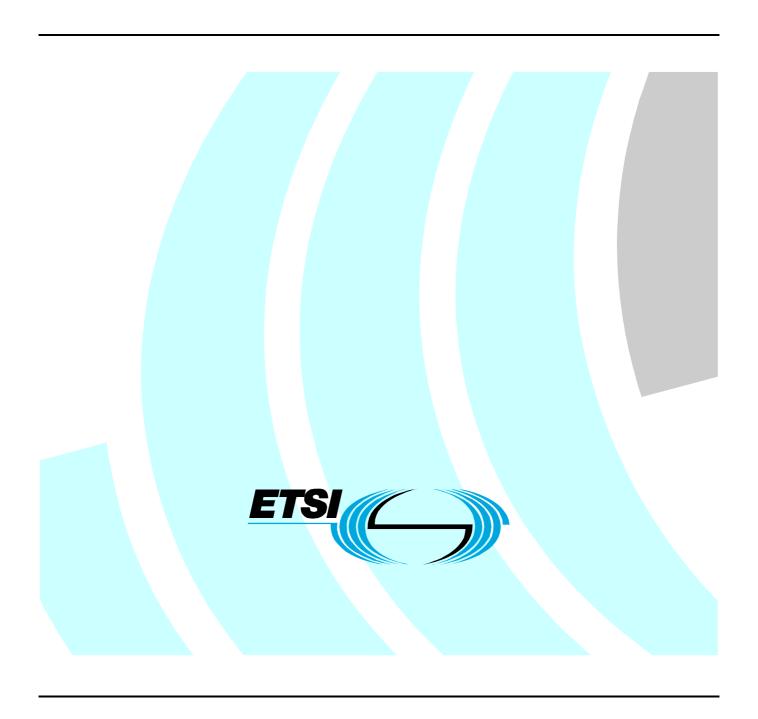
ETSITS 186 016-2 V2.0.0 (2008-12)

Technical Specification

Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN);
Protocol specification Closed User Group (CUG);
Part 2: Test Suite Structure and Test Purposes (TSS&TP)



Reference DTS/TISPAN-06037-2-NGN-R2

Keywords testing, TSS&TP, CUG, IMS

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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 Test Suite Structure and Test Purposes for the Closed User Group (CUG) service, as identified below:

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

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

Part 3: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".

1 Scope

The present document specifies the test suite structure and test purposes of the Closed User Group (CUG) service, based on stage three of the IMS Closed User Group (CUG) simulation services. Within the Next Generation Network (NGN) the stage 3 description is specified using the IP-Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP).

2 References

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.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

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NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- [1] ETSI TS 183 054: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services; Protocol specification Closed User Group (CUG)".
- [2] ETSI TS 186 016-1: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN) PSTN/ISDN simulation services: Closed User Group (CUG); Protocol Conformance Implementation Statement (PICS), Release 2".
- [3] ETSI TS 181 002: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Multimedia Telephony with PSTN/ISDN simulation services".
- [4] IETF RFC 3261: "SIP: Session Initiation Protocol".
- [5] 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]".

[6] ETSI TS 129 163: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks (3GPP TS 29.163 version 7.9.0 Release 7)".

2.2 Informative references

Not applicable.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 181 002 [3] and the following apply:

escaped character: See RFC 3261 [4].

NOTE: This may contain additional information.

3.2 Abbreviations

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

ACK ACKnowledgement
CD Communication Deflection

CDIV Communication DIVersion services
CFB Communication Forwarding Busy

CFNL Communication Forwarding Not Logged-in CFNR Communication Forwarding No Reply

CFNRc Communication Forwarding on subscriber Not Reachable

CFU Communication Forwarding Unconditional

CONF CONFerence calling CUG Closed User Group

ECT Explicit Communication Transfer

HOLD communication HOLD

I-MGCF Incoming - Media Gateway Control Function

IMS IP Multimedia Subsystem

IP Internet Protocol

ISDN Integrated Service Data Network

ISUP Integrated Service digital network User Part

NGN Next Generation Network

O-MGCF Outgoing - Media Gateway Control Function

PSTN Public Switched Telephone Network

SDP Session Description Protocol SIP Session Initiation Protocol

SUB SUBaddressing
UA User Agent
UE User Equipment

XML eXtensible Markup Language

4 Test Suite Structure (TSS)

CUG			
	originating_UE		CUG_U01_xxx
	originating_AS		CUG_N01_xxx
	terminating_AS		CUG_N02_xxx
	interaction	CONF	CUG_N03_xxx
		CDIV	CUG_N04_xxx
		ECT	CUG_N05_xxx
SIP-ISUP		·	·
	SS	CUG	TP516xxx
ISUP-SIP		·	·
	SS	CUG	TP608xxx

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 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).

Table 1: TP identifier naming convention scheme

Identifier: <ss>_<iut><group>_<nnn>

<ss> = supplementary service: e.g. "CUG"

<iut> = type of IUT: U User – equipment
N Network

<group> = group 2 digit field representing group reference according to TSS

<nnn> = sequential number (001-999)

5.1.2 Test strategy

As the base standard TS 183 054 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification TS 186 016-1 [2]. The criteria applied include the following:

whether or not a test case can be built from the TP is not considered.

5.2 Test Purposes for Closed User Group (CUG)

5.2.1 TPs at the originating UA

BYE 200 OK BYE

TSS		TP	CUG	reference	Selection expression
CUG/originating_UE		CUG_U01_001	claus	se 4.5.2.1	_
Test purpose					
Explicit request of CUG service	се				
The originating user requests	explicitly the CUG	service by including	in the	initial INVITE	an xml CUGrequestType
containing the preferred CUG	and an outgoing ac	ccess request.			
Preconditions:					
SIP header values:					
INVITE:					
<cug></cug>					
<pre><cugcalloperation> <outgoingaccessrequ <cugindex="">[PIXIT]</outgoingaccessrequ></cugcalloperation></pre>		ngAccessRequest>			
Comments:				Test equipm	nent
Comments: UA C	→		→	Test equipm	nent
Comments: UA C INVITE	→		→		nent
Comments: UA C INVITE 100 Trying			_	INVITE	nent
Comments: UA C INVITE 100 Trying 180 Ringing	←		←	INVITE 100 Trying	
Comments: UA C INVITE 100 Trying 180 Ringing 200 OK INVITE	+ +		+	INVITE 100 Trying 180 Ringing	
Comments: UA C INVITE 100 Trying 180 Ringing 200 OK INVITE ACK	+ + +	Communication	+ +	INVITE 100 Trying 180 Ringing 200 OK INVI	
Comments: UA C INVITE 100 Trying 180 Ringing 200 OK INVITE	+ + +	Communication	+ +	INVITE 100 Trying 180 Ringing 200 OK INVI	

TSS		TP		CUG	reference	Selection expression
CUG/originating_UE		CUG_U01	_002	clau	se 4.5.2.1	-
Test purpose						
Explicit request of CUG service						
The originating user requests expli-	citly the CUG	service by in	ncluding	in the	e initial INVITE an	xml CUGrequestType does
not contain the preferred CUG and	an outgoing a	access requ	est.			
Preconditions:						
SIP header values:						
INVITE:						
<cug></cug>						
<cugcalloperation></cugcalloperation>						
<outgoingaccessrequest>F</outgoingaccessrequest>	FALSE <td>oingAccessF</td> <td>Request></td> <td>></td> <td></td> <td></td>	oingAccessF	Request>	>		
<pre><cugindex>[PIXIT]</cugindex></pre>	ex>					
Comments:						
UA C					Test equipmer	nt
INVITE	→			→	INVITE	
100 Trying	←			←	100 Trying	
180 Ringing	+			←	180 Ringing	
200 OK INVITE	-			←	200 OK INVITE	
ACK	→			→	ACK	
		Communi	ication			

