# ETSI TS 101 594-2 V5.1.1 (2012-10)



IMS Network Testing (INT); Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification; Part 2: Test Suite Structure and Test Purposes (TSS&TP) Reference

DTS/INT-00071-2

Keywords

ECT, IMS, testing, TSS&TP

#### **ETSI**

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

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

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

#### Important notice

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

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

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at http://portal.etsi.org/tb/status/status.asp

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

#### **Copyright Notification**

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

> © European Telecommunications Standards Institute 2012. All rights reserved.

**DECT**<sup>TM</sup>, **PLUGTESTS**<sup>TM</sup>, **UMTS**<sup>TM</sup> and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**<sup>TM</sup> and **LTE**<sup>TM</sup> are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

# Contents

Intelle	ectual Property Rights	4
Forew	vord	4
1	Scope	5
2	References	5
2.1	Normative references	
2.2	Informative references	
3	Definitions, symbols and abbreviations	5
3.1	Definitions	5
3.2	Symbols	6
3.3	Abbreviations	6
4	Test Suite Structure (TSS) and configuration	6
4.1	Configuration	
5	Test Purposes (TP)	8
5.1	Introduction	
5.1.1	TP naming convention	
5.1.2	Test strategy	
5.2	Signalling requirements	9
5.2.1	Actions at the Transferor UE	9
5.2.2	Actions at the Transferor AS	12
5.2.3	Actions at the Transferee UE	
5.2.4	Action at the Transferee AS	
5.2.5	Actions at the transfer target's UE	
5.2.6	Interaction with other services	
5.2.6.1		
5.2.6.2	$\mathcal{J}$	
5.2.6.3	$\partial ( \cdot \cdot )$	
5.2.6.4	4 Explicit Communication Transfer (ECT)	59
Anne	x A (informative): Bibliography	62
Histor	ry	63

# Intellectual Property Rights

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

4

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

### Foreword

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

The present document is part 2 of a multi-part deliverable covering the Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification, as identified below:

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

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

#### 1 Scope

The present document provides the Test Suite Structure and Test Purposes (TSS&TP) for the protocol specification as defined in ETSI [1] in compliance with the relevant requirements.

# 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 referenced document (including any amendments) applies.

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

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 necessary for the application of the present document.

- [1] ETSI TS 124 629: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.629 Release 10)".
- [2] ETSI TS 101 594-1: "Technical Committee for IMS Network Testing (INT); Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification (3GPP Release 10); Part 1: Protocol Implementation Conformance Statement (PICS)".
- [3] ETSI TS 124 628: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Common Basic Communication procedures using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.628 Release 10)".

#### 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, symbols and abbreviations

#### 3.1 Definitions

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

### 3.2 Symbols

For the purposes of the present document, the symbols given in [1] apply.

#### 3.3 Abbreviations

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

ACR-CB	Anonymous Communication Rejection- Communication Barring
ISC	IM-CN Service Control
IUT	Implementation Under Test
NNI	Network Network Interface
PIXIT	Protocol Implementation eXtra Information for Testing
SIP	Session Initiation Protocol
SUT	System Under Test
TP	Test Purpose
UE	User Equipment
URI	Uniform Resource Identifier

# 4 Test Suite Structure (TSS) and configuration

Netw		
	TransferorAS	ECT_N01_xxx
	TransfereeAS	ECT_N02_xxx
User	Transferor	ECT_U01_xxx
	Transferee	ECT_U02_xxx
	TransferTarget	ECT_U03_xxx
Interaction	OIR	ECT_N03_xxx
	ACR-CB	ECT_N04_xxx
	CONF	ECT_N05_xxx
	ECT	ECT_N06_xxx

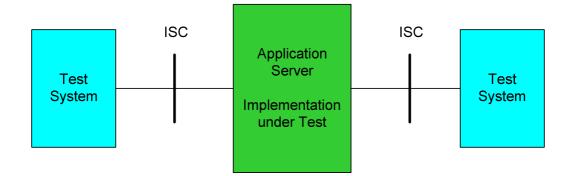
#### Figure 4.1: Test suite structure

# 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 4.1.1 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 4.1.2). 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.

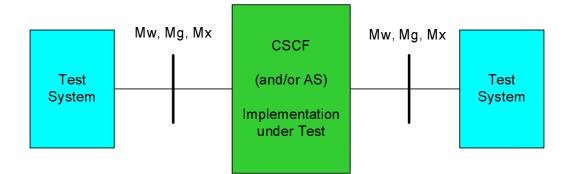


Figure 4.1.2: Applicable interfaces to test using the (generic) NNI interface

Figure 4.1.2 illustrates the usage of any NNI interface.

**Testing of User Equipment:** There are several requirements regarding to the end devices. Therefore a special configuration appears.

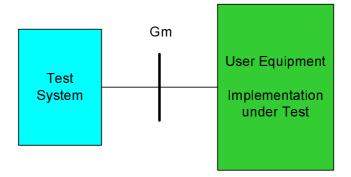


Figure 4.1.3: Applicable configuration to test the User Equipment

# 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 5.1.1).

8

Identifier: <	6S>_	<iut><group>_<nnn></nnn></group></iut>					
<\$\$>	=	supplementary service: e.g. "ECT"					
<iut></iut>	=	type of IUT:	U N	User Network			
<group></group>	=	group	2 digit field	representing group reference according to TSS			
<nnn></nnn>	=	sequential number	(001-999)				

#### 5.1.2 Test strategy

As the base standard [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 [2].

# 5.2 Signalling requirements

### 5.2.1 Actions at the Transferor UE

TSS	ТР	Reference	Selection expression
User/Transferor	ECT_U01_001	4.5.2.1	PICS 4.5.1/1 AND
			PICS 4.6.1/1
Test purpose			
The UE transfers a communication with a			
Ensure that the UE is able to transfer a co	ommunication with th	ie Transferee, optionall	y put on hold before, to the
Transfer Target using the blind transfer m		with user Transferee is	terminated before information
about the progress of the transfer is recein SIP header values:	ved.		
REFER: Request URI: <b>Gm#2</b>			
Refer-To contains <b>Gm#3</b> U	RI method-invite		
Referred-By contains <b>Gm#</b>	1 URI		
NOTIFY(100):Event contains refer			
message/sipfrag contains S	SIP/2.0 100 Trying		
NOTIFY(200):Event contains refer	, , ,		
message/sipfrag contains S	SIP/2.0 200 OK		
Comments:			
UE (Gm#1)		Test equipm	ent (Gm#2)
	Establishment of s	session #1	
CASE A			
Session #1 on h			
REFER	→ ←	REFER	-
202 Accepted	ς	202 Accepte	
BYE	→	BYE	
200 OK (BYE)	÷	200 OK (BYE	=)
	-	200 011 (012	-/
NOTIFY(100)	+	NOTIFY(100	)
200 OK NOTIFY	→	200 OK NOT	ÎFY
NOTIFY(200)	+	NOTIFY(200	
200 OK NOTIFY	<b>→</b>	200 OK NOT	IFY
CASE B REFER	<b>_</b>	DECED	
	→ +	REFER	d
202 Accepted	T	202 Accepte	u
BYE	<b>→</b>	BYE	
200 OK (BYE)	÷	200 OK (BYE	=)
	•	200 0.0 (011	-,
NOTIFY(100)	+	NOTIFY(100	)
200 OK NOTIFY	→	200 OK NOT	
NOTIFY(200)	+	NOTIFY(200	
200 OK NOTIFY	→	200 OK NOT	IFY

