SUT, on receipt of an ANM me	essage with a:		
	Composted number parameter and d			
	Connected number parameter coded Address presentation restricted parameter = p	recentation allowed		
	Nature of address indicator = national number			
	Numbering plan indicator = ISDN/Telephony n			
	Screening indicator = ISUP_SI	erring arm 2 kinem		
	Address signals in the format: NDC+SN			
	Generic number parameter,			
	Number Qualifier Indicator "Additional connec	ted number"		
	Address presentation restricted parameter = p			
	Nature of address indicator = national number			
	Numbering plan indicator = ISDN/Telephony n	umbering plan		
	Screening indicator = user provided, not verific	ed		
	Address signals = NDC+SN			
	sends a 200 OK INVITE to the UAC with a:			
	P-Asserted-Identity header field containing a L	JRI with an identity in the format '+' CC+		
	NDC+ SN has been received and Add CC (of Connected PN address signals to construct E.			
	The additional connected number is not interw			
SIP Parameter	200 OK INVITE: P-Asserted-Identity header field	eld Tel URL containing an URI in the format		
values:	'+'CC+NDC+SN			
ISUP Parameter values:	ANM;			
values:	Connected number parameter Address presentation restricted parameter = '0'	no'P		
	Nature of address indicator = '0000011'B	00 B		
	Numbering plan indicator = '001'B			
	Screening indicator = ISUP_SI			
	Address signals = PIXIT			
	Generic number parameter			
	Number Qualifier Indicator "00000101"B	and D		
	Address presentation restricted parameter = '(00.R		
	Nature of address indicator = '0000011'B			
	Numbering plan indicator = '001'B Screening indicator = '00'B			
	Address signals = PIXIT			
	p. 12.2.2.2.2.2.3.1.3.1.2.1.2.1.2.1.2.2.2.2			

TP103003			-	SUP reference: 0] clause 7.4.2.1	
Comments:	SIP	MGC	F	ISUP	
	INVITE	→	→	IAM	
	180 Ringing	←	←	ACM	
	200 OK INVITE	←	←	ANM	
	ACK	→			
		Conversa	ation		
	BYE	→	→	REL	
	200 OK BYE	←	←	RLC	

TP103004		ISUP reference: [10] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP	[10] Clause 7.4.2.1		
Test purpose:	Ensure that the SUT, on receipt of an ANM m	essage with a:		
	Connected number parameter coded			
	Address presentation restricted parameter = p	resentation allowed		
	Nature of address indicator = international nur			
	Numbering plan indicator = ISDN/Telephony r	numbering plan		
	Screening indicator = ISUP_SI			
	Address signals in the format: CC+NDC+SN			
	Generic number parameter,			
	Number Qualifier Indicator "Additional connec			
	Address presentation restricted parameter = p			
	Nature of address indicator = international nul			
	Numbering plan indicator = ISDN/Telephony r			
	Screening indicator = user provided, not verification Address signals = CC+NDC+SN	ea		
	Address signals = CC+NDC+SN			
	sends a 200 OK INVITE to the UAC with a:			
	P-Asserted-Identity header field containing a URI with an identity in the format '+' CC+			
	NDC+ SN has been received and the			
	The additional connected number is not interworked			
SIP Parameter	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format			
values:	+CC+NDC+SN			
ISUP Parameter values:	ANM;			
values.	Connected number parameter Address presentation restricted parameter = '0	no'B		
	Nature of address indicator = "0000100'B	J0 B		
	Numbering plan indicator = '000'B'			
	Screening indicator = ISUP_SI			
	Address signals = PIXIT			
	Generic number parameter			
	Number Qualifier Indicator "00000101"B			
	Address presentation restricted parameter = '0	00'B		
	Nature of address indicator = '0000100'B			
	Numbering plan indicator = '001'B			
	Screening indicator = '00'B			
Comments:	Address signals = PIXIT SIP M	GCF ISUP		
Comments.	INVITE +	→ IAM		
	180 Ringing	← ACM		
	200 OK INVITE	← ANM		
	ACK →	7 (1 414)		
	=	rsation		
	BYE →	→ REL		
	200 OK BYE	← RLC		
		-		