BYE 200 OK BYE

TSS		TP	CUG	reference	Selection expression
CUG/originating_UE		CUG_U01_003	claus	se 4.5.2.1	
Test purpose					
Explicit request of CUG servi	ce				
The originating user requests			g in the	e initial INVITE a	an xml CUGrequestType
containing the preferred CUG	and an outgoing a	ccess request.			
Preconditions:					
SIP header values:					
INVITE:					
<cug></cug>					
<pre><cugcalloperation> <outgoingaccessrequ <="" cugcalloperation=""></outgoingaccessrequ></cugcalloperation></pre>	uest>TRUE <td>ngAccessRequest></td> <td>></td> <td></td> <td></td>	ngAccessRequest>	>		
Comments:				-	
UA C	_			Test equipm	ent
INVITE	→		→	INVITE	
100 Trying	((100 Trying	
180 Ringing 200 OK INVITE	+		(180 Ringing 200 OK INVI	
ACK	→		←	ACK	16
ACK	7	Communication	7	ACK	
BYE	→	Communication	→	BYE	
200 OK BYE	7		→	200 OK BYE	
ZUU ON DIE				200 ON BTE	

TSS	TP	C	UG reference	Selection expression
CUG/originating_UE	CU	G_U01_004 cl	ause 4.5.2.1	_
Test purpose				
Explicit request of CUG servi	ce			
The originating user requests	explicitly the CUG service	ce by including in	the initial INVITE	an xml CUGrequestType do
not contain the preferred CUC	3 and an outgoing acces	s request.		
Preconditions:				
SIP header values:				
INVITE:				
<cug></cug>				
<cugcalloperation></cugcalloperation>				
<outgoingaccessrequ< td=""><td>uest>FALSE<td>ccessRequest></td><td></td><th></th></td></outgoingaccessrequ<>	uest>FALSE <td>ccessRequest></td> <td></td> <th></th>	ccessRequest>		
	0 0	•		
Comments:				
UA C			Test equipn	nant
				Henr
	→	-	• •	nent
INVITE	→ ←	-	NVITE.	nent
INVITE 100 Trying	=	-	INVITE 100 Trying	
INVITE 100 Trying 180 Ringing	←	•	INVITE 100 Trying 180 Ringing	
INVITE 100 Trying 180 Ringing 200 OK INVITE		•	INVITE 100 Trying 180 Ringing 200 OK INV	
INVITE 100 Trying 180 Ringing 200 OK INVITE ACK	← ← ←	*	INVITE 100 Trying 180 Ringing 200 OK INV	
INVITE 100 Trying 180 Ringing 200 OK INVITE	← ← ←	• •	INVITE 100 Trying 180 Ringing 200 OK INV ACK	

TSS	TP	CUG	reference	Selection expression
CUG/originating_UE	CUG_U01_005	claus	e 4.5.2.1	-
Test purpose				
Implicit request of CUG service				
The originating user with CUG subscription requeinitial INVITE	ests the CUG service	e witho	out including a xm	I CUGrequestType in the
Preconditions:				
SIP header values:				
INVITE:				
Comments:				
UA C			Test equipmen	t
INVITE →		→	INVITE	
100 Trying ←		←	100 Trying	
180 Ringing ←		←	180 Ringing	
200 OK INVITE ←		←	200 OK INVITE	
ACK →		→	ACK	
	Communication			
BYE →		→	BYE	
200 OK BYE ←		+	200 OK BYE	

Selection expression

CUG reference

5.2.2 Test Purposes at the Application Server of the originating User

TP

TSS

CUG/originating_AS		CUG_N01_001		83 054 [1] se 4.5.2.4	PICS 1/1
Test purpose			Claus	56 4.5.2.4	
CUG without preference: INVITE v	vith CUG index	and no outgoingA	ccessF	Reauest, succ	essful
In case of subscription "CUG without					
INVITE with CUGIndex and without					
cugInterlockBinaryCode (PIXIT), th					
outgoing access).		(*)	- 9		
Preconditions: CUG without prefe	erence				
SIP header values:					
INVITE:					
<cug></cug>					
<cugcalloperation></cugcalloperation>					
<pre><outgoingaccessrequest> <cugindex>[PIXIT]</cugindex></outgoingaccessrequest></pre>		ingAccessRequest	>		
INVITE:					
<cug></cug>					
<pre><networkindicator>[PIXIT]<!-- no<br--><cuginterlockbinarycode>[PIX <cugcommunicationindicator></cugcommunicationindicator></cuginterlockbinarycode></networkindicator></pre>	IT] <td>ckBinaryCode></td> <td>•</td> <td></td> <td></td>	ckBinaryCode>	•		
UA C		SUT		UA S	
INVITE 1	→	001	→	INVITE 2	
100 Trying	É		ŕ	100 Trying	
180 Ringing	÷		è	180 Ringing	1
200 OK INVITE	÷		÷	200 OK INV	
ACK	÷		À	ACK	
	-	Communication	-		
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYI	_

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_002	TS 183 054 [1]	PICS 1/2
		clause 4 5 2 4	

CUG+OAE without preference: INVITE with CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, explicit request required without preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAE without preference

Ľ	<pre></pre>				
	Comments:				
	UA C		SUT		UA S
	INVITE 1	→		→	INVITE 2
	100 Trying	←		←	100 Trying
	180 Ringing	←		←	180 Ringing
	200 OK INVITE	←		←	200 OK INVITE
	ACK	→		→	ACK
			Communication		
	BYE	→		→	BYE
	200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_003	TS 183 054 [1]	PICS 1/3
		clause 4.5.2.4	

CUG+OAI without preference: INVITE with CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications without preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAI without preference

Commo	ents:			
UA C		SUT		UA S
INVITE	1 →		→	INVITE 2
100 Try	ing \leftarrow		←	100 Trying
180 Rin	ging +		←	180 Ringing
200 OK	INVITE +		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK	BYE ←		←	200 OK BYE

TSS CUG/originating_AS		TP CU	G_N01_0	004	TS 18	reference 3 054 [1] e 4.5.2.4	Selection expression PICS 1/4
Test purpose	 0.10				_		

CUG with preference: INVITE with CUG index and no outgoingAccessRequest, successful
In case of subscription "CUG with preference", ensure that the validation check for the CUG request contained in an
INVITE with CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the
cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without
outgoing access).

