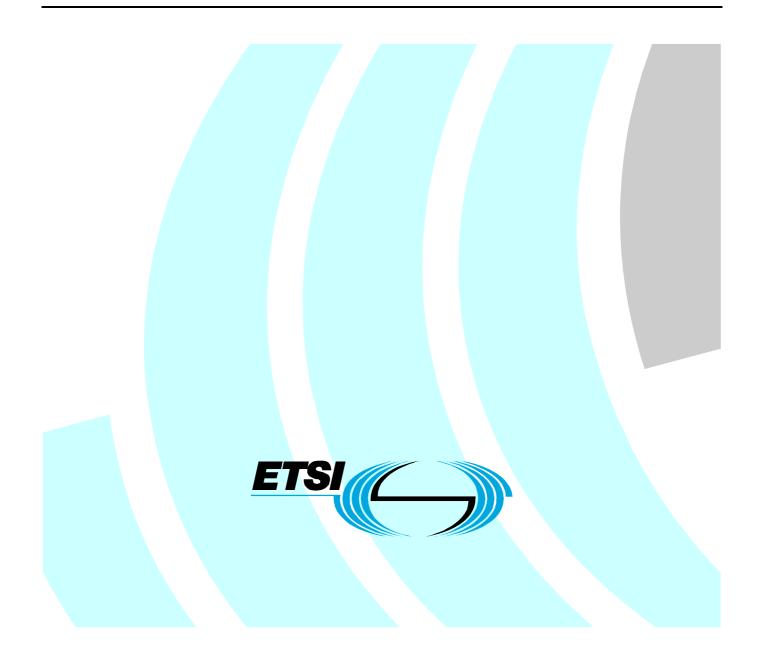
# ETSI TS 186 010-2 V3.1.1 (2011-07)

**Technical Specification** 

Technical Committee for IMS Network Testing (INT); Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Testing; Part 2: Test Suite Structure and Test Purposes (TSS&TP)



Reference

RTS/INT-00027-2

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## Foreword

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

The present document is part 2 of a multi-part deliverable covering Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Testing as identified below:

- Part 1: "Protocol Implementation Conformance Statement (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 for the user".

## 1 Scope

The present document specifies the Test Suite Structure and Test Purposes of the Conference (CONF) service, based on stage 1 and stage 2 of the ISDN conference supplementary services. It provides the protocol details in the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and the 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 specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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#### 2.1 Normative references

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

[1]	ETSI TS 124 605 (V8.3.0): "Digital cellular telecommunications system (Phase 2+);Universal Mobile Telecommunications System (UMTS); Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.605 version 8.3.0 Release 8)".
[2]	ETSI TS 186 010-1: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services; Conference (CONF); Part 1: Protocol implementation Conformance Statement (PICS)".
[3]	ETSI TS 124 147 (V8.3.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3 (3GPP TS 24.147 version 8.3.0 Release 8)".
[4]	ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

#### 2.2 Informative references

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

Not applicable.

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] and the following apply:

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [4].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [4].

PICS proforma: Refer to ISO/IEC 9646-1 [4].

point of control and observation: Refer to ISO/IEC 9646-1 [4].

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1 [4].

System Under Test (SUT): Refer to ISO/IEC 9646-1 [4].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [4].

#### 3.2 Abbreviations

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

TSS Test Suite Structure

## 4 Test Suite Structure (TSS) and configuration

ConferenceFocus		
	CreateConf	CONF_N01_xxx
	JoinConf	CONF_N02_xxx
	InviteToConf	CONF_N03_xxx
	LeaveConf	CONF_N04_xxx
	RemoveFromConf	CONF_N05_xxx
	TerminateConf	CONF_N06_xxx
UserEquipment		
		CONF_U01_xxx
Interaction		
	TIR	CONF_N08_xxx
	OIR	CONF_N09_xxx
	ACR-CB	CONF_N10_xxx

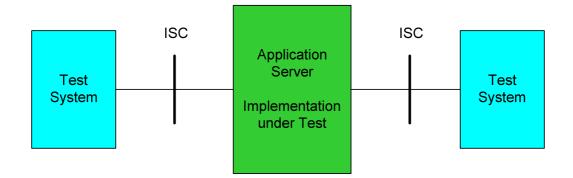
#### Table 1: Test suite structure

## 4.1 Configuration

The scope of the present document is to test the signalling and procedural aspects of the stage 3 requirements as described in [1]. The stage 3 description respects the requirements to several network entities and also to requirements regarding to end devices. Therefore several interfaces (reference points) are addressed to satisfy the test of the different entities.

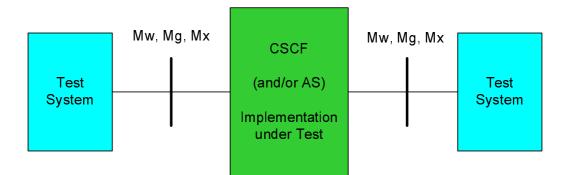
Therefore to test the appropriate entities the configurations below are applicable:

**Testing of the Application Server.** This entity is responsible to perform the service. Hence the ISC interface is the appropriate access point. Figure 1 points to this.





If the ISC interface is not accessible it is also applicable to perform the test of the AS using any NNI (Mw, Mg, Mx) interface (consider figure 2). In case only the Gm interface is accessible this shall be used instead. In this case, be aware that the verification of several requirements is impeded.



#### Figure 2: Applicable interfaces to test using the (generic) NNI interface

Figure 2 illustrates the usage of any NNI interface.

## 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 2).

				-
Identifier: <s< th=""><th>SS&gt;_&lt;</th><th><iut><group>_<nnn></nnn></group></iut></th><th></th><th></th></s<>	SS>_<	<iut><group>_<nnn></nnn></group></iut>		
<\$\$>	=	supplementary service:	e.g. "CONF"	1
<iut></iut>	=	type of IUT:	U N УУУ	User Network service
<group></group>	=	group	2 digit field r	epresenting group reference according to TSS
<nnn></nnn>	=	sequential number	(001-999)	

Table 2: TP identifier naming convention scheme

#### 5.1.2 Test strategy

As the base standard TS 124 605 [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 186 010-1 [2].

## 5.2 Signalling requirements

## 5.2.1 Conference Focus

#### 5.2.1.1 Conference creation

TSS	ТР	Reference	Selection expression						
ConferenceFocus/CreateConf	CONF_N01_001	5.3.2.3.1, 5.3.3 [3]							
Test purpose									
Conference creation with a conference factor	ry URI. Conference	event package subscrib	bed.						
parameter indicated in Contact header is recei	Ensure that a conference can be created by a UE using the conference factory URI. The "isfocus" feature parameter indicated in Contact header is received in the 200 OK (INVITE). In addition the conference participant subscribes to the conference event package and receives a NOTIFY request describing the conference status.								
SIP header values:		- I							
200 OK: conference URI and "isfocus" feature	INVITE: Request URI indicating the conference factory URI 200 OK: conference URI and "isfocus" feature parameter included in Contact header field SUBSCRIBE: Request URI indicating the conference URI								
NOTIFY: Event contains conference; Subscr	iption-State contain	s active; expires=xxxx	κ.						
Comments:									
ISC#1	Foc	us							
INVITE	<b>→</b>								
200 OK (INVITE) ACK	<b>←</b> →								
SUBSCRIBE									
200 OK (SUBSCRIBE)	<b>+</b>								
NOTIFY	+								
200 OK NOTIFY	<b>→</b>								
Α	opply post test rou	tine							