TSS	TP	Reference	Selection expression
User/Transferor	ECT_U01_002	4.5.2.1	PICS 4.5.1/1 AND
	201_001_002	1.0.2.1	PICS 4.6.1/2
Test purpose			1100 1101.112
The UE transfers a communication with a	a Transferee to the T	Fransfer Target (Tran	sferor, assured transfer).
Ensure that the UE is able to transfer a c			
Transfer Target using the assured transf	er method. The sess	ion with Transferee is	s terminated after information
about the progress of the transfer is rece			
SIP header values:			
REFER: Request URI: Gm#2			
Refer-To contains <b>Gm#3</b> L	JRI; method=invite		
Referred-By contains Gm#			
NOTIFY(100):Event contains refer			
message/sipfrag contains	SIP/2.0 100 Trying		
NOTIFY(200):Event contains refer			
message/sipfrag contains	SIP/2.0 200 OK		
Comments:			
UE ( Gm#1)		Test equi	pment ( Gm#2)
	Establishment of	session #1	
CASE A			
Session #1 on			
REFER	→	REFER	
202 Accepted	+	202 Accep	oted
	-		
NOTIFY(100)	<del>(</del>	NOTIFY(1	
200 OK NOTIFY	<b>→</b>	200 OK N	OTIFY
INVITE(inactive/sendonly)			active/sendonly)
200 OK INVITE(inactive/recvonly)			IVITE(inactive/recvonly)
ACK		ACK	
NOTIFY(200)	+	NOTIFY(2	00)
200 OK NOTIFY	÷	200 OK N	
		200 OK N	OTIFI
BYE	<b>→</b>	BYE	
200 OK (BYE)	÷	200 OK (B	(YF)
	•	200 011 (2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CASE B			
REFER	→	REFER	
202 Accepted	+	202 Accep	oted
		1	
NOTIFY(100)	+	NOTIFY(1	00)
200 OK NOTIFY	→	200 OK N	
INVITE(inactive/sendonly)			active/sendonly)
200 OK INVITE(inactive/recvonly)			IVITE(inactive/recvonly)
ACK		ACK	
NOTIFY(200)	+	NOTIFY(2	
200 OK NOTIFY	<b>→</b>	200 OK N	OTIFY
	-	5.75	
BYE	<b>→</b>	BYE	
200 OK (BYE)	+	200 OK (B	5YE)

TSS	ТР	Reference	Selection expression
User/Transferor	ECT_U01_003	4.5.2.1	PICS 4.5.1/1 AND
	201_001_000	4.0.2.1	PICS 4.6.1/3
Test purpose			1100 4.0.1/0
The UE transfers a communication with a	Transferee to the	Transfer Target (Tra	ansferor consultative transfer)
Ensure that the UE is able to transfer a c			
Transfer Target, having a session, option			
REFER request contains a replaces head			
session between Transferor and Transfer			
SIP header values:	raiget (bebbien #2	·/·	
REFER: Request URI: <b>Gm#2</b>			
Refer-To: contains <b>Gm#3 URI</b>	• method=invite?Re	places= <b>call-id1</b> %3	Sto-tag%3DSession1%3B
from-tag%3DSession			
Referred-By contains <b>Gm#1</b> U		•	
NOTIFY(100):Event contains <b>refer</b>			
message/sipfrag contains SIP/	2.0 100 Trvina		
NOTIFY(200):Event contains refer			
message/sipfrag contains SIP/	2.0 200 OK		
Comments:			
UE ( Gm#1)		Test eau	uipment ( Gm#2)
	Establishment of	-	
(Session #1 on I			
(	Establishment of	session #2	
(Session #2 on I			
REFER	→	REFER	
202 Accepted	+	202 Acc	epted
CASE A			
NOTIFY(100)	+	NOTIFY	(100)
200 OK NOTIFY	→	200 OK	
NOTIFY(200)	+	NOTIFY	(200)
200 OK NOTIFY	→	200 OK	
BYE #1	→	BYE	
200 OK (BYE)	+	200 OK	(BYE)
BYE	+	BYE #2	
200 OK (BYE)	→	200 OK	(BYE)
CASE B			
NOTIFY(100)	÷	NOTIFY	
200 OK NOTIFY	<b>→</b>	200 OK	NOTIFY
BYE	+	BYE #2	
200 OK (BYE)	<b>→</b>	200 OK	(BYE)
NOTIFY(200)	+	NOTIFY	
200 OK NOTIFY	<b>→</b>	200 OK	NOTIFY
BYE #1	<b>→</b>	BYE	
200 OK (BYE)	+	200 OK	(BYE)

### 5.2.2 Actions at the Transferor AS

<b>TSS</b> Netw/TransferorAS		<b>TP</b> ECT_N01_001	<b>Reference</b> 4.5.2.4	Selection e PICS 4.5.1/2 PICS 4.7.1/2 NOT (PICS PICS	2 AND 2 AND
REFER 2: Refer-To conta	can successfully about the proces communication be communication. ains <b>ISC#3</b> URI; I pontains <b>ISC#1</b> UF	transfer the commu sing. After the comm etween Transferor a method=invite RI n Identifier URI; m	unication with the tra munication between and Transferee is ter	nsferee set on the Transferee	e and the Transfer
INVITE 3: Request URI = INVITE 4: Request URI = NOTIFY(100):Event cont Subscriptio message/s NOTIFY(200):Event cont message/s Subscriptio	ECT Session Id ISC#3 URI ains refer n-State: active;6 ipfrag contains S ains refer ipfrag contains S	dentifier URI expires=(any value IP/2.0 100 Trying			
Comments: ISC#1	AS	Transferor	ISC#2		ISC#3
INVITE 1 180 Ringing 200 OK (INVITE) ACK	→ ← →	•	<ul> <li>INVITE</li> <li>180 Ringing</li> <li>200 OK (INVIT</li> <li>ACK</li> </ul>	ſE)	
INVITE 2 (sendonly) 200 OK (recvonly) ACK	→ ← →	•	<ul> <li>INVITE (sendo</li> <li>200 OK (recvo</li> <li>ACK</li> </ul>		
REFER 1 202 Accepted INVITE (inactive) 200 OK (inactive) ACK	<ul> <li>→ REFEI</li> <li>← 202 Ac</li> <li>←</li> <li>←</li> </ul>	REFER 2 202 Accepted	<ul> <li>REFER</li> <li>202 Accepted</li> <li>INVITE (inactive)</li> <li>200 OK (inactive)</li> <li>ACK</li> </ul>	ve)	
NOTIFY(100) 200 OK NOTIFY	→	INVITE	<ul> <li>NOTIFY(100)</li> <li>200 OK NOTIF</li> <li>INVITE 3</li> <li>180 Ringing</li> </ul>	=Y ✦	INVITE 180 Ringing
NOTIFY(200) 200 OK NOTIFY BYE 200 OK (BYE)	← → → ←	200 OK 4 200 OK 4	<ul> <li>► 200 OK</li> <li>► NOTIFY(200)</li> <li>► 200 OK NOTIF</li> <li>► BYE</li> <li>► 200 OK (BYE)</li> </ul>		200 OK ACK
	•	Apply post test	Commu	inication ISC#	2 with ISC#3