Preconditions: CUG with preference

<th></th> <th></th> <th></th> <th></th>				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	+		+	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_005	TS 183 054 [1]	PICS 1/5
		clause 4.5.2.4	

CUG+OAE with preference: INVITE with CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, explicit request required with preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAE with preference

Voug>					
Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	(←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK ĬNŬITE	(←	200 OK ĬNŬITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_006	TS 183 054 [1]	PICS 1/6
		clause 4.5.2.4	
Test purpose			

CUG+OAI with preference: INVITE with CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications with preference",

ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAI with preference

```
SIP header values:
INVITE:
```

<cuq> <cugCallOperation>

<outgoingAccessRequest>FALSE</outgoingAccessRequest>

<cugIndex>[PIXIT]</cugIndex>

</cugCallOperation>

</cug>

INVITE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>11</cugCommunicationIndicator>

</cug>

Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	+		+	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_007	TS 183 054 [1]	-
		clause 4.5.2.4	

Test purpose

No CUG: INVITE with CUG index and no outgoingAccessRequest, unsuccessful

In case of subscription "No CUG", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and without outgoingAccessRequest is not successful. The Application Server sends a 403 Forbidden.

Preconditions: No CUG subscription

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest>FALSE</outgoingAccessRequest>

<cugIndex>[PIXIT]</cugIndex>

</cugCallOperation>

</cug>
403 Forbidden:

ı	403	ı	וטוי	uut
	Con	ım	en	ts:

UA C SUT **UAS**

INVITE 403 Forbidden **ACK**

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_008	TS 183 054 [1]	PICS 1/1
		clause 4.5.2.4	
Took warmage			

CUG without preference: INVITE with CUG index and outgoingAccessRequest, successful
In case of subscription "CUG without preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG without preference

v oug-				
Comments:				
UA C	SU	Γ	UA S	
INVITE 1	→	→	INVITE 2	
100 Trying	←	←	100 Trying	
180 Ringing	←	←	180 Ringing	
200 OK INVITE	←	←	200 OK INVITE	
ACK	→	→	ACK	
	Commur	nication		
BYE	→	→	BYE	
200 OK BYE	←	←	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_009	TS 183 054 [1]	PICS 1/2
		clause 4.5.2.4	

CUG+OAE without preference: INVITE with CUG index and outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, explicit request required without preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAE without preference

```
SIP header values:
INVITE:
<cug>
```

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest> <cugIndex>[PIXIT]</cugIndex>

</cugCallOperation>

</cug>

INVITE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>
<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>10</cugCommunicationIndicator>

Voug>				
Comments:				
UA C		SUT	UA S	
INVITE 1	→	→	INVITE 2	
100 Trying	←	←	100 Trying	
180 Ringing	←	←	180 Ringing	
200 OK ĬNŬITE	←	←	200 OK INVITE	
ACK	→	→	ACK	
	Con	nmunication		
BYE	→	→	BYE	
200 OK BYE	←	(200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_010	TS 183 054 [1]	PICS 1/3
		clause 4.5.2.4	

CUG+OAI without preference: INVITE with CUG index and outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications without preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAI without preference

Comments:		
UA C	SUT	UA S
INVITE 1	→	→ INVITE 2
100 Trying	←	100 Trying
180 Ringing	←	← 180 Ringing
200 OK INVITE	←	← 200 OK INVITE
ACK	→	→ ACK

Communication
BYE

200 OK BYE

Communication

BYE

200 OK BYE

Communication

BYE

200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_011	TS 183 054 [1]	PICS 1/4
		clause 4.5.2.4	
Test purpose	·		•
CUG with preference: INVITE with	CUG index and outgoingAccess	Request, successful	
In case of subscription "CUG with p	reference", ensure that the valid	lation check for the Cl	JG request contained in an
INVITE with CUGIndex and outgoin			
cugInterlockBinaryCode (PIXIT), the			
access allowed).	,	J	` 3 3
Preconditions: CUG with preference	ce		
SID header values:			

```
SIP header values: INVITE:
<cug>
    <cugCallOperation>
       <outgoingAccessRequest>TRUE</outgoingAccessRequest>
<cugIndex>[PIXIT]</cugIndex>
    </cugCallOperation>
</cug>
INVITE:
<cug>
```

<networkIndicator >[PIXIT]</networkIndicator>
<networkIndicator >[PIXIT]</networkIndicator>
<networkIndicator>
<networkIndicator<
networkIndicator>
<networkIndicator>
<networkIndi

Comments:		
UA C	SUT	UA S
INVITE 1 →	→	INVITE 2
100 Trying ←	←	100 Trying
180 Ringing ←	←	180 Ringing
200 OK INVITE	←	200 OK INVITE
ACK →	→	ACK
	Communication	
BYE →	→	BYE
200 OK BYE ←	+	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_012	TS 183 054 [1]	PICS 1/5
		clause 4.5.2.4	

CUG+OAE with preference: INVITE with CUG index and outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, explicit request required with preference", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAE with preference

```
SIP header values:
INVITE:
<cug>
```

</cugCallOperation>

</cug>

INVITE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>

<cugCommunicationIndicator>10</cugCommunicationIndicator>

</cug>

<th></th> <th></th> <th></th> <th></th> <th></th>					
Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	+		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	+		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	+		+	200 OK BYE	

TSS CUG/originating_AS	TP CUG_N01_013	CUG reference TS 183 054 [1] clause 4.5.2.4	Selection expression PICS 1/6
Test purpose CUG+OAI with preference: INVITE with In case of subscription "CUG and Outgo ensure that the validation check for the Coutgoing Access Request is successful."	ing access, implicit outgoing CUG request contained in a	g access for all comm in INVITE with CUGIn	unications with preference", dex and

networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAI with preference

```
SIP header values:
INVITE 1:
<cuq>
   <cugCallOperation>
      <outgoingAccessRequest>TRUE</outgoingAccessRequest>
      <cugIndex>[PIXIT]</cugIndex>
   </cugCallOperation>
</cug>
INVITE 2:
<cug>
   <networkIndicator >[PIXIT]</networkIndicator>
   <cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>
   <cugCommunicationIndicator>10</cugCommunicationIndicator>
</cug>
```

Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	(←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	(←	200 OK ĬNŬITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	(←	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_014	TS 183 054 [1]	-
		clause 4.5.2.4	

Test purpose

No CUG: INVITE with CUG index and outgoingAccessRequest, unsuccessful

In case of subscription "No CUG", ensure that the validation check for the CUG request contained in an INVITE with CUGIndex and outgoingAccessRequest is not successful. The Application Server sends a 403 Forbidden.

Preconditions: No CUG subscription

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

<cugIndex>[PIXIT]</cugIndex>

</cugCallOperation>

</cug>

403 Forbidden:				
Comments:				
UA C		SUT	UA S	
INVITE	→			
403 Forbidden	←			
ACK	→			

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_015	TS 183 054 [1]	PICS 1/1
		clause 4.5.2.4	
Test purpose			
CUG without preference: INVITE wi	ithout CUG index and no outgo	ingAccessRequest, un	successful
In case of subscription "CUG withou	ut preference", ensure that the	alidation check for the	CUG request contained in an
INVITE without CUGIndex and with	out outgoingAccessRequest is	successful. The Applic	cation Server sends a 403
Forbidden.			
Preconditions: CUG without prefer	ence		
SIP header values:			
INVITE:			
<cug></cug>			
<cugcalloperation></cugcalloperation>			
<outgoingaccessrequest>F</outgoingaccessrequest>	ALSE <td>st></td> <td></td>	st>	
403 Forbidden:			
Comments:			
UA C	SUT	UA S	
INVITE	→		
403 Forbidden	←		
ACK	→		

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_016	TS 183 054 [1]	PICS 1/2
		clause 4.5.2.4	
Test purpose			
CUG+OAE without preference: INVITE witho			
In case of subscription "CUG and Outgoing a	ccess, explicit reques	t required without prefe	erence", ensure that the
validation check for the CUG request contain	ed in an INVITE without	ut CUGIndex and with	out outgoingAccessRequest is
successful. The Application Server sends a 4	03 Forbidden.		
Preconditions: CUG+OAE without preference	ce		
SIP header values:			
INVITE:			
<cug></cug>			
<cugcalloperation></cugcalloperation>			
<outgoingaccessrequest> FALSE</outgoingaccessrequest>	outgoingAccessReque	st>	
403 Forbidden:			
Comments:			
UA C	SUT	UA S	
	→		
403 Forbidden	(

ACK

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_017	TS 183 054 [1]	PICS 1/3
		clause 4.5.2.4	

CUG+OAI without preference: INVITE without CUG index and no outgoingAccessRequest, no CUG call In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications without preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and without outgoingAccessRequest is successful. The sent INVITE does not contain the cugInterlockBinaryCode, the networkIndicator and cugCommunicationIndicator.