TSS		ТР	Reference	Selection expression
ConferenceFocus	s/CreateConf	CONF_N01_002	5.3.2.3.1 [3]	
Test purpose				
Conference creat	tion with a <b>conference</b>	factory URI. Conference	e event package not	t subscribed.
Ensure that a cor	nference can be created	by a UE using the cont	ference factory URI.	The "isfocus" feature
parameter indicat	ted in Contact header is	received in the 200 OK	(INVITE). The confe	erence participant does not
	conference event packa		. ,	
SIP header value	es:			
INVITE:	Request URI indicating	the conference factory	URI	
200 OK:	conference URI and "i	sfocus" feature parame	ter included in Conta	act header field
Comments:				
ISC#1		Fo	cus	
INVITE		<b>→</b>		
200 OK (INVITE)		+		
ACK		→		
		Apply post test ro	outine	

TSS	TP	Reference	Selection expression
ConferenceFocus/CreateConf	CONF_N01_003	3 5.3.2.3.2, 5.3.3 [3]	_
Test purpose			
Conference creation with a <b>conferen</b>	nce URI. Conference event	package subscribed.	
Ensure that a conference can be created			
indicated in Contact header is receive			
to the conference event package and	d receives a NOTIFY reque	st describing the confer	ence status.
SIP header values:			
INVITE: Request URI indicating the	e conference URI		
200 OK: "isfocus" feature paramete			
	I in the Contact header field	k	
SUBSCRIBE: Request URI indicating			
Event header contains			
NOTIFY: Event contains conference	e; Subscription-State conta	ains <b>active; expires=xx</b>	XX
Comments:			
ISC#1	-	ocus	
INVITE	<b>→</b>		
200 OK (INVITE)	<del>(</del>		
ACK	<b>→</b>		
SUBSCRIBE	<b>→</b>		
200 OK (SUBSCRIBE)	+		
NOTIFY	+		
200 OK NOTIFY	<b>→</b>		
	Apply post test r	outine	

тѕѕ	TP	Reference	Selection expression
ConferenceFocus/CreateConf	CONF_N01_004	5.3.2.3.2 [3]	•
Test purpose Conference creation with a <b>confer</b>	ence URI. Conference event p	ackage not subscri	bed.
Ensure that a conference can be c indicated in Contact header is rece the conference event package.			
SIP header values:			
INVITE: Request URI indicating			
200 OK: "isfocus" feature parame conference URI containe	eter indicated in Contact heade ed in the Contact header field	r field	
Comments:			
ISC#1	Foc	us	
INVITE	<b>→</b>		
200 OK (INVITE)	←		
ACK	→ →		
	Apply post test rou	Itine	

TSS		TP	Reference	Selection expression
	Focus/CreateConf	CONF_N01_005	5.3.2.3.1 [3]	
est purpo				
	creation with a conference f	actory URI. Precondition	is indicated a confer	ence URI is sent in the first
provisional	response.			
Encure that	a conforcina con ha creator	hy a LIE using the conf	oronoo footony LIPI	Broconditions are requested
	a conference can be created			Preconditions are requested
INVITE).	lating OE. The Islocus leat			
SIP header	values:			
NVITE:	Request URI indicating the	e conference factory UR	I	
SDP		, <b>,</b> .		
	a=curr:qos remote none			
	a=des:gos mandatory loca	al sendrecv		
	a=des: qos none remote se			
400				
183 c SDP	onference URI contained in t	ne Contact header field		
3DF	•			
	a=curr:qos remote none a=des:qos mandatory loca	al condrocy		
	a=des:qos mandatory rem			
	a=conf:gos remote sendre			
UPDATE:				
SDP	a=curr:qos local sendrecv			
	a=curr:qos remote none			
	a=des:qos mandatory loca			
	a=des:qos mandatory rem	ote sendrecv		
200 OK UPI	DATE			
SDP	a=curr:gos local sendrecv			
ODI	a=curr:gos remote sendre	CV		
	a=des:qos mandatory loca			
	a=des:qos mandatory rem			
200 OK:	"isfocus" feature paramete conference URI contained			
Comments				
SC#1			cus	
NVITE	_	<b>→</b>		
183 Sessior	n Progress	÷		
		<b>→</b>		
200 OK PR	ACK	<del>(</del>		
		→ 		
		<del>(</del>		
200 OK (IN)	VIIE)	← →		
ACK		Apply post test ro	utino	

TSS	TP	Reference	Selection expression				
ConferenceFocus/CreateConf	CONF_N01_006	5.3.2.3.1 [3]					
Test purpose							
Conference creation with a conference factor	y URI not allocated i	n the focus, unsuc	cessful.				
Ensure that a conference cannot be created by a UE using a conference factory URI not allocated in the focus. The request is rejected by the focus with a <b>488 Not Acceptable Here</b> final response.							
SIP header values:	•						
INVITE: Request URI indicating a confe	rence factory URI no	ot allocated in the f	ocus				
Comments:							
ISC#1	Foc	us					
NVITE							
488 Not Acceptable Here							
ACK	→						

## 5.2.1.2 Joining a conference

TSS	TP	Reference	e	Selection expression
ConferenceFocus/JoinConf	CONF_N02_001	5.3.2.4.1	[3]	
Test purpose				
Participant dial-in the conference, the cor	nference URI is used.			
UE1 (via ISC#1) established a conference				
to the conferencing AS (the conference U	RI is known at the UE2)	. The reque	est is succes	sful.
SIP header values:				
INVITE 2: Request URI indicating the con				
18x "isfocus" feature parameter incl				
200 OK: "isfocus" feature parameter incl		field		
conference URI contained in th	e Contact header field			
Comments:	_			
ISC#1	Focus		ISC#2	
	Conference creat	ion		
200 OK (INVITE)	200 OK (INVITE)			
ACK →	ACK			
1	JE#2 joining in the cor	oforonco		
· · · · · · · · · · · · · · · · · · ·			INVITE 2	
		18x →	==	
	200 OK INI		200 OK IN	VITE
		ACK 🗲		
	Apply post test rou			

TSS	TP	Reference		Selection expression
ConferenceFocus/JoinConf	CONF_N02_002	5.3.2.4.1 [3	5]	
Test purpose				
Participant dial-in the conference, the conf	ference URI is not allo	cated, the rec	quest is rej	ected.
UE2 (via ISC#2) tries to join in a conferenc focus. The request is rejected with the final		JRI in the IN\	/ITE reque	est is not allocated at the
SIP header values:				
INVITE: Request URI contained the conf	erence URI not alloca	ed in the focu	us (PIXIT)	
Comments:				
ISC#1	Focus		ISC	#2
U	E#2 joining in the co	nference		
		INVITE	← INV	ITE 2
		4xx	→ 4xx	
		ACK	← ACł	K

## 5.2.1.3 Inviting other users to a conference

TSS	TP	Reference	Selection expression
ConferenceFocus/InviteToConf	CONF_N03_001	5.3.2.5.2, 5.3.2.5.4 [3]	
Test purpose			
Inviting participant by sending REFER to t	he focus.		
UE1 (via ISC#1) established a conference	and invites LIE2 (conn	ected via ISC#2) to ioin	into the conference LIE1
sends a REFER to the focus; the focus se			
SIP header values:			
REFER: Request URI indicating the con	ference URI		
Refer-To contains the URI of UI	E2, method=INVITE		
Referred-By contains SIP URI of	of UE1		
INVITE 2: Request URI indicating the add			
The P-Asserted-Identity contain			
conference URI and "isfocus" fe		ted in Contact header fie	eld
Referred-By contains SIP or tel			
NOTIFY 1 Event contains refer; Subscripti		/e	
message/sipfrag contains SIP/2			
NOTIFY 2 Event contains refer; Subscripti		inated	
message/sipfrag contains SIP/2	.0 200 OK		
Comments:	_	100 //0	
ISC#1	Focus	ISC#2	
	Conference creat	ion	
200 OK (INVITE) ← ACK →	200 OK (INVITE) ACK		
	1 invites UE#2 to the	aanfaranaa	
REFER →	REFER	comerence	
202 Accepted	202 Accepted		
	202 Accepted		
F	ocus dials out to invi	te UE#2	
		TE 2 🗲 INVITE	
NOTIFY +	NOTIFY 1		
200 OK NOTIFY →	200 OK NOTIFY		
	180 Rin		g
	200 OK IN	VITE 🗲 200 OK IN'	VITE
		АСК 🗲 АСК	
NOTIFY +	NOTIFY 2		
200 OK NOTIFY -	200 OK NOTIFY		
	Apply post test rou	Itine	