TSS		ТР	Reference	a Salact	ion e	expression
Netw/TransferorAS		ECT_N01_002	4.5.2.4	PICS 4		
		201_101_002	4.0.2.4	PICS 4		
						4.7.1/4 OR
						4.7.1/5)
Test purpose						
Communication transfer:	ssured trans	<b>sfer</b> . Transferee was	originator of the	originating ca	all.	
Ensure that a Transferor ca	an successfu	ly transfer the comm	unication with the	e transferee s	set or	hold before and
the Transferor is notified a						
Target is confirmed, the co			and Transferee i	s terminated.	The	Transferee was the
initiator of the originating c	ommunicatio	າ.				
SIP header values:						
REFER 1: Refer-To contain						
Referred-By cor						
REFER 2: Refer-To contai			ietnod=invite			
Referred-By cor INVITE 3: Request URI =						
INVITE 4: Request URI = I						
NOTIFY(100):Event contai						
		;expires=(any value	e)			
		SIP/2.0 100 Trying	- 1			
NOTIFY(200):Event contai						
message/sip	frag contains	SIP/2.0 200 OK				
		ated;reason=noreso	urce			
Comments:						
ISC#1	A	S Transferor	ISC#2			ISC#3
N.N. 4775						
INVITE 400 Dia sin s	÷		INVITE 1			
180 Ringing	→ →		→ 180 Ringin → 200 OK (II)			
200 OK (INVITE) ACK	7 <del>(</del>		→ 200 OK (II ← ACK	NVIIE)		
ACK			<ul> <li>AUX</li> </ul>			
INVITE 2 (sendonly)	→		→ INVITE (s	endonly)		
200 OK (recvonly)	÷		← 200 OK (r			
ACK	→		→ ACK			
REFER 1	→ REF	ER				
			→ REFER 2			
	_		← 202 Accep	oted		
202 Accepted		Accepted				
INVITE (inactive)	÷		INVITE (ir			
200 OK (inactive)	→ ←		→ 200 OK (in ← ACK	nactive)		
ACK	T		ACK			
NOTIFY(100)	←		← NOTIFY(1	00)		
200 OK NOTIFY	÷		→ 200 OK N			
	-		← INVITE 3	01111		
			→		→	INVITE
			÷		←	180 Ringing
		180 Ringing				2 0
		180 Ringing	➔ 180 Ringir	ng		
		180 Ringing 200 OK	←	ng	←	200 OK
		180 Ringing 200 OK		-		
		180 Ringing 200 OK 200 OK	<ul><li>← 200 OK</li></ul>	ACK	← →	200 OK ACK
NOTIFY(200)	÷	180 Ringing 200 OK 200 OK	<ul> <li>← 200 OK</li> <li>← NOTIFY(2</li> </ul>	ACK 200)		
200 OK NOTIFY	<b>→</b>	180 Ringing 200 OK 200 OK	<ul> <li>← 200 OK</li> <li>← NOTIFY(2</li> <li>→ 200 OK N</li> </ul>	ACK 200)		
200 OK NOTIFY BYE	→ →	180 Ringing 200 OK 200 OK	<ul> <li>← 200 OK</li> <li>← NOTIFY(2</li> <li>→ 200 OK N</li> <li>→ BYE</li> </ul>	ACK 200) OTIFY		
200 OK NOTIFY	<b>→</b>	180 Ringing 200 OK 200 OK	<ul> <li>← 200 OK</li> <li>← NOTIFY(2</li> <li>→ 200 OK N</li> <li>→ BYE</li> <li>← 200 OK (E</li> </ul>	ACK 200) OTIFY 3YE)	<b>→</b>	

TSS		TP		Reference	Selection	expression
Netw/TransferorAS		ECT_N01_003	3	4.5.2.4	PICS 4.5. PICS 4.7. NOT (PIC	1/2 AND
Test purpose				· · · · ·		
Communication transfer: Ensure that a Transferor the Transferor is notified communication between communication. SIP header values: REFER 1: Refer-To conta Referred-By co REFER 2: Refer-To conta Referred-By co INVITE 3: Request URI = INVITE 4: Request URI =	can successful about the proc Transferor and ains ISC#3 UR ontains ISC#1 ains ECT Sess ontains ISC#1 = ECT Session	ly transfer the com essing. After the RI Transferee is term ; method=invite URI <b>ion Identifier</b> URI; URI	municat EFER re inated.	tion with the trar equest to the Tra The Transferor	nsferee set o ansferee is s	sent, the
NOTIFY(100):Event cont Subscriptio message/s NOTIFY(200):Event cont message/s	ains <b>refer</b> n-State: <b>active</b> ipfrag contains ains <b>refer</b> ipfrag contains	e;expires=(any val SIP/2.0 100 Tryin SIP/2.0 200 OK nated;reason=nores	g			
Comments:				100#2		160#2
ISC#1	А	S Transferor		ISC#2		ISC#3
INVITE 1 180 Ringing 200 OK (INVITE) ACK	→ ← ← →		→	INVITE 180 Ringing 200 OK (INVIT ACK	E)	
INVITE 2 (sendonly) 200 OK (recvonly) ACK	→ ← →		→ ← →	INVITE (sendo 200 OK (recvor ACK		
REFER 1	→ REF	REFER 2 202 Accepted	→ ←	REFER 202 Accepted		
202 Accepted BYE 200 OK (BYE)	<ul> <li>← 202</li> <li>→</li> <li>←</li> </ul>	Accepted	<b>→</b> ←	BYE 200 OK (BYE)		
NOTIFY(100) 200 OK NOTIFY	← →	INVITE INVITE 4	$\leftarrow$ $\rightarrow$ $\leftarrow$ $\rightarrow$ $\leftarrow$	NOTIFY(100) 200 OK NOTIF INVITE 3	Y → €	=
		180 Ringing 180 Ringing 200 OK 200 OK	+ + + +	180 Ringing 200 OK	÷	l o o i kii igii ig
NOTIFY(200) 200 OK NOTIFY	← →		← →	NOTIFY(200) 200 OK NOTIF		
		Apply post to			nication ISC	C#2 with ISC#3

TSS Netw/TransferorAS Test purpose Communication transfer: Blind tr Ensure that a Transferor can such the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	)4 originato nmunicat REFER re	ion with the tran equest to the Tra	nsferee set on hold before and ansferee is sent, the
Test purpose Communication transfer: Blind tr Ensure that a Transferor can such the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	<b>Transfere</b> was a cessfully transfer the come processing. After the R for and Transferee is term <b>#3</b> URI; method=invite <b>SC#1</b> URI	<i>originato</i> nmunicat REFER re	r of the origination with the transported to the Transport to the Transpor	PICS 4.7.1/1 AND NOT (PICS 4.7.1/4 OR PICS 4.7.1/5) Ing call. Insferee set on hold before and ansferee is sent, the
Communication transfer: Blind tr Ensure that a Transferor can suc the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	nmunicat REFER re	ion with the tran equest to the Tra	NOT (PICS 4.7.1/4 OR PICS 4.7.1/5) ing call. Insferee set on hold before and ansferee is sent, the
Communication transfer: Blind tr Ensure that a Transferor can suc the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	nmunicat REFER re	ion with the tran equest to the Tra	PICS 4.7.1/5) Ing call. Insferee set on hold before and ansferee is sent, the
Communication transfer: Blind tr Ensure that a Transferor can suc the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	nmunicat REFER re	ion with the tran equest to the Tra	ng call. Isferee set on hold before and ansferee is sent, the
Communication transfer: Blind tr Ensure that a Transferor can suc the Transferor is notified about th communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	nmunicat REFER re	ion with the tran equest to the Tra	nsferee set on hold before and ansferee is sent, the
Ensure that a Transferor can suc the Transferor is notified about th communication between Transfer originating communication. <b>SIP header values:</b> REFER 1: Refer-To contains <b>ISC</b> Referred-By contains <b>I</b> REFER 2: Refer-To contains <b>ECT</b> Referred-By contains <b>I</b>	cessfully transfer the con e processing. After the R or and Transferee is tern <b>#3</b> URI; method=invite <b>SC#1</b> URI	nmunicat REFER re	ion with the tran equest to the Tra	nsferee set on hold before and ansferee is sent, the
communication between Transfer originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	#3 URI; method=invite SC#1 URI			
originating communication. SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains ECT Referred-By contains I	#3 URI; method=invite SC#1 URI	minated.	The Transferee	was the initiator of the
SIP header values: REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains EC Referred-By contains I	SC#1 URI			
REFER 1: Refer-To contains ISC Referred-By contains I REFER 2: Refer-To contains EC Referred-By contains I	SC#1 URI			
Referred-By contains I REFER 2: Refer-To contains EC Referred-By contains I	SC#1 URI			
REFER 2: Refer-To contains ECT Referred-By contains I				
Referred-By contains I	Concion Identifier LIDI	mothod	-invite	
		, method		
INVITE 3: Request URI = ECT Set				
INVITE 4: Request URI = ISC#3				
NOTIFY(100):Event contains refe				
	active;expires=(any va	alue)		
	ontains SIP/2.0 100 Tryin			
NOTIFY(200):Event contains refe	er	-		
	ontains SIP/2.0 200 OK			
	terminated;reason=nore	source		
Comments:	10 T		100 //0	100 //0
ISC#1	AS Transferor		ISC#2	ISC#3
INVITE ←		←	INVITE 1	
180 Ringing →		÷	180 Ringing	
200 OK (INVITE) →		→	200 OK (INVITI	E)
ACK ←		←	ACK	
INVITE 2 (sendonly) → 200 OK (recvonly) ←		<b>→</b>	INVITE (sendor	
200 OK (recvonly) ← ACK →		← →	200 OK (recvor ACK	11y)
ACK 7		7	ACK	
REFER 1 →	REFER			
		→	REFER 2	
	202 Accepted	←	202 Accepted	
202 Accepted +	202 Accepted			
BYE →		→	BYE	
200 OK (BYE) 🗧 🗲		←	200 OK (BYE)	
		-		
NOTIFY(100)		<del>(</del>	NOTIFY(100)	X
200 OK NOTIFY →		→ ∠	200 OK NOTIF	ř
	INVITE INVITE 4	← →	INVITE 3	→ INVITE
	180 Ringing	<b>7</b> ←		<ul> <li>✓ INVITE</li> <li>✓ 180 Ringing</li> </ul>
	180 Ringing	<b>←</b> →	180 Ringing	
	200 OK	÷		← 200 OK
	200 OK	÷	200 OK	- 200 010
				ACK -> ACK
NOTIFY(200)		←	NOTIFY(200)	
200 OK NOTIFY →		→	200 OK NOTIF	
	Apply post t			nication ISC#2 with ISC#3