Preconditions: CUG+OAI without preference

SIP header values:

INVITE 1:

<cug>

<cugCallOperation>

<outgoingAccessRequest> FALSE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE 2:

No <cug> XML attachment

NO Cug/ AIVIL attachment				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_018	TS 183 054 [1]	PICS 1/4
		clause 4.5.2.4	

Test purpose

CUG with preference: INVITE without CUG index and no outgoingAccessRequest, successful
In case of subscription "CUG with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (preferential CUG PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG with preference

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest> FALSE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>11</cugCommunicationIndicator>

</cuq>

Voug>				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_019	TS 183 054 [1]	PICS 1/5
		clause 4.5.2.4	

CUG+OAE with preference: INVITE without CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, explicit request required with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (preferential CUG PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAE with preference

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest> FALSE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE: <cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>11</cugCommunicationIndicator>

Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	+		←	100 Trying	
180 Ringing	+		←	180 Ringing	
200 OK INVITE	+		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	+		←	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_020	TS 183 054 [1]	PICS 1/6
		clause 4.5.2.4	

CUG+OAI with preference: INVITE without CUG index and no outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and without outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "11" (CUG without outgoing access).

Preconditions: CUG+OAI with preference

SIP header values:

INVITE:

<cuq>

<cugCallOperation>

<outgoingAccessRequest> FALSE/outgoingAccessRequest>

</cugCallOperation>

</cug>

INVIŤE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>11</cugCommunicationIndicator>

<cugCommunicationIndicator>10</cugCommunicationIndicator>

</cug>

or

Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_021	TS 183 054 [1]	-
		clause 4.5.2.4	

Test purpose

No CUG: INVITE without CUG index and no outgoingAccessRequest, unsuccessful

In case of subscription "No CUG", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and without outgoingAccessRequest is not successful. The Application Server sends a 403 Forbidden.

Preconditions: No CUG subscription

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest> FALSE</outgoingAccessRequest>

</cugCallOperation>

</cug>

403 Forbidden:				
Comments:				
UA C		SUT	UA S	
INVITE	→			
403 Forbidden	←			
ACK	→			

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_022	TS 183 054 [1]	PICS 1/1
		clause 4.5.2.4	
Test purpose			
CUG without preference: INVITE with			
In case of subscription "CUG without			
INVITE without CUGIndex and outgoi	ingAccessRequest is success	ful. The Application Se	erver sends a 403 Forbidden.
Preconditions: CUG without preferen	nce		
SIP header values:			
INVITE:			
<cug></cug>			
<cugcalloperation></cugcalloperation>			
<outgoingaccessrequest>TR</outgoingaccessrequest>	UE <td>></td> <td></td>	>	
403 Forbidden:			
Comments:			
UA C	SUT	UA S	
INVITE	→		
403 Forbidden	←		
ACK	→		

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_023	TS 183 054 [1]	PICS 1/2
		clause 4.5.2.4	

CUG+OAE without preference: INVITE without CUG index and outgoingAccessRequest, no CUG call In case of subscription "CUG and Outgoing access, explicit request required without preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and outgoingAccessRequest is successful. The Application Server sends a 403 Forbidden.

Preconditions: CUG+OAE without preference

SIP header values: INVITE 1:

<cug>

-cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE 2:

No <cug> XML attachment

NO Cug / AIVIL attachment				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	+		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_024	TS 183 054 [1]	PICS 1/3
		clause 4.5.2.4	

CUG+OAI without preference: INVITE without CUG index and outgoingAccessRequest, no CUG call In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications without preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and outgoingAccessRequest is successful. The sent INVITE does not contain the cugInterlockBinaryCode, the networkIndicator and cugCommunicationIndicator.

Preconditions: CUG+OAI without preference

SIP header values:

INVITE 1:

<cug>

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE 2:

No <cug> XML attachment

NO Youge AME attachment				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_025	TS 183 054 [1]	PICS 1/4
		clause 4.5.2.4	

Test purpose

CUG with preference: INVITE without CUG index and outgoingAccessRequest, unsuccessful

In case of subscription "CUG with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and outgoingAccessRequest is successful. The Application Server sends a 403 Forbidden.

Preconditions: CUG with preference

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

</cugCallOperation>

</cug>

403 Forbidden:

Comments:

UA C SUT UA S

INVITE →
403 Forbidden ←
ACK →

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_026	TS 183 054 [1]	PICS 1/5
		clause 4.5.2.4	

CUG+OAE with preference: INVITE without CUG index and outgoingAccessRequest, no CUG call In case of subscription "CUG and Outgoing access, explicit request required with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and outgoingAccessRequest is successful. The sent INVITE does not contain the cugInterlockBinaryCode, the networkIndicator and cugCommunicationIndicator.

Preconditions: CUG+OAE with preference

SIP header values:

INVITE:

<cuq>

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVITE 2:

No <cug> XML attachment

NO Couge AME attachment				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_027	TS 183 054 [1]	PICS 1/6
		clause 4.5.2.4	

Test purpose

CUG+OAI with preference: INVITE without CUG index and outgoingAccessRequest, successful In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications with preference", ensure that the validation check for the CUG request contained in an INVITE without CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAI with preference

SIP header values:

INVITE:

<cug>

<cugCallOperation>

<outgoingAccessRequest>TRUE</outgoingAccessRequest>

</cugCallOperation>

</cug>

INVIŤE:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>10</cugCommunicationIndicator>

</cug>

70ug>			
Comments:			
UA C	SUT		UA S
INVITE 1 →		→	INVITE 2
100 Trying ←		←	100 Trying
180 Ringing ←		←	180 Ringing
200 OK INVITE ←		←	200 OK INVITE
ACK →		→	ACK
	Communication		
BYE →		→	BYE
200 OK BYE ←		(200 OK BYE

TSS		TP	CUG reference	Selection expression
CUG/originating_AS		CUG_N01_028	TS 183 054 [1]	
			clause 4.5.2.4	
Test purpose				
No CUG: INVITE without CUG inde	ex and outgoing	gAccessRequest,	unsuccessful	
In case of subscription "No CUG", of	ensure that the	validation check	for the CUG request c	ontained in an INVITE without
CUGIndex and outgoingAccessRed	quest is not suc	cessful. The App	lication Server sends	a 403 Forbidden.
Preconditions: No CUG subscript	ion			
SIP header values:				
INVITE:				
<cug></cug>				
<cugcalloperation></cugcalloperation>				
<outgoingaccessrequest></outgoingaccessrequest>	TRUE <td>gAccessRequest</td> <td>></td> <td></td>	gAccessRequest	>	
403 Forbidden:				
Comments:				
UA C		SUT	UA S	
INVITE	→			
403 Forbidden	←			
ACK	→			