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TSS	ТР	Reference	Selection expression
ConferenceFocus/InviteToConf	CONF_N03_002	5.3.2.5.3, 5.3.2.5.4 [3	6]
<b>Test purpose</b> Inviting participant by sending a participant	list to the focus.		
UE1 (via ISC#1) established a conference. The AS establishes a communication to the			
SIP header values:			
INVITE 1: Request URI=Focus <resource-lists< td=""><td></td><td></td><td></td></resource-lists<>			
<entry to"="" uri="sip:UE#2 cp:copy&lt;/td&gt;&lt;td&gt;control="></entry>			
INVITE 2: Request URI = UE#2 The P-Asserted-Identity contains conference URI and "isfocus" fea		ted in Contact header	field
Comments:			
ISC#1	Focus	ISC#2	
	Conference creat	ion	
INVITE 1 →	INVITE		
200 OK (INVITE)	200 OK (INVITE)		
ACK →	ACK		
Fo	ocus dials out to inv		
	INVI	TE 2 → INVITE	
	200 OK IN	VITE 🗲 200 OK	INVITE
		ACK 🗲 ACK	
	Apply post test ro	utine	
TSS	TP	Reference	Selection expression
ConferenceFocus	CONF_N03_003	5.3.1.5.4 [3]	
Test purpose		• • • •	·
Inviting participant by sending a participant UE1 (via ISC#1) established a conference.			to create the conference
The AS establishes a communication to the			to create the conference.
SIP header values:		participart list.	
INVITE 1: Request URI=Focus			
<resource-lists< td=""><td></td><td></td><td></td></resource-lists<>			
<entry s1="" td="" uf<="" uri="&lt;entry uri="><td>RI?Call-ID=S1&amp;From=</td><td>S1%3Btag%3DS1&amp;1</td><td>0=51%3Btag%3D51*</td></entry>	RI?Call-ID=S1&From=	S1%3Btag%3DS1&1	0=51%3Btag%3D51*
cp:copyControl="to"/>			
INVITE 2: Request URI = ISC#2			
The P-Asserted-Identity contains			
"isfocus" feature parameter indic		er field	
conference URI contained in the	Contact header field		
Comments:	_		
ISC#1	Focus	ISC#2	
INVITE (S1)			
180 Ringing			
200 OK INVITE			
ACK			
INVITE 1 (S1, sendonly) →			
200 OK (INVITE)		→ INVITE	
		← 200 OK	(INVITE (recvonly))
ACK →		<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	(INVITE (recvonly))
	Conference creat	<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	(INVITE (recvonly))
INVITE 1 (S2) →	INVITE	<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	(INVITE (recvonly))
		<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	(INVITE (recvonly))
INVITE 1 (S2) →	INVITE	<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	(INVITE (recvonly))
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK	<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>	
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK	← 200 OK → ACK	
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK	← 200 OK → ACK ion cus dials out to inv TE 2 → INVITE	ite ISC#2
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK F INVI	← 200 OK → ACK ion cus dials out to inv TE 2 → INVITE aging ← 180 Ring	ite ISC#2
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK F INVI 180 Rir	← 200 OK → ACK ion cus dials out to inv TE 2 → INVITE aging ← 180 Ring	ite ISC#2
INVITE 1 (S2) → 200 OK (INVITE) ←	INVITE 200 OK (INVITE) ACK F INVI 180 Rir	← 200 OK → ACK ion bcus dials out to inv TE 2 → INVITE bging ← 180 Ring VITE ← 200 OK ACK → ACK	ite ISC#2

TSS	TP	Reference	Selection expression
ConferenceFocus/InviteToConf	CONF_N03_004	5.3.1.3.3, 5.3.1.5.2 [3	
Test purpose			
Three-way session creation. REI	FER is sent to the partic	ipants.	
Ensure that it is possible that two joined in a three way session by UE1. The remote users receive a directly from UE1. The remote us	UE1 and that the existin a REFER request with the	g sessions S1 and S2 can le Refer-To header contair	be released by the served user hing the address of the Focus
request.			
SIP header values: REFER (S1): Request line=UE# Refer-To=Focus; r Referred-By=UE# REFER (S2): Request line=UE# Refer-To=Focus; r Beferred But UE#	nethod=INVITE 1 3 nethod=INVITE		
Referred-By=UE# INVITE (S4): Request URI=Foc Referred-By=UE#	us		
INVITE (S5): Request URI=Foc Referred-By=UE#	us		
Comments: ISC#1	Focus	ISC#2	ISC#3
INVITE (S3) → 200 OK (INVITE) ← ACK →	Session Establish Session	session #1 #1 on hold session #2 #2 on hold ation (session #3)	
REFER (S1) → 202 Accepted ←		<ul> <li>REFER</li> <li>202 Accepted</li> </ul>	
NOTIFY (100)		<ul> <li>← NOTIFY (100)</li> <li>→ 200 OK (NOTIFY)</li> </ul>	
NOTIFY (200)	ACK	→ 200 OK (INVITE)	
BYE (S1) → 200 OK (BYE) ←		<ul> <li>→ BYE (S1)</li> <li>← 200 OK (BYE)</li> </ul>	
REFER (S2) → 202 Accepted ←			<ul> <li>→ REFER</li> <li>← 202 Accepted</li> </ul>
NOTIFY (100)			<ul> <li>← NOTIFY (100)</li> <li>→ 200 OK (NOTIFY)</li> </ul>
NOTIFY (200)	INVITE 200 OK (INVITE) ACK	→	<ul> <li>← INVITE (S5)</li> <li>→ 200 OK (INVITE)</li> <li>← ACK</li> <li>← NOTIFY (200)</li> <li>→ 200 OK (NOTIFY)</li> </ul>
BYE (S1) → 200 OK (BYE) ←	Apply post	test routine	<ul> <li>→ BYE (S2)</li> <li>← 200 OK (BYE)</li> </ul>

TSS	ТР	Reference	Selection expression
ConferenceFocus/InviteToConf	CONF_N03_005	5.3.1.3.3, 5.3.1.5.3, 5.3.2.5.2 [3]	
Test purpose			
Three-way session creation. REF	ER is sent to the Focus.		
Ensure that it is possible that two joined in a three way session by UUE1. UE1 sends two REFER req	JE1 and that the existing s	essions S1 and S2 can be r	eleased by the served user
containing the Referred-By head		cus which then sends in vit	E requests to DE2 and DE3
SIP header values:			
REFER (S1): Request line=Focu Refer-To=UE#2; m	ethod=INVITE		
Referred-By=UE#1			
REFER (S1): Request line=Focu Refer-To=UE#3; m Referred-By=UE#1	ethod=INVITE		
INVITE (S4): Request URI=UE# Referred-By=UE#1	2		
INVITE (S5): Request URI=UE# Referred-By=UE#1			
Comments: ISC#1	Focus	ISC#2	ISC#3
INVITE (S3) → 200 OK (INVITE) ← ACK →	Establish se Session #1 Establish se Session #2 Conference creation INVITE 200 OK (INVITE) ACK	on hold ssion #2 on hold	
REFER (S1)	REFER		
202 Accepted	202 Accepted		
NOTIFY (100)	NOTIFY (100) 200 OK (NOTIFY)		
	INVITE (S4) → 200 OK (INVITE) ← ACK →	INVITE 200 OK (INVITE) ACK	
NOTIFY (200) ← 200 OK (NOTIFY) →	NOTIFY (200) 200 OK (NOTIFY)		
BYE (S1) → 200 OK (BYE) ←	→ ←	BYE (S1) 200 OK (BYE)	
REFER (S2) → 202 Accepted ←	REFER 202 Accepted		
NOTIFY (100)	NOTIFY (100) 200 OK (NOTIFY)		
	INVITE (S5) → 200 OK (INVITE) ← ACK →		<ul> <li>→ INVITE</li> <li>← 200 OK (INVITE)</li> <li>→ ACK</li> </ul>
NOTIFY (200)	NOTIFY (200) 200 OK (NOTIFY)		
BYE (S1) → 200 OK (BYE) ←	Apply post te		<ul> <li>→ BYE (S2)</li> <li>← 200 OK (BYE)</li> </ul>