TSS Netw/TransferorAS Test purpose Communication transfer:	Consultative tra	TP ECT_N01_009 nsfer. Transfere		Reference 4.5.2.4 originator of the	PICS 4 PICS 4 NOT (F F	.5.1/2 .7.1/3 PICS PICS	3 AND 4.7.1/4 OR 4.7.1/5)
Ensure that a Transferor the Transferor is notified target set on hold. The Tr successful session betwee Transferor. The Transfero <b>SIP header values:</b> REFER 1: Refer-To conta <b>fror</b> Referred-By co REFER 2: Refer-To conta Referred-By co INVITE 3: Request URI = INVITE 4: Request URI = Replaces: <b>call</b> Require: repla Referred-By co NOTIFY(100):Event cont	can successfully about the process ransferor refers th een Transferee an or was the initiato ains ISC#3 URI; n n-tag%3DS1ℜ ontains ISC#1 UR ains ECT Session Id ECT Session Id ECT Session Id ISC#3 URI; -id1;to-tag=S1;fr ces ontains ISC#1 UR ains refer;	transfer the com sing. The Transfe e Transferee to d Transfer targe <u>r of the originatir</u> nethod=invite?R quire=replaces <b>I Identifier URI</b> ; entifier URI om-tag=S1	munic eror h estab et, the ng con eplace metho	ation with the tra as a session with lish a session to sessions of the nmunication. es= <b>call-id1</b> %3B <b>t</b>	ansferee Transfer the Tran Transfer	set o eree or ar 3D <b>S</b> 1	on hold before and and the Transfer target. After the e released by the I%3B
message/sipfr NOTIFY(200):Event cont message/sipfr Subscription-S	itate: active;expli ag contains SIP/2 ains refer; ag contains SIP/2 itate: terminated;r	.0 100 Trying .0 200 OK					
Comments: ISC#1	AS	Fransferor		ISC#2			ISC#3
INVITE 1 180 Ringing 200 OK (INVITE) ACK	→ ← + →		<b>→                                    </b>	INVITE 180 Ringing 200 OK (INVITI ACK	E)		
INVITE (sendonly) 200 OK (recvonly) ACK	→ ← →		→ ← →	INVITE (sendor 200 OK (recvor ACK			
INVITE 2 180 Ringing 200 OK (INVITE) ACK	+<+<+					<b>* * *</b>	INVITE 180 Ringing 200 OK (INVITE) ACK
INVITE (sendonly) 200 OK (recvonly) ACK	→ ← →					→ <del>(</del> →	INVITE (sendonly) 200 OK (recvonly) ACK
REFER 1		REFER 2 202 Accepted	→ ←	REFER 202 Accepted			
202 Accepted INVITE (inactive) 200 OK (inactive) ACK	<ul> <li>← 202 Ac</li> <li>←</li> <li>→</li> <li>←</li> </ul>	cepted	<b>↔</b> →	INVITE (inactiv 200 OK (inactiv ACK			
NOTIFY(100) 200 OK NOTIFY	<b>←</b> →	INVITE INVITE 4	+ <b>+</b> + <b>+</b>	NOTIFY(100) 200 OK NOTIF INVITE 3	Y	<b>→</b>	INVITE
		180 Ringing 180 Ringing	← →	180 Ringing		÷	180 Ringing
		200 OK 200 OK	← →	200 OK	101	<b>←</b>	200 OK
NOTIFY(200)	÷		←	NOTIFY(200)	ACK	<b>→</b>	ACK

TSS		TP	Reference	Selection expression
Netw/TransferorAS		ECT_N01_005	4.5.2.4	PICS 4.5.1/2 AND
				PICS 4.7.1/3 AND
				NOT (PICS 4.7.1/4 OR
				PICS 4.7.1/5)
200 OK NOTIFY	<b>→</b>	<b>→</b>	200 OK NOT	IFY
BYE	←			← BYE
200 OK (BYE)	<b>→</b>			→ 200 OK (BYE)
BYE	<b>→</b>			→ BYE
200 OK (BYE)	←			<ul> <li>200 OK (BYE)</li> </ul>
			Comm	nunication ISC#2 with ISC#3
		Apply post test r	routine	

TSS			Referenc	ce Selection expression PICS 4.5.1/2 AND
Netw/TransferorAS		ECT_N01_006	6 4.5.2.4	PICS 4.5.1/2 AND PICS 4.7.1/3 AND NOT (PICS 4.7.1/4 OR PICS 4.7.1/5)
the Transferor is notified a target. The Transferor ref session between Transfer Transferor. The Transfere SIP header values: REFER 1: Refer-To conta to-tag%3D Referred-By cc INVITE 3: Request URI = Referred-By cc INVITE 4: Request URI = Replaces=call Require: replac Referred-By cc NOTIFY(100):Event conta Subscriptio	can success about the pro- ers the Tran ree and Tran ee was the ir sins ISC#3 L S1%3Bfrom ontains ISC# S1%3Bfrom ontains ISC# ECT Sessi ontains ISC# ISC#3 URI -id1;to-tag= ces ontains ISC# ains refer n-State: act opfrag contai	fully transfer the composessing. The Transferster to establish a state of the origination	munication wit eror has a session to the d, the session ng communica eplaces= <b>call-i</b> =replaces method=invite	th the transferee set on hold before and asion with Transferee and the Transfer Transfer target. After the successful as of the Transferor are released by the ation. id1%3B
message/s	pfrag contai	ns SIP/2.0 200 OK ninated;reason=nores	ource	
Comments: ISC#1		AS Transferor	ISC#2	ISC#3
INVITE 180 Ringing 200 OK (INVITE) ACK	$\begin{array}{c} \leftarrow \\ \rightarrow \\ \rightarrow \\ \leftarrow \end{array}$		<ul> <li>← INVITE 1</li> <li>→ 180 Ringi</li> <li>→ 200 OK (I</li> <li>← ACK</li> </ul>	ing
INVITE (sendonly) 200 OK (recvonly) ACK	→ ← →		<ul> <li>→ INVITE (s</li> <li>← 200 OK (r</li> <li>→ ACK</li> </ul>	
INVITE 2 180 Ringing 200 OK (INVITE) ACK	<b>* + + *</b>			<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK (INVITE)</li> <li>→ ACK</li> </ul>
INVITE (sendonly) 200 OK (recvonly) ACK	→ ← →			<ul> <li>→ INVITE (sendonly)</li> <li>← 200 OK (recvonly)</li> <li>→ ACK</li> </ul>
REFER 1			<ul> <li>→ REFER 2</li> <li>← 202 Acce</li> </ul>	
202 Accepted INVITE (inactive) 200 OK (inactive) ACK	<ul> <li>← 20</li> <li>←</li> <li>→</li> <li>←</li> </ul>		<ul> <li>► INVITE (ir</li> <li>→ 200 OK (i</li> <li>← ACK</li> </ul>	inactive)
NOTIFY(100) 200 OK NOTIFY	← →	INVITE	<ul> <li>← NOTIFY(1</li> <li>→ 200 OK N</li> <li>← INVITE 3</li> <li>→</li> </ul>	NOTIFY
		180 Ringing 180 Ringing 200 OK	← ➔ 180 Ringi	<ul> <li>180 Ringing</li> </ul>