Values for test purposes TP102001-TP102006				
VA_01	VA_01 ISUP_SI = user provided verified and passed, '01'B			
VA_02	ISUP_SI = network provided, '11'B			

A.2.2 Connected Line Identification Restriction (COLR)

TP104001		ISUP reference:		
		[10] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP			
Test purpose:	essage with a:			
	Connected number parameter coded			
	resentation restricted			
	Nature of address indicator = national number Numbering plan indicator = ISDN/Telephony n			
	Screening indicator = ISUP_SI	umbering plan		
	Address signals in the format: NDC+SN			
	Address signals in the format. NDO+ON			
	and without the Generic number parameter,			
	sends a 200 OK INVITE to the UAC with a:			
	P-Asserted-Identity header field containing a L	IRI with an identity in the format '+' CC+		
	NDC+ SN has been received and Add CC (of			
	Connected PN address signals to construct E.164 number in URI. Prefix number			
	a Privacy header is inserted with the value 'id'	or the value 'id' is added to a existence		
	Privacy header			
SIP Parameter	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format			
values:	'+'CC+NDC+SN			
ISUP Parameter	ANM;			
values:	Connected number parameter	ALID		
	Address presentation restricted parameter = 'C)1'B		
	Nature of address indicator = '0000011'B			
	Numbering plan indicator = '001'B Screening indicator = ISUP_SI			
	Address signals = PIXIT			
	Generic number parameter not present			
Comments:		GCF ISUP		
	INVITE →	→ IAM		
	180 Ringing ←	← ACM		
	200 OK INVITE ←	← ANM		
	ACK →			
	Conve	rsation		
	BYE →	→ REL		
	200 OK BYE ←	← RLC		

TP104002		IS	UP reference:	
		[10] clause 7.4.2.1	
TSS reference:	SIP-ISUP/SS/COLP			
Test purpose:	Ensure that the SUT, on receipt of an ANM message with a:			
	Connected number parameter coded Address presentation restricted parameter = p	recentation restric	etad	
	Nature of address indicator = international nu		sied .	
	Numbering plan indicator = ISDN/Telephony r			
	Screening indicator = ISUP_SI	0.1		
	Address signals in the format: CC+NDC+SN			
	and without the Generic number parameter,			
	sends a 200 OK INVITE to the UAC with a:			
	P-Asserted-Identity header field containing a URI with an identity in the format '+' CC+			
	NDC+ SN has been received and the			
	a Privacy header is inserted with the value 'id' or the value 'id' is added to a existence			
SIP Parameter	Privacy header			
values:	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format			
ISUP Parameter	'+'CC+NDC+SN ANM:			
values:	Connected number parameter			
	Address presentation restricted parameter = '01'B			
	Nature of address indicator = '0000100'B			
	Numbering plan indicator = '001'B			
	Screening indicator = ISUP_SI			
	Address signals = PIXIT			
Comments:	Generic number parameter not present SIP M	GCF	ISUP	
Comments.	INVITE →	GCF →	IAM	
	180 Ringing	-	ACM	
	200 OK INVITE ←	÷	ANM	
	ACK →	•	7 (1417)	
		ersation		
	BYE →	→	REL	
	200 OK BYE ←	←	RLC	

TP104003		ISUP reference: [10] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP			
Test purpose:	Ensure that the SUT, on receipt of an ANM m	nessage with a:		
	Connected number parameter coded			
	Address presentation restricted parameter =			
	Nature of address indicator = national number			
	Numbering plan indicator = ISDN/Telephony	numbering plan		
	Screening indicator = ISUP_SI			
	Address signals in the format: NDC+SN			
	Generic number parameter,			
	Number Qualifier Indicator "Additional connected number"			
	Address presentation restricted parameter = presentation restricted			
	Nature of address indicator = national number			
	Numbering plan indicator = ISDN/Telephony numbering plan			
	Screening indicator = user provided, not verif	ied		
	Address signals = NDC+SN			
	sends a 200 OK INVITE to the UAC with a:			
	P-Asserted-Identity header field containing a	URI with an identity in the format '+' CC+		
	NDC+ SN has been received and Add CC (of			
	Connected PN address signals to construct E	.164 number in URI. Prefix number with '+'.		
	a Privacy header is inserted with the value 'id Privacy header	or the value 'id' is added to a existence		