TSS		TP		Reference		Selection expression
ConferenceFocus/InviteT	oConf	CONF_N03_006		5.3.1.3.3, 5.3.1.5.3, 5.3.2.5.2 [3]		
Test purpose	ion DEE	ED is cant to the Ecou	a Bonlo	ooo hoodor included ii	n th	
Three-way session creat						
Ensure that it is possible joined in a three way ses users UE2 and UE3. UE1	sion by L	JE1 and that the existing	ng sessio	ons S1 and S2 can be	rele	eased by the remote
then sends INVITE reque						
Replaces header indicati	ng the or	iginal dialog sessions.	-	-		
SIP header values:	_					
REFER (S1): Request lir Refer-To=l Referred-B	JE#2; me	s ethod=INVITE?Replac	es=S1;to	o-tag=S1;from-tag=S1		
REFER (S1): Request lir		3				
		ethod=INVITE?Replac	es=S2;to	o-tag=S2;from-tag=S2		
Referred-B INVITE (S4): Request U		)				
Referred-B		-				
		j=S1;from-tag=S1				
INVITE (S5): Request U	RI=UE#3					
Referred-B		Cliffrom tor 00				
Replaces=	S2;to-tag	=S2;from-tag=S2				
ISC#1		Focus		ISC#2		ISC#3
		Establish Session Establish Session Conference cre	h #1 on h h sessio h #2 on h	old n #2 old		
INVITE (S3) 200 OK (INVITE) ACK	→ ← →	INVITE 200 OK (INVITE) ACK				
REFER (S1) 202 Accepted	→ ←	REFER 202 Accepted				
NOTIFY (100) 200 OK (NOTIFY)	← →	NOTIFY (100) 200 OK (NOTIFY)				
		INVITE (S4) 200 OK (INVITE) ACK	←	INVITE 200 OK (INVITE) ACK		
NOTIFY (200) 200 OK (NOTIFY)	<b>←</b> →	NOTIFY (200) 200 OK (NOTIFY)				
BYE (S1) 200 OK (BYE)	<b>←</b> →		← →	BYE (S1) 200 OK (BYE)		
REFER (S2) 202 Accepted	→ ←	REFER 202 Accepted				
NOTIFY (100) 200 OK (NOTIFY)	← →	NOTIFY (100) 200 OK (NOTIFY)				
		INVITE (S5) 200 OK (INVITE) ACK	←		→ <del>(</del>	INVITE 200 OK (INVITE) ACK
NOTIFY (200) 200 OK (NOTIFY)	← →	NOTIFY (200) 200 OK (NOTIFY)	-		7	
BYE (S1) 200 OK (BYE)	← →	Analyses		utino	← ≯	BYE (S2) 200 OK (BYE)
		Apply pos	or rest to	uune		

TSS	TP	Reference	Selection expression
ConferenceFocus/InviteToConf	CONF_N03_007	4.5.2.2.1 [1]	
Test purpose			
Referred-By value does not contain	a valid identity of the i	requesting user.	
Ensure that the invalid identity in the	Deferred Dy beeder	reactived in the DEI	TED request from LIE4 is replaced
Ensure that the invalid identity in the			sending the INVITE request to UE2.
SIP header values:		enco-identity when	Sending the INVITE request to DE2.
REFER 1: Request line=Focus			
Refer-To=UE#2; method	=INVITE		
Referred-By=any value r		(IT)	
P-Asserted-Identity=UE#		<i>,</i>	
INVITE 1: Request URI=UE#2			
Referred-By=UE#1			
Comments:	_		
ISC#1	Foc		ISC#2
	Conferenc → INVITE	e creation	
INVITE 200 OK (INVITE)	<ul> <li>→ INVITE</li> <li>← 200 OK (INVI</li> </ul>		
ACK		1 – )	
	UE#1 invites UE#2	to the conference	2
REFER 1	→ REFER		
202 Accepted	← 202 Accepted		
	Focus dials out		
		INVITE 1 🗕	INVITE
	<ul> <li>← NOTIFY 1</li> <li>→ 200 OK NOTI</li> </ul>		
200 OK NOTIFY	2 200 OKINO II		200 OK INVITE
	200	ACK →	ACK
NOTIFY	← NOTIFY 2		
200 OK NOTIFY	→ 200 OK NOTI	FY	
	Apply post t	est routine	

TSS	TP	Reference		Selection expression
ConferenceFocus/InviteToConf	CONF_N03_008	4.5.2.2.1 [1]		-
Test purpose				
Referred-By header not present.				
Ensure that the missing Referred-B				
value matching the REFER request	's P-Asserted-Identity	when sending the	INVITE reque	est to UE2.
SIP header values:				
REFER 1: Request line=Focus				
Refer-To=UE#2; met				
P-Asserted-Identity=l	JE#1			
INVITE 1: Request URI=UE#2				
Referred-By=UE#1 Comments:				
ISC#1	Foc		ISC#2	
130#1	Conferenc		130#2	
INVITE 1	→ INVITE	ecreation		
200 OK (INVITE)	← 200 OK (INV	TC)		
ACK	$\rightarrow$ ACK	16)		
ACIX	UE#1 invites UE#2	to the conference	0	
REFER 1	→ REFER		6	
202 Accepted	<ul><li>✔ 202 Accepted</li></ul>	4		
		4		
	Focus dials out	to invite UE#2		
		INVITE 1 →	INVITE	
NOTIFY	NOTIFY 1			
200 OK NOTIFY	→ 200 OK NOT	IFY		
			180 Ringin	g
	200	OK INVĪTĒ 🗲	200 OK ĬN	VITE
		АСК 🗲	ACK	
NOTIFY	NOTIFY 2			
200 OK NOTIFY	➔ 200 OK NOT	IFY		
	Apply post	test routine		

## 5.2.1.4 Leaving a conference

TSS		ТР	Refer	ence	Selection expression
ConferenceFocus/LeaveConf		CONF_N04_001		6.1 [3]	
Test purpose			J.J.Z.	0.1 [0]	
A participant leaves the conference.					
LIE#2 wishes to leave the conference		anding a BVE request	to the fe		dance to the basic call
UE#2 wishes to leave the conferenc procedures.		enuling a DTE Tequest			
Comments:					
ISC#1		Focus		ISC#2	
13C#1		Conference crea	41an	130#2	
	``		tion		
	$\rightarrow$				
200 OK (INVITE)	÷	200 OK (INVITE)			
ACK	<b>→</b>	ACK			
REFER	<b>→</b>				
202 Accepted	←_			_	
	F	ocus dials out to inv		_	
		IN	IVITE		
		180 Ri	nging	← 180 Rin	nging
		200 OK IN	IVITE	← 200 Ok	K INVITE
			ACK	→ ACK	
		Conference commu	nication		
		UE#2 leaves the con	ference		
				← BYE	
				→ 200 Ok	K BYE
		Apply post test ro	outine		