TSS		TP	Reference	Selection expression
Netw/TransferorAS		ECT_N01_006	4.5.2.4	PICS 4.5.1/2 AND
				PICS 4.7.1/3 AND
				NOT (PICS 4.7.1/4 OR
				PICS 4.7.1/5)
			•	ACK -> ACK
NOTIFY(200)	+	+	NOTIFY(200)	1
200 OK NOTIFY	<b>→</b>	<b>→</b>	200 OK NOTI	IFY
BYE	←			🗲 BYE
200 OK (BYE)	<b>→</b>			→ 200 OK (BYE)
BYE	<b>→</b>	→	BYE	
200 OK (BYE)	+	+	200 OK (BYE	)
			Comr	munication ISC#2 with ISC#3
		Apply post test	t routine	

TSS		TP	Re	eference	Selection expression
Netw/TransferorAS		ECT_N01_007	4.	5.2.4.1.2.2	PICS 4.5.1/2
Test purpose					
The method in the Refer-To h	eader is not th	ne 'INVITE' method.			
Ensure that the REFER reque	st is rejected	if the Method in the	Refer-T	o header used	in this dialogue is not the
INVITE method e.g. BYE.					
SIP header values:					
REFER: Refer-To contains I		ethod=BYE			
Referred-By contair	ns <b>ISC#1</b> URI				
Comments:					
ISC#1	A	S Transferor	IS	C#2	ISC#3
	->		<b>.</b>		
INVITE	→ ←			0 Ringing	
180 Ringing 200 OK (INVITE)	<del>(</del>			0 Kinging 0 OK (INVITE	)
ACK	→		→ A0		)
Aon					
INVITE (sendonly)	→		→ IN	VITE (sendonl	
200 OK (recvonly)	÷			0 OK (recvonl	<b>J</b> /
ACK	→			<b>`</b>	,
-	C#1 transfe	s ISC#2 to ISC#3			
REFER	→ REFER				
4xx or 5xx or 6xx Response	← 4xx or 5	xx or 6xx Response	•		
· ·		Apply post test r			

TSS		TP		Reference	Selection expression
		ECT_N01_008		4.5.2.4.1.2.2	PICS 4.5.1/2
Test purpose					
The request-URI is not targeted					
Ensure that the ECT simulation	service of	loes not apply if the Re	ques	st URI is not the Trans	feree URI. The REFER
request is rejected.					
SIP header values:					
REFER: Request URI contain	ed the ot	her URI (PIXIT)			
		SC#3, method=invite			
Referred-By contains	s SIP or to	el URI of ISC#1			
Comments:					
ISC#1		AS Transferor		ISC#2	ISC#3
INVITE	<b>→</b>		_	INVITE	
180 Ringing	+			180 Ringing	
200 OK (INVITE)	÷			200 OK (INVITE)	
ACK	<b>→</b>		<b>→</b>	ACK	
INVITE (sendonly)	→		→	INVITE (sendonly)	
200 OK (recvonly)	←		←	200 OK (recvonly)	
ACK	<b>→</b>		→	ACK	
REFER	→	REFER			
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx			
		Response			
		Apply post test re	outir	ne	

TSS	TP	Reference	Selection expression
Netw/TransferorAS	ECT_N01_009	4.5.2.4.1.2.2	PICS 4.5.1/2
Test purpose			
There is no method parameter contained i	in the Refer-To heade	<i>r.</i>	
Ensure that the REFER request is rejected	d if there is no Method	parameter contained in th	ne Refer-To header.
SIP header values:			
REFER: Refer-To To contains ISC#3 UF	RI (no method parame	ter)	
Referred-By contains ISC#1 UF	RI		
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
INVITE → 180 Ringing ← 200 OK (INVITE) ← ACK →		<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK (INVITE)</li> <li>→ ACK</li> </ul>	
INVITE (sendonly) 200 OK (recvonly) ACK → ISC#1 transfe	ers ISC#2 to ISC#3	<ul> <li>→ INVITE (sendonly)</li> <li>← 200 OK (recvonly)</li> <li>→ ACK</li> </ul>	
REFER → REFER 4xx or 5xx or 6xx Response ← 4xx or	R 5xx or 6xx Response Apply post test re	outine	

T00	70		
TSS		Reference	Selection expression
Netw/TransferorAS	ECT_N01_010	4.5.2.4.2.3	PICS 4.5.1/2 AND
			NOT (PICS 4.7.1/4 OR
			PICS 4.7.1/5)
Test purpose			
In the REFER request, the Referred-			
A Referred-By header is available in t			
contains a valid identity of the served		e the Referred-By h	eader with a valid value matching
the REFER request's P-Asserted-Ide	ntity.		
SIP header values:			
REFER 1: Request URI: ISC#2			
Referred-By contains ISC#	x URI (PIXIT any value	e)	
P-Asserted-Identity=ISC#1			
REFER 1: Request URI: ISC#2			
Referred-By contains ISC#	1 URI		
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
Establis	hment of session #1		
Session #1 on hole	d		
Establis	hment of session #2		
Session #2 on hole	d		
ISC#1 tra	nsfers ISC#2 to ISC#3	•	
REFER 1 🔁 RI	EFER		
	REFER 2	→ REFER	
	202 Accepted	← 202 Accepted	1
202 Accepted 🗧 🗧 20	)2 Accepted		
INVITE (inactive)		← INVITE (inacti	ive)
200 OK (inactive)		→ 200 OK (inact	
ACK 🗲		← ACK	
NOTIFY(100)		← NOTIFY(100)	1
200 OK NOTIFY ->		→ 200 OK NOTÍ	
	INVITE	← INVITE 3	
	INVITE 4	→	→ INVITE
	180 Ringing	+	<ul> <li>180 Ringing</li> </ul>
		➔ 180 Ringing	
		←	← 200 OK
		→ 200 OK	
	200 0.1		АСК 🗲 АСК
NOTIFY(200)		← NOTIFY(200)	
200 OK NOTIFY		→ 200 OK NOTI	
BYE →		→ BYE	
200 OK (BYE)		← 200 OK (BYE)	
	Apply post tes	•	77