TSS	Т	P	CUG reference	Selection expression
CUG/originating_AS	C	CUG_N01_022	TS 183 054 [1]	PICS 1/1
			clause 4.5.2.4	
Test purpose				
CUG without preference: INVITE for Nor	n-CUG con	nmunication, uns	uccessful	
In case of subscription "CUG without pre	,			•
without CUGIndex and outgoingAccessR	Request is:	successful. The /	Application Server ser	nds a 403 Forbidden.
Preconditions: CUG without preference	!			
SIP header values:				
INVITE:				
No <cug> XML attachment</cug>				
403 Forbidden:				
Comments:				
UA C		SUT	UA S	
INVITE	→			
403 Forbidden	←			
ACK	→			

TSS	TP		CUG reference	Selection expression
CUG/originating_AS	CU	IG_N01_023	TS 183 054 [1]	PICS 1/2
			clause 4.5.2.4	
Test purpose				
CUG+OAE without preference: INVITI	E for Non-CUG	communication	on, unsuccessful	
In case of subscription "CUG and Out	going access, e	explicit reques	t required without prefe	erence", ensure that the
validation check for a non CUG reques	st in an INVITE	is successful	. The Application Serve	er sends a 403 Forbidden.
Preconditions: CUG+OAE without pre	eference			
SIP header values:				
INVITE 1:				
No <cug> XML attachment</cug>				
403 Forbidden:				
Comments:	•			
UA C		SUT	UA S	
INVITE	→			
403 Forbidden	←			
ΔCK	_			

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_024	TS 183 054 [1]	PICS 1/3
		clause 4 5 2 4	

CUG+OAI without preference: INVITE for Non-CUG communication, no CUG call

In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications without preference", ensure that the validation check for a non the CUG request in an INVITE is successful. The sent INVITE does not contain the cugInterlockBinaryCode, the networkIndicator and cugCommunicationIndicator.

Preconditions: CUG+OAI without preference

SIP header values:

INVITE 1:

No < cug> XML attachment

INVITE 2:

No <cug> XIVIL attachment</cug>				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	←		←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	←		←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_025	TS 183 054 [1]	PICS 1/4
		clause 4.5.2.4	

Test purpose

CUG with preference: INVITE for Non-CUG communication, successful

In case of subscription "CUG with preference", ensure that the validation check for a non CUG request in an INVITE without CUGIndex and outgoingAccessRequest is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG with preference

SIP header values:

INVITE 1:

No < cug> XML attachment

INVITE 2:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

<cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>

<cugCommunicationIndicator>10</cugCommunicationIndicator>

</cug>

Comments: UA C **SUT UAS INVITE 1 INVITE 2** 100 Trying 100 Trying 180 Ringing 180 Ringing 200 OK ĬNŬITE 200 OK INVITE **→** ACK **ACK** Communication BYE **BYE** 200 OK BYE 200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_026	TS 183 054 [1]	PICS 1/5
		clause 4.5.2.4	

CUG+OAE with preference: INVITE for Non-CUG communication, successful

In case of subscription "CUG and Outgoing access, explicit request required with preference", ensure that the validation check for a non CUG request in an INVITE is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAE with preference

SIP header values:

INVITE:

No < cug> XML attachment

INVITE 2:

<cug>

<networkIndicator >[PIXIT]</networkIndicator>

- <cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>
- <cugCommunicationIndicator>10</cugCommunicationIndicator>

</cua>

4 5 a.g.				
Comments:				
UA C		SUT		UA S
INVITE 1	→		→	INVITE 2
100 Trying	(←	100 Trying
180 Ringing	←		←	180 Ringing
200 OK INVITE	(←	200 OK INVITE
ACK	→		→	ACK
		Communication		
BYE	→		→	BYE
200 OK BYE	←		←	200 OK BYE

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_027	TS 183 054 [1]	PICS 1/6
		clause 4.5.2.4	

Test purpose

CUG+OAI with preference: INVITE for Non-CUG communication, successful

In case of subscription "CUG and Outgoing access, implicit outgoing access for all communications with preference", ensure that the validation check for a non CUG request in an INVITE is successful. The sent INVITE contains the cugInterlockBinaryCode (PIXIT), the networkIndicator (PIXIT) and cugCommunicationIndicator set to "10" (outgoing access allowed).

Preconditions: CUG+OAI with preference

SIP header values:

INVITE:

No <cug> XML attachment

INVITE:

<cug>

- <networkIndicator >[PIXIT]</networkIndicator>
- <cugInterlockBinaryCode>[PIXIT]</cugInterlockBinaryCode>
- <cugCommunicationIndicator>10</cugCommunicationIndicator>

</cua>

Comments:					
UA C		SUT		UA S	
INVITE 1	→		→	INVITE 2	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

TSS	TP	CUG	reference	Selection expression
CUG/originating_AS	CUG_N01_028	TS 18	3 054 [1]	
		claus	e 4.5.2.4	
Test purpose				
No CUG: INVITE for Non-CUG communication	on, unsuccessful			
In case of subscription "No CUG", ensure tha	t the validation check	for a noi	n CUG request in	an INVITE is not
successful. The sent INVITE does not contain	the cugInterlockBina	ryCode,	the networkIndic	ator and
cugCommunicationIndicator.	· ·			
Preconditions: No CUG subscription				
SIP header values:				
INVITE:				
No <cug> XML attachment</cug>				
INVITE 2:				
No <cug> XML attachment</cug>				
Comments:				
UA C	SUT		UA S	
INVITE 1	→	→	INVITE 2	
100 Trying	+	←	100 Trying	
180 Ringing	F	←	180 Ringing	
200 OK INVITE	-	←	200 OK INVITE	
ACK -	→	→	ACK	
	Communication			
BYE -	→	→	BYE	
200 OK BYE	-	+	200 OK BYE	

TSS	TP	CUG reference	Selection expression
CUG/originating_AS	CUG_N01_029	TS 183 054 [1]	_
		clause 4.5.2.4	
Test purpose			
Outgoing communications barring applies, the ca	II is rejected.		
Ensure that a CUG request and outgoing commu	nications barring ap	plies is rejected with a 6	303 Decline final response
Preconditions: CUG without preference			-
SIP header values:			
INVITE:			
<cug></cug>			
<cugcalloperation></cugcalloperation>			
<outgoingaccessrequest>FALSE<td>ingAccessRequest></td><td></td><td></td></outgoingaccessrequest>	ingAccessRequest>		
<cuglndex>[PIXIT]</cuglndex>			
603 Decline:			
Comments:			
UA C	SUT	UA S	
INVITE →			
603 Decline ←			
ACK →			

TSS	TP		CUG reference	Selection expression
CUG/originating_AS	CUG_N	01_030	TS 183 054 [1]	-
			clause 4.5.2.4	
Test purpose				
Outgoing communications barring appl	ies, a non CUG cal	l is deliver	red to the terminating ι	ıser.
Ensure that a CUG request and outgoin	ng communications	barring ap	pplies is delivered toward	ard the terminating user
Preconditions: CUG+OAI without pref	erence			
SIP header values:				
INVITE:				
<cug></cug>				
<cugcalloperation></cugcalloperation>				
<outgoingaccessrequest>TRU</outgoingaccessrequest>	E <td>Request></td> <td>,</td> <td></td>	Request>	,	
<pre><cugindex>[PIXIT]</cugindex></pre>				
603 Decline:				
Comments:				
UA C	SI	JT	UA S	
INVITE	→			
603 Decline	←			
ACK	→			