## 5.2.1.5 Removing a conference participant from a conference

TSS	TP	Referen	се	Selection expression
ConferenceFocus/RemoveFromConf	CONF_N05_001	5.3.2.6.2 5.3.2.6.2		
Test purpose				
The conference owner asks the focus to	remove a participant fr	rom the conf	erence.	
UE1 (via ISC#1) sends a REFER request UE2 (via ISC#2).	t to removes UE2 from	the confere	nce. The focu	s sends a BYE request to
SIP header values:				
REFER 2: Request URI contained the UF	RI of conference URI			
Refer-To contains the UE#2 URI,				
Referred-By contains the URI of U	E#1 URINOTIFY 3 Ev	ent contains	conference;	Subscription-State
contains <b>active</b>				
message/sipfrag contains SIP/2.0	200 OK			
Comments:				
ISC#1	Focus		ISC#2	
	Conference created	ation		
INVITE -				
200 OK (INVITE)				
ACK 🔶				
REFER 1				
202 Accepted				
	UE#2 joining in the c	onference		
200 OK NOTIFY →	200 Onthoma			
			INVITE 2	
	200 OK I		200 OK IN	VIIE
	NOTIFY 2	ACK →	ACK	
NOTIFY Contract Contract NOTIFY Contract NOTIFY Contract NOTIFY NOTIFY Contract NOTIFY				
	Conference commu	niestion		
LIE#1 wish	nes to remove UE#2 f		nforonco	
REFER 2				
202 Accepted				
		removee I	IF#2 from the	e conference
	10003	→ s reinioves c	BYE	
		÷	200 OK BY	Έ
NOTIFY +	NOTIFY 3	Ľ	200 01 01	-
200 NOTIFY				
	Apply post test r	outine		

TSS	TP	Reference	Selection expression
ConferenceFocus/RemoveFromConf	CONF_N05_002	5.3.2.6.2.2 [3]	
Test purpose			
The conference owner asks the focus to	remove a user that is r	not participant from th	ne conference.
UE1 (via ISC#1) sends a REFER reques	t to removes a user tha	at is not participant in	the conference from the
conference. The focus rejects the reques	it.		
SIP header values:			
REFER 1: Request URI contained the UF	RI of conference URI		
Refer-To contains the URI of a	a user that is not confei	rence participant, met	hod=BYE
Referred-By contains the URI	of UE#1 URI		
Comments:			
ISC#1	Focus	ISC#2	
	Conference crea	ation	
INVITE 🗕	INVITE		
200 OK (INVITE)			
ACK -			
REFER →			
202 Accepted			
	UE#2 joining in the c		
		NVITE 🗲 INVITE	
	200 OK II	NVITE 🗲 200 O	K INVITE
		ACK 🗲 ACK	
	Conference commu		
	o remove non-particip	pant from the confer	ence
REFER 1			
4xx	1700		
	Apply post test re	outine	

#### 5.2.1.6 Conference termination

TSS	TP	Reference	Selection expression
ConferenceFocus/TerminateConf	CONF_N06_001	5.3.2.7 [3]	
Test purpose			
The conference owner releases the en	tire conference by sendin	g a BYE to the fo	icus.
UE1 (via ISCP#1), the conference own	ar sands a BVE request	to the focus. The	antire conference is released
SIP header values:			entire conference is released.
BYE 1:			
Request URI = conference URI			
Comments:			
ISC#1	Focus		C#2
	Conference crea	ition	
	→ INVITE		
	← 200 OK (INVITE)		
ACK	→ ACK		
REFER	<b>→</b>		
202 Accepted	÷		
	Focus dials out to inv	/ite UE#2	
	11	NVITE → INV	VITE 2
			0 Ringing
	200 OK IN		0 OK INVITE
		ACK 🗲 AC	K
	Conference commu		
	wishes to finish the er	ntire conference	
	→ BYE		
200 OK BYE	← 200 OK BYE		
Foc	us removes UE#2 from	the conference	
	-	→ BY	Έ
		← 200	0 OK BYE
	Apply post test ro	outine	

TSS	ТР	Reference	Selection expression
ConferenceFocus/TerminateConf	CONF_N06_002	5.3.2.7 [3]	PICS 1/6
Test purpose			
Conference termination when the co	nference creator has left th	ne conference.	
Ensure that the conference is termin		creator which has cre	eated the conference using the
conference factory has left the confe	rence.		
SIP header values:			
INVITE S1: Request URI indicatin	g the conference factory U	RI	
200 OK S1: conference URI and "	sfocus" feature parameter	included in Contact h	neader field
Comments:			
ISC#1	Focus	ISC#	2
	Conference cre	ation	
INVITE (S1)	→ INVITE		
200 OK (INVITE) (S1)	<ul> <li>200 OK (INVITE)</li> </ul>		
ACK	→ ACK		
REFER	<b>→</b>		
202 Accepted	+		
	Focus dials out to ir	vite UE#2	
	INVII	E (S2) 🗲 INVIT	E 2
		NVITÉ ← 200 0	OK INVITE
		ACK 🗲 ACK	
	Conference comm	unication	
C	onference creator leaves		
BYE (S1)	→ BYE (S1)		
200 OK BYE	€ 200 OK BYE		
	ВЪ	′E (S2) → BYE	
			OK BYE

### 5.2.2 Actions at the UE

TSS		TP	Reference	Selection expression
UserEquipment		CONF_U01_00	4.5.2.1.2 [3]	
Test purpose				· · · · ·
The User Equipment ha	is the capability to crea	te a conference.	No subscription to the	e conference event package.
Ensure that the User Ec with the Request URI co SIP header values:			conference factory, se	ends an initial INVITE request
INVITE: Reque	est URI=conference fac	ctory URI		
200 OK (INVITE):Conta	ct: conference URI;isfo	ocus		
Comments:				
User Equipment		-	Fest Equipment	
INVITE		→	NVITE	
200 OK		← :	200 OK	
ACK		→	ACK	
	Α	pply post test	routine	

TSS	TP	Reference	Selection expression
UserEquipment	CONF_U01_00	)2 4.5.2.1.2 [3]	-
Test purpose			
The User Equipment has the capa	ability to create a conference	with. subscription to t	he conference event package
Ensure that the User Equipment to	o create a conference with a	conference factory, se	ends an initial INVITE reques
with the Request URI containing a	conference factory URI and	on receipt of a 200 O	K response, to subscribe to
the conference event package ser	nds a SUBSCRIBE request v	vith Request URI indic	ating the received conference
URI.	· · · · · ·		-
SIP header values:			
INVITE: Request URI=co	onference factory URI		
200 OK (INVITE):Contact: confere			
SUBSCRIBE: Request URI contai	ned the conference URI		
header contains "co			
NOTIFY: Event contains confere	ence; Subscription-State con	tains active; expires:	=XXXX
Comments:			
User Equipment		Test Equipment	
INVITE	_	NVITE	
200 OK	=	200 OK	
ACK	→	ACK	
SUBSCRIBE	→	SUBSCRIBE	
200 OK	← :	200 OK	
NOTIFY	÷	NOTIFY	
200 OK NOTIFY	→	200 OK NOTIFY	
	Apply post test		