TSS		ТР	Reference	Selection e	expression
Netw/TransferorAS		ECT_N01_011	4.5.2.4.2.3	PICS 4.5.1	
					4.7.1/4 OR
					4.7.1/5)
Test purpose		I		I	,
The REFER request do	es not contain	a Referred-By header.			
If no Referred-By head				ler is added tha	t matches the
REFER method's P-As		·			
SIP header values:					
REFER 1: Request UR	: ISC#2				
Referred-By	not present				
	dentity=ISC#1				
REFER 1: Request UR	: ISC#2				
Referred-By	contains ISC#1	URI			
Comments:					
ISC#1		AS Transferor	ISC#2		ISC#3
	Establish	ment of session #1			
Sess	on #1 on hold				
	Establish	ment of session #2			
Sess	on #2 on hold				
	ISC#1 tran	sfers ISC#2 to ISC#3	5		
REFER 1	→ RE	FER			
			→ REFER		
			← 202 Accepte	d	
202 Accepted		2 Accepted			
INVITE (inactive)	+		← INVITE (inac		
200 OK (inactive)	<b>→</b>		➔ 200 OK (inac	ctive)	
ACK	+		← ACK		
	_				
NOTIFY(100) 200 OK NOTIFY	← →		<ul> <li>← NOTIFY(100</li> <li>→ 200 OK NOT</li> </ul>	/	
200 OK NOTIFY	7		<ul> <li>→ 200 OK NOT</li> <li>← INVITE 3</li> </ul>	IFY	
		INVITE 4		<b>→</b>	INVITE
		180 Ringing	→ ←	→ ←	180 Ringing
			→ 180 Ringing	~	TOU KINGING
		0 0		+	200 OK
			► 200 OK	T	200 UN
		200 OK	200 UK	АСК 🗲	ACK
NOTIFY(200)	+		← NOTIFY(200		
200 OK NOTIFY	★		<ul> <li>→ 200 OK NOT</li> </ul>		
BYE	→ →		→ BYE		
200 OK (BYE)	<del>,</del>		<ul><li>✓ BTE</li><li>✓ 200 OK (BYI</li></ul>	=)	
	•	Apply post tes		-)	

TSS	ТР	Reference	Selection expression
Netw/TransferorAS	ECT_N01_012		PICS 4.5.1/2 AND
			NOT (PICS 4.7.1/4 OR
			PICS 4.7.1/5)
Test purpose			· · · · · · · · · · · · · · · · · · ·
	er in the received <b>INVITE</b> does not	contain the valid iden	tity of the served user.
	r is available in the INVITE request		
			header with a valid value matching
the REFER request's P			0
SIP header values:	•		
REFER 1: Refer-To cor	ntains ISC#3 URI; method=invite		
	dentity=ISC#1		
	= ECT Session Identifier URI		
Referred-By	contains ISC#x URI (PIXIT any va	llue)	
INVITE 4: Request UR			
Referred-By	contains ISC#1 URI		
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
	Establishment of session #	<b>#1</b>	
Sess	ion #1 on hold		
	Establishment of session #	<b>#2</b>	
Sess	ion #2 on hold		
	ISC#1 transfers ISC#2 to ISC	\$#3	
REFER 1	→ REFER		
	REFER 2	→ REFER	
	202 Accepted	← 202 Accepte	ed
202 Accepted	← 202 Accepted	_	
INVITE (inactive)	+	← INVITE (inad	
200 OK (inactive)	<b>→</b>	→ 200 OK (ina	ctive)
ACK	<del>(</del>	← ACK	
NOTIFY(100)	← →	← NOTIFY(100	
200 OK NOTIFY	-	→ 200 OK NO <sup>-</sup> ← INVITE 3	I IF Y
		← INVITE 3 →	
	INVITE 4		
	180 Ringing	<ul> <li>←</li> <li>→ 180 Ringing</li> </ul>	← 180 Ringing
	180 Ringing 200 OK		← 200 OK
	200 OK 200 OK	► 200 OK	₹ 200 UK
	200 OK	- 200 UN	АСК 🗲 АСК
NOTIFY(200)	۲	← NOTIFY(200	
200 OK NOTIFY	→	<ul> <li>→ 200 OK NO<sup>-</sup></li> </ul>	
	Apply post	200 01110	

TSS		TP	Rofe	erence	Selecti	on ev	pression
Netw/TransferorAS		ECT_N01_013	-	2.4.2.1	PICS 4.		
Netw/HansleiorAo			7.0.	2.7.2.1			.7.1/4 OR
							.7.1/5)
Test purpose						100 4	
The received <b>INVITE</b> d	nes not contain :	Referred-Ry heade	⊐ <i>r</i>				
If no Referred-By head				arred-Ry heade	r is adde	d that	t matches the
REFER request's P-As					115 4446		
SIP header values:	Seried Identity.						
REFER 1: Refer-To cor	ntains <b>ISC#3</b> UR	I <sup>.</sup> method=invite					
	dentity=ISC#1	, 1100100-11110					
INVITE 3: Request UR		Identifier URI					
Referred-By							
INVITE 4: Request UR							
	contains ISC#1	URI					
Comments:							
ISC#1	Δ	S Transferor		ISC#2			ISC#3
	Establish	nent of session #1					
Sess	ion #1 on hold						
	Establish	nent of session #2					
Sess	ion #2 on hold						
	ISC#1 trans	fers ISC#2 to ISC#	3				
REFER 1	→ REF						
		REFER 2	→	REFER			
		202 Accepted	÷	202 Accepted			
202 Accepted		Accepted	-				
INVITE (inactive)	<del>(</del>		÷	INVITE (inacti			
200 OK (inactive)	→ ←		<b>→</b>	200 OK (inact	ive)		
ACK	<b>F</b>		÷	ACK			
NOTIFY(100)	L		←				
200 OK NOTIFY	← →		÷	NOTIFY(100) 200 OK NOTI	EV		
		INVITE	÷	INVITE 3			
		INVITE 4	À			→	INVITE
		180 Ringing	÷			÷	180 Ringing
		180 Ringing	÷	180 Ringing		•	roorkinging
		200 OK	÷	.co i inging		←	200 OK
		200 OK	÷	200 OK		-	
		200 010	-		ACK	→	ACK
NOTIFY(200)	←		←	NOTIFY(200)	-		
200 OK NOTIFY	<b>→</b>		→	200 OK NOTI			
BYE	<b>→</b>		→	BYE			
200 OK (BYE)	÷		←	200 OK (BYE)	)		
		Apply post te	st rou				

TSS		TP	Deference	Selection expression
Netw/TransferorAS		ECT_N01_014	Reference 4.5.2.4.1.2.3,	Selection expression PICS 4.5.1/2 AND
Netw/ HansleiorAS			4.7.2.9.7/ [3]	PICS 4.7.1/2 AND
			4.7.2.3.77 [0]	PICS 4.7.1/4
Test purpose				
	Fransferor A	AS receives a 403 Forbi	dden indicating the 7	ransferee does not support the
Ensure that three party c	all control a	applies at the Transferor	AS when a 403 For	bidden is received upon a REFER
was sent to the Transfere	ee:			
<ul> <li>A 202 Accepted</li> <li>A NOTIFY conta accepted.</li> </ul>			to 'SIP/2.0 100 Tryin	g' if the REFER request is
An INVITE is se		ansfer Target containing ie identity of the Transfe		entity of the Transferee and the
				aining the P-Asserted_identity of
		e Referred-By header w		
				f the refered communication is
SIP header values:				
REFER 1: Refer-To conta Referred-By c				
INVITE 3: Request URI =			2, Referred-By=ISC#	<i>‡</i> 1
INVITE 4: Request URI =	= <b>ISC#2</b> , P-			
NOTIFY(100):Event cont				
		tive;expires=(any valu		
		ains SIP/2.0 100 Trying		
NOTIFY(200):Event cont		ains <b>SIP/2.0 200 OK</b>		
		rminated;reason=nores	ource	
Comments:				
ISC#1		AS Transferor	ISC#2	ISC#3
	Establ	alument of seasion #4		
1		shment of session #1		
Sess	sion #1 on			
Sess	sion #1 on			
	sion #1 on	hold REFER REFER		
REFER 1	sion #1 on →	hold REFER REFER ➡ 403 Forbidden ◀		
	sion #1 on →	hold REFER 403 Forbidden € 202 Accepted	<ul> <li>403 Forbidden</li> </ul>	
REFER 1	sion #1 on ➔	hold REFER 403 Forbidden € 202 Accepted 3 party call con	<ul> <li>403 Forbidden</li> <li>trol applies</li> </ul>	→ INVITE
REFER 1	sion #1 on ➔	hold REFER 403 Forbidden € 202 Accepted 3 party call con INVITE 3 →	<ul> <li>403 Forbidden</li> <li>trol applies</li> </ul>	→ INVITE 180 Ringing
REFER 1	sion #1 on ➔	hold REFER 403 Forbidden € 202 Accepted 3 party call con INVITE 3 ₽ 180 Ringing €	<ul> <li>403 Forbidden</li> <li>trol applies</li> </ul>	<ul> <li>180 Ringing</li> </ul>
REFER 1	sion #1 on ➔	hold REFER 403 Forbidden € 202 Accepted 3 party call con INVITE 3 →	• 403 Forbidden trol applies	<ul> <li>180 Ringing</li> </ul>
REFER 1 202 Accepted NOTIFY(100)	sion #1 on → F ← 2	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK J NOTIFY(100)	• 403 Forbidden trol applies	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted	sion #1 on → F ← 2	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK	• 403 Forbidden trol applies	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100)	sion #1 on → F ← 2	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100)	sion #1 on → F ← 2	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY	sion #1 on → F ← 2 ←	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	sion #1 on → F ← 2 ←	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK ACK NOTIFY(200)	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY	sion #1 on → F ← 2 ←	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	sion #1 on → F ← 2 ← →	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK ACK NOTIFY(200)	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY	sion #1 on → F ← 2 ← → →	hold REFER 403 Forbidden 202 Accepted 3 party call com INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200) 200 OK NOTIFY	<ul> <li>403 Forbidden</li> <li>trol applies</li> <li>INVITE</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>