5.2.3 Actions at the AS of the terminating User

TSS		TP	CUG	reference	Selection expression
CUG/terminating_AS		CUG_N02_001	TS 1	83 054 [1]	
			claus	se 4.5.2.4	
Test purpose					•
Preconditions:					
SIP header values:					
INVITE:					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVIT	E
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

At the AS of the terminating User a validation check of the acceptability of a communication is made according to the rule shown in table 5.2.3 the terminating party (as indicated by a cugInterlockBinaryCode and networkIndicator in the INVITE received) or the originating party belongs to a CUG. The call set-up is continued only in cases where the information received checks with the information stored at the AS of the terminating. Table 5.2.3 indicates the action to be taken.

In cases where a communication is rejected as the result of the validation check because of incompatible CUG information, a 603 response as shown in table 5.2.3 shall be sent.

Table 5.2.3: Handling of a CUG communication at the AS of the terminating User

			Class of terminating user					
CUG cugCommi nIndicator INVITE		CUG match check	No ICB	CUG	No ICB	CUG+IA	No CUG	
CUG with 0	24 not	Match	CUG call	Sent 603	CUG call	Sent 603	Sent 403	
allowed	JA IIUL	Water	COG can	Sent 603	COG Call	Sent 603	Sent 403	
		No match	Sent 403	I	Sent 403	L	1	
CUG with 0 allowed	DA	Match	CUG call	Sent 603	CUG+OA call	Non-CUG call	Non-CUG call	
		No match	Sent 403		Non-CUG call			
Non-CUG		=	Sent 403		Non-CUG ca	all	Non-CUG call	
IA	Incoming	access.						
OA	Outgoing	access.						
ICB	Incoming	communications bar	red.					
Match	The inter	lock code in the recei	ived INVITE n	natches one of	the CUGs to wh	nich the user belon	gs.	
No match		lock code does not m						
NOTE:	As OA at	tribute of the termina	ting user is of	no concern at	the AS of the te	rminating User, Cl	UG+OA class is	
	equivaler	nt to CUG, and CUG+	-IA class is ec	uivalent to CU	G+IA in this tabl	le. Subscription of p	preferential CUG	
	by the te	rminating user is also	of no concern	n in this table.				

In case of each successful CUG Check an INVITE without a CUG xml MIME shall be sent towards the terminating user. Therefore the received CUG xml MIME shall be discarded.

5.3 Interaction with other services

5.3.1 Conference calling (CONF)

TSS		TP	CUG	reference	Selection expression
CUG/interaction/CONF		CUG_N03_001	TS 1	83 054 [1]	-
			claus	se 4.5.2.4	
Test purpose					
Preconditions:					
SIP header values:					
INVITE:					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVITE	
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

When the communication involving the first conferee is added to the conference, then the conference shall assume the CUG of that communication.

In order to add a subsequent communication to the conference, then the CUG of that communication shall be checked against the CUG of the conference.

5.3.2 Communication Diversion Services (CDIV)

5.3.2.1 Communication Forwarding Unconditional (CFU)

TSS		TP	CUG	reference	Selection expression
CUG/interaction/CDIV		CUG_N04_001	TS 1	83 054 [1]	_
				se 4.5.2.4	
Test purpose		•	•		•
Preconditions:					
SIP header values:					
INVITE:					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
100 Trying	←		←	100 Trying	
180 Ringing	←		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVITI	E
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

CUG restrictions shall be checked and met for the communication between the originating party and the forwarding party. The information of a CUG applied by the NGN on the original communication shall be used for the communication forwarding and by this means CUG restrictions shall be checked and met for the communication between the originating party and the forwarded-to party.

In the case of multiple forwarding, CUG restrictions between the originating party and the forwarding party have to be checked and met at each intermediate forwarding point. In addition, CUG restrictions between the originating party and forwarded-to party shall be met end-to-end.

The outgoing communication barring information of the forwarding party shall not be used to determine whether the communication can be forwarded.

The CUG information sent to the "forwarded-to" destination shall be the same CUG information of the originating party that was sent from the originating network.

5.3.2.2 Communication Forwarding Busy (CFB)

See interactions with CFU (TS 183 054 [1] clause 4.6.7.1).

5.3.2.3 Call Forwarding No Reply (CFNR)

See interactions with CFU (TS 183 054 [1] clause 4.6.7.1).

NOTE: CUG restrictions were checked and met for the communication between the originating party and the forwarding party when the communication was offered to the forwarding party.

5.3.2.4 Communication Forwarding on Not Logged-in (CFNL)

See interactions with CFU 4.6.7.1.

5.3.2.5 Communication Forwarding on subscriber Not Reachable (CFNRc)

See interactions with CFU 4.6.7.1.

5.3.2.6 Communication Deflection (CD)

The information of a CUG applied by the NGN on the original communication shall be used for the deflected part of the communication and by this means CUG restrictions shall be checked and met for the communication between the originating party and the deflected-to party.

In the case of multiple deflections, CUG restrictions between the originating party and the deflecting party have to be checked and met at each intermediate deflecting point. In addition, CUG restrictions between the originating party and deflected-to party shall be met end-to-end.

When a communication is deflected, a new check of the CUG restrictions between the originating party and the deflected-to party is made at the "deflected-to" destination. The CUG information sent to the "deflected-to" destination is the same CUG information of the originating party that was sent from the originating network.

The outgoing communication barring information of the deflecting party shall not be used to determine whether the communication can be deflected.

NOTE: CUG restrictions were checked and met for the communication between the originating party and the deflecting party when the communication was offered to the deflecting party.

5.3.3 Explicit Communication Transfer (ECT)

TSS		TP	CUG	reference	Selection expression
CUG/interaction/ECT		CUG_N05_001	TS 1	83 054 [1]	_
				se 4.5.2.4	
Test purpose					•
Preconditions:					
SIP header values:					
INVITE:					
Comments:					
UA C		SUT		UA S	
INVITE	→		→	INVITE	
100 Trying	+		←	100 Trying	
180 Ringing	+		←	180 Ringing	
200 OK INVITE	←		←	200 OK INVIT	Έ
ACK	→		→	ACK	
		Communication			
BYE	→		→	BYE	
200 OK BYE	←		←	200 OK BYE	

The two communications shall use the same CUG for the transfer to be successful.

NOTE: CUG restrictions between users will have been checked when the first communication is established. Similarly, CUG restrictions between users will have been checked when establishing the second communication.