TSS		TP	Reference	Selection expression		
UserEquipme		CONF_U01_003	5.3.1.3.3, 5.3.1.5.3 [3]			
Test purpose Conference of is subscribed	reation by Three-way ses	sion creation. REFER	request to the Focus, Confer	rence notification service		
together two		a so-called three-way	1 and S2) which are put on h / session. The <b>conference n</b> ng steps:			
URI. • For • <b>REF</b> To h • The	Receive and store the co each of the active sessions <b>ER requests</b> with the Rec eader indicating the SIP L	nference URI in the 20 s, that are requested t quest URI indicating th JRI or tel URL of the re es the sessions 1 and	o be joined to a three-way se the previously received confer espective remote user. 2 after the receipt of NOTIF	ession, sends <b>two</b> ence URI and the Refer-		
SIP header v			.,			
INVITE:	Request URI indicating th	ne conference factory	URI			
200 OK:	conference URI and "isfo	ocus" feature paramete	er indicated in Contact heade	er field		
	Request URI contained the header contains "confere	nce"				
NOTIFY 1	Event contains conferen	ce; Subscription-State	e contains active; expires=x	XXX		
REFER:	Request URI indicating the Refer-to header contains					
NOTIFY 2	Event contains <b>conferen</b> message/sipfrag contains		contains <b>active</b>			
NOTIFY 3						
NOTIFY 4	Event contains <b>conferen</b> message/sipfrag contains	ce; Subscription-State				
NOTIFY 5	Event contains <b>conferen</b> message/sipfrag contains application/conference-in	ce; Subscription-State s SIP/2.0 200 OK				

Comments:							
User Equipment	Test Equipment						
	Create session S1						
	Set session S	1 on hold					
	Create ses	sion S2					
	Set session S2 on hold						
INVITE	<b>→</b>	INVITE					
200 OK	+	200 OK					
ACK	<b>→</b>	ACK					
SUBSCRIBE	<b>→</b>	SUBSCRIBE					
200 OK	+	200 OK					
NOTIFY	+	NOTIFY 1					
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY					
REFER (S1)	<b>→</b>	REFER					
202 Accepted	+	202 Accepted					
NOTIFY	÷	NOTIFY 2 (S1, 100)					
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY					
NOTIFY	÷	NOTIFY 3 (S1, 200)					
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY					
BYE (S1)	<b>→</b>	BYE					
200 OK (BYE)	÷	200 OK (BYE)					
REFER (S2)	<b>→</b>	REFER					
202 Accepted	÷	202 Accepted					
NOTIFY	+	NOTIFY 4 (S2, 100)					
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY					
NOTIFY	+	NOTIFY 5 (S2, 200)					
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY					
BYE (S2)	<b>→</b>	BYE					
200 OK (BYE)	+	200 OK (BYE)					
	Apply post te	st routine					

TSS	TP	Reference	Selection expression
UserEquipment	CONF_U01_004	5.3.1.3.3, 5.3.1.5.3 [3]	
Test purpose			
Conference creation by Three-way	session creation. REFER red	quest to the Focus, Confe	erence notification service
not subscribed.			
The conference creator is participat			
together two of these active session			notification service is
not subscribed. The conference cr	eator shall perform the follow	ving steps:	
	conference factory by send		ith the conference factory
	e conference URI in the 200 sions, that are requested to b		accion condo two
	Request URI indicating the p		
	IP URI or tel URL of the resp		
To header indicating the S			
SIP header values:			
	ig the conference factory UR		
200 OK: conference URI and "	isfocus" feature parameter in	ndicated in Contact head	er field
	ig the conference URI		
Comments:	ains the URI of remote user		
User Equipment	Т	est Equipment	
	Create session		
	Set session S1 or		
	Create session		
	Set session S2 or	n hold	
INVITE	→ IN	IVITE	
200 OK		00 OK	
ACK	→ A0	CK	
REFER (S1)		EFER	
202 Accepted	← 20	02 Accepted	
REFER (S2)	→ RI	EFER	
202 Accepted		02 Accepted	

TSS	<b>TP</b> CONF_U01_005	Reference	Selection expression
UserEquipment		5.3.1.3.3, 5.3.1.5.2 [3]	
Test purpose Conference creation by Three-way session subscribed.	creation. REFER requ		ence notification service is
The conference creator is participating in the together two of these active sessions to a subscribed. The conference creator shall	so-called three-way ses	sion. The conference	
<ul> <li>Create a conference at the confer URI. Receive and store the confer</li> <li>For each of the active sessions, the <b>REFER requests</b> with the Requer the Refer-To header indicating the</li> <li>The conference creator releases the remote users have successful</li> </ul>	rence URI in the 200 O nat are requested to be st URI indicating SIP U e the previously receive the sessions 1 and 2 af	K response. joined to a three-way s RI or tel URL of the res d conference URI. ter the receipt of NOTIF	ession, sends <b>two</b> pective remote user and
SIP header values: INVITE: Request URI indicating the conf 200 OK: conference URI and "isfocus" fe		ted in Contact header fi	eld
SUBSCRIBE: Request URI contained the one of the ader contains "conference", NOTIFY 1: Event contains conference;	)"	tains <b>active; expires=</b> :	xxxx
REFER 1: Request URI indicating the remo Refer-to header contains the co			
NOTIFY 2 Event contains <b>conference</b> ; Sul message/sipfrag contains <b>SIP/2</b> NOTIFY 3 Event contains <b>conference</b> ; Sul message/sipfrag contains <b>SIP/2</b> application/conference-info+xml	.0 100 Trying oscription-State contain .0 200 OK	s active	
REFER 2: Request URI indicating the remo Refer-to header contains the co			
NOTIFY 4 Event contains <b>conference</b> ; Sul message/sipfrag contains <b>SIP/2</b> NOTIFY 5 Event contains <b>conference</b> ; Sul message/sipfrag contains <b>SIP/2</b> application/conference-info+xml	.0 100 Trying oscription-State contain .0 200 OK	s active	

Comments:						
User Equipment		Test Equipment				
	Create session S1					
	Set session S1 on hold					
	Create session S2 Set session S2 on hold					
INVITE		INVITE				
200 OK	÷	200 OK				
ACK	÷	ACK				
SUBSCRIBE	→	SUBSCRIBE				
NOTIFY	+	NOTIFY 1				
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY				
REFER (S1)	<b>→</b>	REFER				
202 Accepted	÷	202 Accepted				
NOTIFY	+	NOTIFY 2 (S1, 100)				
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY				
NOTIFY	+	NOTIFY 3 (S1, 200)				
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY				
BYE	→	BYE (S1)				
200 OK (BYE)	+	200 OK (BYE)				
REFER (S2)	<b>→</b>	REFER				
202 Accepted	+	202 Accepted				
NOTIFY	+	NOTIFY 4 (S2, 100)				
200 OK NOTIFY	× →	200 OK NOTIFY				
	-					
NOTIFY	+	NOTIFY 5 (S2, 200)				
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY				
BYE	<b>→</b>	BYE (S2)				
200 OK (BYE)	<del>(</del>	200 OK (BYE)				
	Apply post tes					

TSS	ТР	Reference	Selection expression
UserEquipment	CONF_U01_00	6 5.3.1.3.3, 5.3.1.5.2	
Test purpose			
Conference creation by Three-w	ay session creation. REFER I	request to the user, Col	nference notification service is
not subscribed.			
The conference creator is partici together two of these active sess not subscribed. The conference	sions to a so-called three-way	session. The conferen	
<ul> <li>URI. Receive and store</li> <li>For each of the active s</li> <li>REFER requests with</li> </ul>	the conference factory by ser the conference URI in the 20 sessions, that are requested to the Request URI indicating SI	0 OK response. b be joined to a three-w P URI or tel URL of the	ay session, sends <b>two</b>
SIP header values:	dicating the the previously rec	elved conference URI.	
	ng the conference factory URI isfocus" feature parameter inc		ler field
REFER 1: Request URI indicatin Refer-to header conta	ng the remote user of S1 ains the conference URI		
REFER 2: Request URI indicatin Refer-to header conta	ng the remote user of S2 ains the conference URI		
Comments:			
User Equipment		Test Equipment	
	Create session		
	Set session S1		
	Create sessio		
	Set session S2	on noid INVITE	
INVITE 200 OK		200 OK	
ACK	-	ACK	
REFER (S1)	<b>→</b>	REFER	
202 Accepted	+	202 Accepted	
REFER (S2)	<b>→</b>	REFER	
202 Accepted	+	202 Accepted	
	Apply post test	routine	
TSS	ТР	Reference	Selection expression
<b>TSS</b> UserEquipment	<b>TP</b> CONF_U01_0		Selection expression