700						· · · · ·
<b>TSS</b> Netw/TransferorAS		<b>TP</b> ECT_N01_015		Reference 4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4.	on expression 5.1/2 AND 7.1/1 AND 7 1/4
Test purpose					- 100 <del>-</del> .	7.1/4
Blind transfer. The Tr	ansferor AS re	ceives a 403 Forbidde	en indi	cating the Transfer	ee does no	ot support the
REFER method.		к <i>са</i> <b>т</b> с		100 E 111		
Ensure that three party was sent to the Transfe		plies at the Transferor	' A5 W	nen a 403 Forbidd	en is receiv	led upon a REFER
	ed for the REF	ER is sont				
		sage/sipfrag body set	to 'SIF	2/2 0 100 Trying' if t	the REFE	? request is
accepted.	manning a moo	bago/olphag boay oor		72.0 100 Hynig in 1		
	sent to the Tra	nsfer Target containing	a the	P-Asserted identity	of the Tra	nsferee and the
		identity of the Transfe		_ ,		
		, a reINVITE is sent to				serted_identity of
		Referred-By header w				
	ntaining a mes	sage/sipfrag body set	to 'SI	P/2.0 200 OK' if the	refered co	mmunication is
established. SIP header values:						
REFER 1: Refer-To co	ntains ISC#3	IRI: method-invite				
Referred-By	contains <b>ISC#</b>	1 URI				
INVITE 3: Request UR			2. Rei	ferred-By=ISC#1		
INVITE 4: Request UR						
NOTIFY(100):Event co						
		ive;expires=(any valu				
		ns SIP/2.0 100 Trying	3			
NOTIFY(200):Event co		ns <b>SIP/2.0 200 OK</b>				
		ninated;reason=nores	ource			
Comments:			04100			
ISC#1		AS Transferor		ISC#2		ISC#3
		hment of session #1				
	Session #1 on	hold				
REFER 1	→ RI	EFER				
		REFER	→	REFER		
		403 Forbidden	←	403 Forbidden		
202 Accepted	← 20	2 Accepted				
BYE	<b>→</b>					
200 OK (BYE)	←					
		3 party call con	_	pplies	<b>_</b>	
		INVITE 3	→ ←		→ ←	INVITE
		180 Ringing 200 OK	÷		÷	180 Ringing 200 OK
		ACK	÷		÷ →	ACK
NOTIFY(100)	←	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-		-	
200 OK NOTIFY	→					
1			→			
		INVITE 4	-	INVITE		
		200 OK	←	200 OK		
		200 OK ACK				
NOTIFY(200)		200 OK ACK DTIFY(200)	←	200 OK		
NOTIFY(200) 200 OK NOTIFY		200 OK ACK	<b>←</b> →	200 OK ACK		

TSS		ТР		Reference	Salaati	on expression
Netw/TransferorAS		ECT_N01_016	3	4.5.2.4.1.2.3,		5.1/2 AND
		201_101_010	,	4.7.2.9.7/ [3]		7.1/3 AND
					PICS 4.	
Test purpose Consultative transfer. The T the REFER method. Ensure that three party call co was sent to the Transferee: • A 202 Accepted for t • A NOTIFY containin accepted • A reINVITE is sent to Referred-By header • After the 200 OK is to the Transfer Target to • A NOTIFY containin established. SIP header values:	ontrol applies a the REFER is a g a message/s o the Transfer with the identi received, a rell and the Referr	at the Transfero sent. sipfrag body set Target containi ty of the Transf NVITE is sent to ed-By header v	or AS w to 'SII ng the eror. o the T vith the	vhen a 403 Forbidde P/2.0 100 Trying' if th P-Asserted_identity ransferee containing identity of the Tran	iransferee on is receiv ne REFER of the Tra g the P-As sferor.	does not support ved upon a REFER R request is ansferee and the sserted_identity of
REFER 1: Refer-To contains	ISC#3 URI:me	thod=invite?Re	places	=call-id1%3Bto-ta	a%3D <b>S1</b> %	53B
from-ta	g%3D <b>S1</b> &Req	uire=replaces	1.0000			
Referred-By contain						
INVITE 3: Request URI = <b>ISC</b> INVITE 4: Request URI = <b>ISC</b>						
NOTIFY(100):Event contains			-0, IXC	loneu-by−loo#1		
Subscription-S	tate: active;ex					
message/sipfra		P/2.0 100 Tryin	g			
NOTIFY(200):Event contains message/sipfra		2/2 0 200 OK				
Subscription-Si			source			
Comments:						
ISC#1	-	ransferor		ISC#2		ISC#3
	Establishmen on #1 on hold	t of session #1	l			
		t of session #2	2			
Sessio	on #2 on hold					
REFER 1	→ REFER	REFER	→	REFER		
	40	)3 Forbidden	÷	403 Forbidden		
202 Accepted	← 202 Acc	epted				
	:	3 party call co		pplies		
		INVITE 3 180 Ringing	→ ←		→ ←	INVITE 180 Ringing
		200 OK	+ +		+ +	200 OK
		ACK	→		→	ACK
NOTIFY(100)	← NOTIFY	(400)				
200 OK NOTIFY	<ul><li>→ 200 OK</li></ul>					
200 OK NOTIFY			→	INVITE		
200 OK NOTIFY		NOTIFY INVITE 4 200 OK	←	200 OK		
	→ 200 OK	NOTIFY INVITE 4 200 OK ACK				
NOTIFY(200)	<ul> <li>→ 200 OK</li> <li>← NOTIFY</li> </ul>	NOTIFY INVITE 4 200 OK ACK (200)	←	200 OK		
	→ 200 OK	NOTIFY INVITE 4 200 OK ACK (200)	←	200 OK		
NOTIFY(200) 200 OK NOTIFY BYE(S1)	<ul> <li>→ 200 OK</li> <li>← NOTIFY</li> <li>→ 200 OK</li> <li>→ BYE</li> </ul>	NOTÍFY INVITE 4 200 OK ACK (200) NOTIFY	←	200 OK		
NOTIFY(200) 200 OK NOTIFY	<ul> <li>→ 200 OK</li> <li>← NOTIFY</li> <li>→ 200 OK</li> </ul>	NOTÍFY INVITE 4 200 OK ACK (200) NOTIFY	←	200 OK		
NOTIFY(200) 200 OK NOTIFY BYE(S1) 200 OK (BYE)	<ul> <li>→ 200 OK</li> <li>← NOTIFY</li> <li>→ 200 OK</li> <li>→ BYE</li> <li>← 200 OK</li> </ul>	NOTIFY INVITE 4 200 OK ACK (200) NOTIFY (BYE)	←	200 OK		
NOTIFY(200) 200 OK NOTIFY BYE(S1)	<ul> <li>→ 200 OK</li> <li>← NOTIFY</li> <li>→ 200 OK</li> <li>→ BYE</li> </ul>	NOTIFY INVITE 4 200 OK ACK (200) NOTIFY (BYE)	←	200 OK		