5.4 Test purposes for the ISUP/SIP Interworking

5.4.1 Interworking at the I-MGCF

TP516001	SIP reference: RFC 3261 [4]		ISUP reference: 4.7.1.1 (TS 183 054 [1])
TSS reference:	SIP-ISUP/SS/CUG/	l	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
SIP selection criteria:			
ISUP selection criteria:	PICS 5/7		
Test purpose:	Mapping of <cug> XML element in the re "00" Ensure that the <cugcommunicationind <networkindicator="" a="" body="" call="" forward="" hav="" in="" indicator="" is="" of="" optional="" sent="" the="" xml=""> and <cuginterlockbi< th=""><th>cator> value "00 all indicator - Cl e to be set not e</th><th>D" contained in the INVITE <cug> JG call indicator, if any other value equal "0". No mapping of</cug></th></cuginterlockbi<></cugcommunicationind></cug>	cator> value "00 all indicator - Cl e to be set not e	D" contained in the INVITE <cug> JG call indicator, if any other value equal "0". No mapping of</cug>
SIP Parameter values:	INVITE: <cug> <networkindicator>[PIXIT]</networkindicator>[PIXIT][PIXIT](cugInterlockBinaryCode>[PIXIT](cugCommunicationIndicator>00<th>ugInterlockBina</th><th></th></cug>	ugInterlockBina	
ISUP Parameter values:	IAM: Optional Forward Call Indicator CUG ca When optional forward call indicator hav to "0"		
Comments:	SIP INVITE →	SUT	ISUP → IAM
	180 Ringing ←	linging tone	← ACM
	200 OK INVITE ←	Ringing tone	← ANM
	ACK →	onversation	
	BYE •	0.000.0.7	← REL
	200 OK BYE →		→ RLC

TP516002	SIP reference: RFC 3261 [4]	ISUP reference: 4.7.1.1 (TS 183 054 [1])					
TSS reference:	SIP-ISUP/SS/CUG/						
SIP selection criteria:							
ISUP selection criteria:	PICS 5/7						
Test purpose:	"01" Ensure that the <cugcommunicationindicat <networkindicator="" an="" be="" body="" call="" call.="" forward="" has="" in="" indicator="" is="" mapping="" no="" not="" of="" optional="" sent="" ser="" to="" xml=""> and Group interlock code</cugcommunicationindicat>	tor> value "01" contained in the INVITE <cug> cor> value "01" contained in the INVITE <cug> call indicator - CUG call indicator. If the at, the CUG call indicator is set to "00" no CUG d <cuginterlockbinarycode> into Closed User</cuginterlockbinarycode></cug></cug>					
SIP Parameter values:	INVITE: <cug> <networkindicator>[PIXIT]</networkindicator> <cuginterlockbinarycode>[PIXIT]</cuginterlockbinarycode></cug> 01	InterlockBinaryCode>					
ISUP Parameter values:	IAM: Optional Forward Call Indicator CUG call in	dicator = "00" be sent in case of an other indicator is not set					
Comments:	INVITE 180 Ringing 200 OK INVITE ACK → Ringing	SUT ISUP → IAM ← ACM ging tone ← ANM versation ← REL → RLC					

TP516003	SIP reference: RFC 32	261 [4]		4.7	ISUP reference: 7.1.1 (TS 183 054 [1])
TSS reference:	SIP-ISUP/SS/CUG/				
SIP selection criteria:					
ISUP selection criteria:	PICS 5/7				
Test purpose:	Mapping of <cug> XML element in the received INVITE cugCommunicationIndicator value "10" Ensure that the <cugcommunicationindicator> value "10" contained in the INVITE <cug> XML body is sent in a optional forward call indicator - CUG call indicator = "10". The XML <cug> <networkindicator> is mapped into the IAM Closed User Group interlock code Network identity and the XML <cug> <cuginterlockbinarycode> is mapped into the IAM Closed User Group interlock code IAM Closed User Group interlock code Binary code</cuginterlockbinarycode></cug></networkindicator></cug></cug></cugcommunicationindicator></cug>				
SIP Parameter values:	INVITE: <cug> <networkindicator>[PIXIT]- <cuginterlockbinarycode> <cugcommunicationindica <="" cug=""></cugcommunicationindica></cuginterlockbinarycode></networkindicator></cug>	:/networl [PIXIT] </td <td>kIndicator> /cugInterlock</td> <td>BinaryC</td> <td></td>	kIndicator> /cugInterlock	BinaryC	
ISUP Parameter	IAM:				
values:	Optional Forward Call Indicato	r CUG c	all indicator =	= "10"	
	Closed User Group interlock code Binary code derived from INVITE XML body <cuginterlockbinarycode> Network identity derived from INVITE XML body <networkindicator></networkindicator></cuginterlockbinarycode>				
Comments:	SIP		SUT		ISUP
	INVITE	→		→	IAM
	180 Ringing	←		←	ACM
			Ringing tone)	
	200 OK INVITE	←		←	ANM
	ACK	→			
			Conversation	า	
	BYE	←		←	REL
	200 OK BYE	→		→	RLC

TP516004	SIP reference: RFC 32	61 [4]	4	ISUP reference:		
T00 (4.,	7.1.1 (TS 183 054 [1])		
TSS reference:	SIP-ISUP/SS/CUG/					
SIP selection						
criteria:	12100 7/2					
ISUP selection	PICS 5/7					
criteria:	14					
Test purpose:	Mapping of <cug> XML element in the received INVITE cugCommunicationIndicator value "11"</cug>					
	Ensure that the <cugcommunic< td=""><td></td><td></td><td></td></cugcommunic<>					
	XML body is sent in a optional					
	<pre><cug> <networkindicator> is it</networkindicator></cug></pre>					
	Network identity and the XML			ryCode> is mapped into the		
	IAM Closed User Group interlo	ck code Bina	ry code.			
SIP Parameter	INVITE:					
values:	<cug></cug>					
	<networkindicator>[PIXIT]<</networkindicator>					
	<pre><cuginterlockbinarycode>[</cuginterlockbinarycode></pre>					
	<pre><cugcommunicationindicat< pre=""></cugcommunicationindicat<></pre>	or>11 <td>ommunicationi</td> <td>ndicator></td>	ommunicationi	ndicator>		
ICUD Dovernotor						
ISUP Parameter	IAM:	. CLIC!! :	J: "44"			
values:	Optional Forward Call Indicator		ilcator = 11			
	Closed User Group interlock code Binary code derived from INVITE XML body <cuginterlockbinarycode></cuginterlockbinarycode>					
	Network identity derived fr					
Comments:	SIP		SUT	ISUP		
	INVITE	→		IAM		
	180 Ringing	´		ACM		
	100 Kinging	-	ing tone	AOW		
	200 OK INVITE	←		ANM		
	ACK	←	~	AINIVI		
	ACK	=	araction			
	DVE		ersation	DEL		
	BYE	(É	REL		
	200 OK BYE	→	→	RLC		

TP516005	SIP reference: RFC 3261 [4]		ISUP reference: 4.7.1.1 (TS 183 054 [1])			
TSS reference:	SIP-ISUP/SS/CUG/	<u> </u>	4.7.11.1 (10 100 004 [1])			
SIP selection						
criteria:						
ISUP selection	NOT PICS 5/7					
criteria:						
Test purpose:	Mapping of <cug> XML element in the received INVITE cugCommunicationIndicator value "10". The PSTIVISDN network does not support CUG. Ensure that the <cugcommunicationindicator> value "10" contained in the INVITE <cug> XML body is not sent in a optional forward call indicator - CUG call indicator = "10" when the PSTIVISDN does not support CUG. If the optional forward call indicator has to be sent, the CUG call indicator is set to "00" no CUG call. No mapping of <networkindicator> and <cuginterlockbinarycode> into Closed User Group interlock code</cuginterlockbinarycode></networkindicator></cug></cugcommunicationindicator></cug>					
SIP Parameter	INVITE:	•				
values:	<cug> <networkindicator>[PIXIT]</networkindicator> <cuginterlockbinarycode>[PIXIT]</cuginterlockbinarycode> <cugcommunicationindicator>10</cugcommunicationindicator> </cug>					
ISUP Parameter	IAM:					
values:	Optional Forward Call Indicator CUG call indicator = "00" When optional forward call indicator have to be sent in case of an other indicator is not set to "0"					
Comments:	SIP	SUT	ISUP			
	INVITE →	-	→ IAM			
	180 Ringing ←	•	E ACM			
		Ringing tone				
	200 OK INVITE	•	E ANM			
	ACK →					
	·	Conversation				
	BYE		F REL			
	200 OK BYE →		→ RLC			