Ensure that the User Equipment on receipt of a REFER request that contains a Refer-To header indicating a conference URI including the "method" parameter set to INVITE and contains a Referred-By header, sends an INVITE request to the conference URI including the received Referred-By header. SIP header values: REFER: Refer-To=conference URI; method=INVITE Referred-By=Remote User Equipment URI

INVITE:	VVITE: Request URI indicating the received conference URI						
	Referred-By=Remote User Equipment URI						
Commen	ts:						
User Equ	ipment		Test Equipment				
REFER		←	REFER				
202 Acce	pted	→	202 Accepted				
INVITE		→	INVITE				
	Apply po	st tes	t routine				

TSS	TP	Reference	Selection expression
UserEquipment	CONF_U01_008	5.3.1.5.2 [3]	· · · · · · · · · · · · · · · · · · ·
		0.0.1.0.2 [0]	
Test purpose			-
The User Equipment has the capability to invit	e a participant to t	he conference. REFE	R request to the participant.
Ensure that the User Equipment is able to invi	te a participant to t	he established confe	rence. The User Equipment
sends a REFER request to the participant and			
SIP header values:			
REFER: Request URI=TestEquipment (User	= PIXII)		
Refer-To=conference URI			
Comments:			
User Equipment	Те	st Equipment	
	Create Conferen	ce	
REFER	→ RE	FER	
202 Accepted	← 20	2 Accepted	
A	Apply post test ro	utine	
TSS	TP	Reference	Selection expression
			Selection expression
UserEquipment	CONF_U01_009	5.3.1.5.3 [3]	
Test purpose			
The User Equipment has the capability to invit	e a participant to t	he conference. REFE	R request to the Focus.
	, ,		1
Ensure that the User Equipment is able to invi	to a narticinant to t	ha astablishad confa	rence. The User Equipment
sends a REFER request to the conference AS	and the Refer-10	neader URI is set to	the inviting user's URI.
SIP header values:			
REFER: Request URI=conference URI			
Refer-To=Participant URI (PIXIT); n	nethod=INVITE		
Comments:			
	Та	et Equipment	
User Equipment		st Equipment	
	Create Conferen	се	
REFER	→ RE	FER	
202 Accepted	← 20	2 Accepted	
•		•	
	Apply post test ro	utine	
TSS	TP	Reference	Selection expression
			Selection expression
UserEquipment	CONF_U01_010	5.3.1.5.4 [3]	
Test purpose			
The User Equipment has the capability to invit	e a participant to t	he conference. Resol	urce list is used.
Ensure that the User Equipment is able to sen	d a recource list to	the conference AS t	o invite participant(s) to a
		the conference Ao to	
conference.			
SIP header values:			
INVITE Request URI indicating the Conferer	ice Factory URI		
Content-Type: application/resource-lists+xml	•		
Content-Disposition: recipient-list			
xml version="1.0" encoding="UTF-8"?			
<resource-lists td="" xm<="" xmlns="urn:ietf:params:xml:ns:&lt;/td&gt;&lt;td&gt;resource-lists"><td>ns:cp="urn:ietf:paran</td><td>ns:xml:ns:copyControl"&gt;</td></resource-lists>	ns:cp="urn:ietf:paran	ns:xml:ns:copyControl">	
<list></list>			
<entry <="" td="" uri="S1 URI"><td></td><td></td><td></td></entry>			
cp:copyControl="to"/>			
Comments:			
User Equipment	Те	st Equipment	
INVITE		VITE (S1)	
200 OK (INVITE)		0 OK (INVITE)	
ACK	← AC	'n	
	Apply post test ro		

# 5.3 Interaction with other supplementary services

## 5.3.1 Terminating Identification Restriction (TIR)

TSS	TP	Reference	Selection expression
Interaction/TIR	CONF_N08_001	4.6.3 [1]	PICS 1/5
Test purpose			
Remote user requests TIR, no identity in	formation in the confer	ence notification i	nfo send in the NOTIFY request to
the conference creator.			
Ensure the no identity is sent to the confe			
set to "id" in the 200 OK to the INVITE fro	om the conference focu	is to invite the par	ticipant to the conference.
SIP header values:			
200 OK INVITE 2: Privacy: id	a. Cubaccintian Otata	antaina antiva	
NOTIFY 2: Event contains conference		ontains active	
application/conference-info <conference-info></conference-info>	)+xmi:		
	JRI, state="full", versio	n_"v"	
<pre>conference c </pre>		11— A	
	/user-count> if present		
<active>true<td></td><td></td><td></td></active>			
<users></users>			
	C#1 URI state="full"		
	ntity=endpoint ISC#1 L	IRI	
	connected		
	method>dialed-in joi</td <td>ning-method&gt;</td> <td></td>	ning-method>	
<media i<="" td=""><td></td><td></td><td></td></media>			
	us>sendrecv		
	ormation of UE#2 or	Element is not p	resent]
Comments:	_		
ISC#1	Focus		C#2
	Conference cre	ation	
	=		
200 OK (INVITE) ← ACK →	/ /		
SUBSCRIBE			
200 OK (SUBSCRIBE)		BF)	
LIF1#1	invites UE#2 via the		5
REFER A			-
200 OK (REFER)			
	cus invites UE#2 to th	e conference	
NOTIFY	NOTIFY 1		
200 OK NOTIFY	200 OK NOTIFY		
			VITE 2
	200 OK I	-	0 OK INVITE 2
		ACK 🗲 AC	CK C
	-		
200 OK NOTIFY	200 010101111		
	Apply post test r	outine	

# 5.3.2 Originating Identification Restriction (OIR)

TSS		ТР	Reference	e	Selection expression
Interaction/OIR		CONF_N09_001	4.6.5 [1]		PICS 1/4
Test purpose					
Conference creator subscribes				identity infori	nation of the creator
included in the conference noting	fication sen	t to the conference pa	articipants.		
Ensure that the conference not	ification con	t in the NOTIEV requ	ant to the pe	rticipant ofta	r it has joined the
Ensure that the conference not conference if the conference cr				inicipant alte	ni nas joined the
SIP header values:	ealor nas si		Service.		
SUBSCRIBE: Request URI cor	tained the	conference LIRL Ever	ot contains "	conference"	
Event header col	ntaineu ine i	erence"		Jonnerence	
		Subscription-State c	ontains <b>activ</b>	e: expires=	xxxx
application/confe				, expired=2	
<conference-< td=""><td></td><td>XIII.</td><td></td><td></td><td></td></conference-<>		XIII.			
		RI state="full" version:	="x"		
<conferer< td=""><td></td><td></td><td></td><td></td><td></td></conferer<>					
<user-< td=""><td>-count&gt;2<td>ser-count&gt; if present</td><td></td><td></td><td></td></td></user-<>	-count>2 <td>ser-count&gt; if present</td> <td></td> <td></td> <td></td>	ser-count> if present			
<activ< td=""><td>e&gt;true<td>ive&gt; if present</td><td></td><td></td><td></td></td></activ<>	e>true <td>ive&gt; if present</td> <td></td> <td></td> <td></td>	ive> if present			
<users></users>					
		mation of UE#1 or	Element is r	ot present]	
		2 URI state="full"			
<e< td=""><td></td><td>ty=endpoint ISC#2 U</td><td>RI</td><td></td><td></td></e<>		ty=endpoint ISC#2 U	RI		
		onnected			
		ethod>dialed-in join</td <td>hing-method:</td> <td>&gt;</td> <td></td>	hing-method:	>	
	<media id="&lt;/td"><td></td><td></td><td></td><td></td></media>				
0	<status< td=""><td>s&gt;sendrecv</td><td></td><td></td><td></td></status<>	s>sendrecv			
Comments: ISC#1		Focus		ISC#2	
130#1		Conference crea	otion	136#2	
INVITE	→	INVITE	ation		
200 OK (INVITE)	÷	200 OK (INVITE)			
ACK	÷	ACK			
	2	NOR			
	UE1#1 in	vites UE#2 via the o	conference	focus	
REFER	→				
200 OK (REFER)	+				
,	Focu	is invites UE#2 to th	e conferenc	e	
NOTIFY	÷	NOTIFY 1			
200 OK NOTIFY	<b>→</b>	200 OK NOTIFY			
			NVITE →	INVITE 2	
		200 OK I		200 OK IN	VITE
			ACK 🗲	ACK	
NOTIFY	+	NOTIFY 2			
200 OK NOTIFY	→	200 OK NOTIFY	-	0.0000000000000000000000000000000000000	
			÷	SUBSCRI	
					UBSCRIBE)
		-	TIFY 3 →	NOTIFY	
		200 OK N	-	200 OK N	JTIFY
		Apply post test r	outine		