TP104003		ISUP reference: [10] clause 7.4.2.1		
	The additional connected number is not interworked			
SIP Parameter	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format			
values:	'+'CC+NDC+SN			
ISUP Parameter	ANM;			
values:	Connected number parameter Address presentation restricted parameter = '01'B Nature of address indicator = '0000011'B			
	Numbering plan indicator = '001'B			
	Screening indicator = ISUP_SI			
	Address signals = PIXIT			
	Generic number parameter Number Qualifier Indicator "00000101"B			
	Address presentation restricted parameter = '01'B			
	Nature of address indicator = '0000011'B			
	Numbering plan indicator = '001'B Screening indicator = '00'B			
	Address signals = PIXIT			
Comments:	SIP	MGCF ISUP		
	INVITE →	→ IAM		
	180 Ringing ←	← ACM		
	200 OK INVITE ←	← ANM		
	ACK →			
	Conve	ersation		
	BYE →	→ REL		
	200 OK BYE ←	← RLC		

TP104004		ISUP reference: [10] clause 7.4.2.1		
TSS reference:	SIP-ISUP/SS/COLP	[10] 010030 7.4.2.1		
Test purpose:	Ensure that the SUT, on receipt of an ANM message with a:			
	Connected number parameter coded Address presentation restricted parameter = presentation restricted Nature of address indicator = international number			
	Numbering plan indicator = ISDN/Telephony numbering plan			
	Screening indicator = ISUP_SI			
	Address signals in the format: CC+NDC+SN			
	Generic number parameter, Number Qualifier Indicator "Additional connected number" Address presentation restricted parameter = presentation restricted Nature of address indicator = international number Numbering plan indicator = ISDN/Telephony numbering plan Screening indicator = user provided, not verified Address signals = CC+NDC+SN			
	sends a 200 OK INVITE to the UAC with a: P-Asserted-Identity header field containing a UNDC+ SN has been received and the	·		
	a Privacy header is inserted with the value 'id' or the value 'id' is added to a existence Privacy header The additional connected number is not interworked			
SIP Parameter				
values:	200 OK INVITE: P-Asserted-Identity header field Tel URL containing an URI in the format '+'CC+NDC+SN			

TP104004			,	SUP reference: 10] clause 7.4.2.1		
ISUP Parameter	ANM;		_	-		
values:	Connected number parameter					
	Address presentation restricted parameter = '01'B					
	Nature of address indicator = "0000100'B					
	Numbering plan indicator = '001'B					
	Screening indicator = ISUP_SI					
	Address signals = PIXIT					
	Generic number parameter					
	Number Qualifier Indicator "00000101"B					
	Address presentation restricted parameter = '001B					
	Nature of address indicator = '00	Nature of address indicator = '0000100'B				
	Numbering plan indicator = '001'B					
	Screening indicator = '00'B					
	Address signals = PIXIT					
Comments:	SIP	М	GCF	ISUP		
	INVITE	→	→	IAM		
	180 Ringing	←	←	ACM		
	200 OK INVITE	←	←	ANM		
	ACK	→				
		Conve	rsation			
	BYE	→	→	REL		
	200 OK BYE	-	+	RLC		
Ì						

Values for test purposes TP102001-TP102006		
VA_01	ISUP_SI = user provided verified and passed, '01'B	
VA_02	ISUP_SI = network provided, '11'B	

Annex B (informative): Bibliography

- ETSI TS 122 228: "Service requirements for the IP multimedia core network subsystem; Stage 1".
- ETSI TS 123 002: "Network architecture".
- ETSI TS 123 003: "Numbering, addressing and identification".
- ETSI TS 123 228: "IP multimedia subsystem; Stage 2".
- ETSI TS 124 229: "IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".
- ISO/IEC 9646-2: "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 2: Abstract Test Suite specification".

History

Document history				
V1.1.1	July 2006	Publication		