TP516006	SIP reference: RFC 3261 [4]		ISUP reference: 4.7.1.1 (TS 183 054 [1])			
TSS reference:	SIP-ISUP/SS/CUG/					
SIP selection criteria:						
ISUP selection criteria:	NOT PICS 5/7					
Test purpose: SIP Parameter values:	"11". The PSTN/ISDN network does r Ensure that the <cugcommunication< th=""><th>not support C ndicator> va d call indicated into the IA > <cuginterl< th=""><th>lue "11" contained in the INVITE <cug> or - CUG call indicator ="11". The XML M Closed User Group interlock code ockBinaryCode> is mapped into the</cug></th></cuginterl<></th></cugcommunication<>	not support C ndicator> va d call indicated into the IA > <cuginterl< th=""><th>lue "11" contained in the INVITE <cug> or - CUG call indicator ="11". The XML M Closed User Group interlock code ockBinaryCode> is mapped into the</cug></th></cuginterl<>	lue "11" contained in the INVITE <cug> or - CUG call indicator ="11". The XML M Closed User Group interlock code ockBinaryCode> is mapped into the</cug>			
ISUP Parameter	<pre><networkindicator>[PIXIT]</networkindicator> <cuginterlockbinarycode>[PIXIT]</cuginterlockbinarycode> <cugcommunicationindicator>11</cugcommunicationindicator> </pre>					
values:						
Comments:	SIP INVITE 403 Forbidden ACK ACK →	SUT	ISUP			
Comments:	INVITE →	SUT	ISUP			

5.4.2 Interworking at the O-MGCF

TP608001	SIP refere	ence: RFC 3261 [4]		ISUP reference: I.7.1.2 (TS 183 054 [1])
TSS reference:	ISUP-SIP/SS/CU	G/	1	i./.1.2 (13 163 034 [1])
SIP selection criteria:	NOT PICS 5/7	<u> </u>		
ISUP selection criteria:				
Test purpose:	normal call. Ensure that the Sindicator coded a indicator coded a	UT if an IAM is received wit s "CUG call with outgoing	h Optional fo	orward call indicator, CUG call d CUG interlock code or CUG call li indicator is absent, the SIP
SIP Parameter values:	No mapping	·		
ISUP Parameter values:				
Comments:	ISUP/BICC IAM ACM	SUT → ← Ringing tone	→	SIP INVITE 180 Ringing
	ANM	€	← →	200 OK INVITE ACK
	REL RLC	Conve → ←	ersation	BYE 200 OK BYE

TP608002	SIP reference	e: RFC 3261	[4]	ISUP reference:
TCC vofeveres	IOUD OID/OO/OUO/			TS 129 163 [6], clause 7.4.16
TSS reference:	ISUP-SIP/SS/CUG/			
SIP selection	NOT PICS 5/7			
criteria:				
ISUP selection				
criteria:				
Test purpose:	SIP network does not	support CUG	; CUG with c	outgoing access not allowed is rejected.
		UG call with	out outgoing	Optional forward call indicator, CUG call gaccess" and CUG interlock code, a REL
SIP Parameter	No action			
values:				
ISUP Parameter	REL: Cause #29			
values:				
Comments:	ISUP/BICC		SUT	SIP
	IAM	→		
	REL	←		
	RLC	→		

TP608003	SIP refere	nce: RFC 3261 [4]	4	ISUP reference: .7.1.2 (TS 183 054 [1])
TSS reference:	ISUP-SIP/SS/CUC	G /		
SIP selection	PICS 5/7			
criteria:				
ISUP selection				
criteria:				
Test purpose:		orts CUG. CUG call indicato		
				JG call indicator is mapped into
				roup interlock code Parameter
		is mapped into <cug> <netv< th=""><th></th><th>r> and the Binary code is</th></netv<></cug>		r> and the Binary code is
		cug> <cuginterlockbinaryco< th=""><th>ode></th><th></th></cuginterlockbinaryco<>	ode>	
SIP Parameter	INVITE:			
values:	<cug></cug>			
		ator>[derived from IAM Netv		
				ode]
	_	icationIndicator>10 <th>nmunication</th> <th>indicator></th>	nmunication	indicator>
ISUP Parameter				
values:		Call Indicator CLIC call india	otor "10"	
values:	•	Call Indicator CUG call indic	ator = 10	
	Closed User Grou	p interiock code lerived from INVITE XML bo	dy zoualnt	orlook Pinory Codo
		tity derived from INVITE XM		
Comments:	ISUP/BICC	SUT	iL body <iic< th=""><th>SIP</th></iic<>	SIP
Commonto.	IAM	→	→	INVITE
	ACM	´	É	180 Ringing
	AOW	Ringing tone	•	100 Kinging
	ANM	tringing tone	←	200 OK INVITE
	AINIVI		→	ACK
		Canua	rsation	AON
	DEL			DVE
	REL)	→	BYE
	RLC	+	+	200 OK BYE

TP608004	SIP referer	nce: RFC 3261 [4]	4	ISUP reference: I.7.1.2 (TS 183 054 [1])	
TSS reference:	ISUP-SIP/SS/CUG	/			
SIP selection criteria:	PICS 5/7				
ISUP selection					
criteria: Test purpose:	SID notwork suppo	orts CUG. CUG call indicate	r valua "11"	received	
rest purpose.	Ensure that Option <cug> < cugComm Network identity is</cug>	al Forward Call Indicator Pa	arameter Cl osed user g vorkIndicato	JG call indicator is mapped into roup interlock code Parameter	
SIP Parameter	INVITE: <cug></cug>				
values:	<cuginterlockb< th=""><th>tor>[derived from IAM Netv inaryCode>[derived from IA cationIndicator>11<th>M Binary c</th><th>ode]</th></th></cuginterlockb<>	tor>[derived from IAM Netv inaryCode>[derived from IA cationIndicator>11 <th>M Binary c</th> <th>ode]</th>	M Binary c	ode]	
ISUP Parameter	IAM:				
values:	Optional Forward C	Call Indicator CUG call indic o interlock code	ator = "11"		
	Binary code derived from INVITE XML body <cuginterlockbinarycode> Network identity derived from INVITE XML body <networkindicator></networkindicator></cuginterlockbinarycode>				
Comments:	ISUP/BICC	SUT		SIP	
	IAM	→	→	INVITE	
	ACM	←	←	180 Ringing	
		Ringing tone			
	ANM	`← `	←	200 OK INVITE	
			→	ACK	
		Conve	rsation		
	REL	→	→	BYE	
	RLC	+	←	200 OK BYE	

History

Document history		
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