TSS	TP	Reference	Selection expression
Interaction/OIR	CONF_N09_002	4.6.5 [1]	PICS 1/4
Test purpose			
			ot sent in the INVITE request if a
Privacy header set to	value "user" was received i	n the REFER.	
			conference focus is not sent in the
		he conference if the REFE	ER request contained Referred-By
header and a Privacy	header set to "user".		
SIP header values:			
REFER 1: Referred-B			
Privacy: us			
INVITE 1: Request UI			
	d-By included		
Comments: ISC#1		<b>F</b>	100#0
156#1	C.	Focus	ISC#2
INVITE	→ INVI		
200 OK (INVITE)		OK (INVITE)	
ACK			
AUN		UE#2 via the conference	focus
REFER 1	→ REF		10003
202 Accepted		Accepted	
2027.00000100	2021	loopted	
	Focus	dials out to invite UE#2	
		INVITE 1 🗕	INVITE
NOTIFY	← NOT	IFY 1	
200 OK NOTIFY	→ 200 0	OK NOTIFY	
		200 OK INVITE 🗲	200 OK INVITE
		ACK 🗲	ACK
NOTIFY	← NOT	IFY 2	
200 OK NOTIFY	→ 200 0	OK NOTIFY	
	App	ly post test routine	

TSS	TP	Reference	e	Selection expression
Interaction/OIR	CONF_N09_003	4.6.5/[1]		PICS 1/4
Test purpose				
Conference creator s	ubscribes to OIR in tem	oorary mode. Referred-By	is not inserted	I into the INVITE request if
Privacy value "user"	was received in the REF	ER.		
		eceived in the REFER req		
		rticipant to be invited to the	e conference i	f the REFER request
contained a Privacy I	neader set to "user".			
SIP header values:				
REFER 1: no Referre	d-By present			
Privacy: u				
INVITE 1: Request L				
	ed-By inserted			
Comments:				
ISC#1		Focus	ISC#2	
		Conference creation		
INVITE		NVITE		
200 OK (INVITE)		200 OK (INVITE)		
ACK		ACK	_	
		tes UE#2 via the confere	nce focus	
REFER 1	-	REFER		
202 Accepted	← 2	202 Accepted		
	For	us dials out to invite UE	#2	
	FOU	INVITE 1		
NOTIFY	← \	NOTIFY 1		
200 OK NOTIFY	-			
		200 OK INVITE	← 200 OK	
		ACK		
NOTIFY	← 1	NOTIFY 2		
200 OK NOTIFY				
		Apply post test routine		

TSS	TP	Reference	ce	Selection expression
Interaction/OIR	CONF_N09_004	4.6.5 [1]		PICS 1/4
Test purpose				
			r is not ins	serted into the INVITE request if
Privacy value "header	" was received in the RE	FER.		
	une d Diske e den is met ne			
				ne conference focus, it is not
contained a Privacy he		icipant to be invited to th	le contere	ence if the REFER request
SIP header values:	cauel sel lo fieadel .			
REFER 1: no Referred	-By present			
Privacy: he				
INVITE 1: Request UF				
	d-By inserted			
Comments:	•			
ISC#1		Focus	IS	6C#2
		Conference creation		
INVITE		VITE		
200 OK (INVITE)		0 OK (INVITE)		
ACK	→ A(			
		s UE#2 via the confere	nce tocu	IS
REFER 1		EFER		
202 Accepted	₹ 20	2 Accepted		
	Foci	s dials out to invite UE	#2	
	1000	INVITE 1		IVITE
NOTIFY	← N	DTIFY 1		
200 OK NOTIFY	→ 20	0 OK NOTIFY		
		200 OK INVITE	← 20	00 OK INVITE
		ACK	→ A	СК
NOTIFY		DTIFY 2		
200 OK NOTIFY		0 OK NOTIFY		
	A	pply post test routine		

# 5.3.3 Anonymous Communication Rejection and Communication Barring (ACR/CB)

TSS		TP	Reference	Selection expression		
Interactio	n/ACR-CB	CONF_N10_001	4.6.9 [1]	PICS 1/6		
Test purp	est purpose					
	ce creator subscribes to ACR/CB ia REFER is rejected.	and has Outgoin Call	Barring activated fo	r UE2. Conference invitation		
	Ensure that the conference AS rejects the REFER request targeted at a participant (UE2) that is barred by the conference creator's Outgoing Communication Barring rules.					
SIP head	er values:					
REFER:	Request URI contained the conf	erence URI				
	Refer-To contains the URI of UE	#2, method=invite				
	Referred-By contains SIP URI of UE#1					
Commen	Comments:					
ISC#1		Focus	ISC#2			
	Conference creation					
INVITE	<b>→</b>	INVITE				
200 OK (I	INVITE)	200 OK (INVITE)				
ACK	· •	ACK				
UE1#1 invites outgoing call barred UE#2 via the conference focus						
REFER	→ ĭ	RĚFER				
4xx	+	4xx				
	Apply post test routine					

TSS	TP	Reference	Selection expression		
Interaction/ACR-CB	CONF_N10_002	4.6.9 [1]	PICS 1/6		
Test purpose Conference creator subs for UE2 via the uri-list is Ensure that the focus AS Communication Barring to the conference. SIP header values: INVITE (S1) Request I Content-Type: application Content-Disposition: rec xml version="1.0" encodi<br <resource-lists td="" ue#:<="" xmlns="urn:&lt;br&gt;&lt;list&gt;&lt;br&gt;&lt;entry uri="><td>scribes to ACR/CB and has O s rejected. S removes the URI of UE2 tha rules from the list of URIs in th URI indicating Conference Fac on/resource-lists+xml ipient-list</td><td>outgoin Call Barring activated f at is barred by the conference he "recipient-list" body of INVI</td><td>for UE2. Conference invitation creator's Outgoing TE request. UE2 is not invited</td></resource-lists>	scribes to ACR/CB and has O s rejected. S removes the URI of UE2 tha rules from the list of URIs in th URI indicating Conference Fac on/resource-lists+xml ipient-list	outgoin Call Barring activated f at is barred by the conference he "recipient-list" body of INVI	for UE2. Conference invitation creator's Outgoing TE request. UE2 is not invited		
200 OK (INVITE)	Focus INVITE 200 OK (INVITE) ACK	ISC#2	ISC#3		
		INVITE (S2) 200 OK (INVITE) ACK	<ul> <li>→ INVITE</li> <li>← 200 OK (INVITE)</li> <li>→ ACK</li> </ul>		
Apply post test routine					

# 6 Compliance

An ATS which complies with the present document 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;

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.

# History

Document history			
V2.1.1	July 2009	Publication	
V3.1.1	July 2011	Publication	