TSS		TP	Reference	Colooti	an averagaian
Netw/TransferorAS		ECT_N01_017	4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4	on expression .5.1/2 AND .7.1/2 AND .7.1/4
Test purpose		· ·			
Assured transfer. The	Transferor AS r	eceives a 501 Not impl	emented indicating the	Transferee	e does not support
the REFER method.					
Ensure that three party of		ies at the Transferor AS	S when a 501 Not imple	emented is	received upon a
REFER was sent to the					
	d for the REFER				
			e P-Asserted_identity	of the Tran	sferee and the
		entity of the Transferor			
			e Transferee containing		erted_identity of
	irget and the Re	eferred-By header with	the identity of the Trans	sferor.	
SIP header values:					
REFER 1: Refer-To cont					
	contains ISC#1		Deferred Dr. 100//4		
INVITE 3: Request URI INVITE 4: Request URI					
		serted-identity=ISC#3, I	Referred-By=ISC#1		
NOTIFY(100):Event con		e;expires=(any value)			
		SIP/2.0 100 Trying			
NOTIFY(200):Event con		5 011 / 2.0 100 Trying			
		SIP/2.0 200 OK			
		nated;reason=noresour	ce		
Comments:			00		
ISC#1	AS	Transferor	ISC#2		ISC#3
		ment of session #1			
S	ession #1 on h	old			
REFER 1	→ REFER				
KEFEK 1		REFER	REFER		
	501	Not implemented		ted	
202 Accepted		Not implemented  epted	501 Not implement	ted	
	501	Not implemented epted 3 party call contro	<ul> <li>501 Not implement</li> <li>I applies</li> </ul>		
	501	Not implemented epted 3 party call contro INVITE 3	501 Not implement	<b>→</b>	INVITE
	501	Not implemented epted 3 party call contro INVITE 3 180 Ringing	501 Not implement	→ +	180 Ringing
	501	Not implemented septed <b>3 party call contro</b> INVITE 3 180 Ringing 200 OK	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK	501 Not implement	→ +	180 Ringing
202 Accepted NOTIFY(100)	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK 7 (100)	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100)	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100)	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100)	501 ← 202 Acc	Not implemented septed 3 party call control INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4 200 OK	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100) 200 OK NOTIFY	501 ← 202 Acc ← NOTIFY → 200 OK	Not implemented septed 3 party call contro INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4 200 OK ACK ACK	501 Not implement applies INVITE 200 OK	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	501 ← 202 Acc ← NOTIFY → 200 OK ← NOTIFY	Not implemented septed 3 party call contro INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4 200 OK ACK 7(200)	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100) 200 OK NOTIFY	501 ← 202 Acc ← NOTIFY → 200 OK ← NOTIFY	Not implemented septed 3 party call contro INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4 200 OK ACK ACK	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY	501 ← 202 Acc ← NOTIFY → 200 OK ← NOTIFY → 200 OK	Not implemented septed 3 party call contro INVITE 3 180 Ringing 200 OK ACK 7(100) NOTIFY INVITE 4 200 OK ACK 7(200)	501 Not implement	+ + +	180 Ringing 200 OK
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	501 ← 202 Acc ← NOTIFY → 200 OK ← NOTIFY	Not implemented septed 3 party call contro INVITE 3 180 Ringing 200 OK ACK 7 (100) NOTIFY INVITE 4 200 OK ACK 7 (200) NOTIFY	501 Not implement	+ + +	180 Ringing 200 OK

TOO		TD	Deference	Coloction oversocion	
TSS			Reference	Selection expression	
Netw/TransferorAS		ECT_N01_018	4.5.2.4.1.2.3,	PICS 4.5.1/2 AND	
			4.7.2.9.7/ [3]	PICS 4.7.1/1 AND	
<b>—</b>				PICS 4.7.1/4	
Test purpose					
	ansferor AS re	ceives a 501 Not imple	mented indicating the T	ransferee does not support a	the
REFER method.					
		plies at the Transferor	AS when a 501 Not imp	plemented is received upon a	а
REFER was sent to the	Transferee:				
<ul> <li>A 202 Accepte</li> </ul>	ed for the REF	ER is sent.			
<ul> <li>An INVITE is s</li> </ul>	sent to the Tra	nsfer Target containing	the P-Asserted_identit	y of the Transferee and the	
		identity of the Transfer			
				ng the P-Asserted_identity o	of
			th the identity of the Tra		•
SIP header values:					
REFER 1: Refer-To cor	ntains ISC#3	JRI: method=invite			
	contains ISC#				
INVITE 3: Request URI			Referred-By-ISC#1		
INVITE 4: Request URI					
NOTIFY(100):Event cor		isseried-identity-ioo#c	, Referred-Dy=100#1		
		ive;expires=(any valu	۵		
		ins SIP/2.0 100 Trying	6)		
NOTIFY(200):Event cor		IIS SIFIZ.0 TOU Trying			
		ins SIP/2.0 200 OK			
	lion-State. ten	ninated;reason=noreso	burce		
Comments: ISC#1		AS Transferor	ISC#2	ISC#3	
130#1		shment of session #1	130#2	130#3	
e.	ession #1 on				
	2551011 #1 011	noiu			
REFER 1	→ REF	ED			
NEFER I			→ REFER		
	E 0			tod	
202 Accepted			← 501 Not implement	nea	
202 Accepted		Accepted			
BYE	<b>→</b>				
	→ ←	2 months coll com	und ann line		
BYE		3 party call cont			
BYE		INVITE 3	→		
BYE		INVITE 3 180 Ringing	→	<ul> <li>180 Ringing</li> </ul>	
BYE		INVITE 3 180 Ringing 200 OK	→ ← ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE)	÷	INVITE 3 180 Ringing 200 OK	→	<ul> <li>180 Ringing</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100)	<del>(</del>	INVITE 3 180 Ringing 200 OK	→ ← ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE)	÷	INVITE 3 180 Ringing 200 OK ACK	→ ← ← →	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100)	<del>(</del>	INVITE 3 180 Ringing 200 OK ACK	→ ← ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100)	<del>(</del>	INVITE 3 180 Ringing 200 OK ACK INVITE 4	→ ← ← →	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100)	<del>(</del>	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	<ul> <li>→</li> <li>→</li> <li>invite</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100)	← ← →	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	<ul> <li>→</li> <li>→</li> <li>→</li> <li>→</li> <li>NVITE</li> <li>←</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	
BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY	← → ← NOT	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	<ul> <li>→</li> <li>→</li> <li>→</li> <li>→</li> <li>NVITE</li> <li>←</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>	

TSS		ТР	Reference	Selection expression
Netw/TransferorAS		ECT_N01_019	4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4.5.1/2 AND PICS 4.7.1/3 AND
support the REFER meth Ensure that three party c: REFER was sent to the T • A 202 Accepted • A reINVITE is se Referred-By hea • After the 200 Of the Transfer Tar SIP header values: REFER 1: Refer-To conta fror Referred-By co INVITE 3: Request URI = INVITE 4: Request URI = INVITE 4: Request URI = NOTIFY(100):Event cont Subscription message/s	all control applie ransferee: for the REFER ent to the Transf ader with the ide (is received, a r rget and the Refe ains ISC#3 URI; n-tag%3DS1&R ontains ISC#1 U = ISC#3, P-Asse ains refer on-State: active; ipfrag contains S	s at the Transferor is sent. er Target containin ntity of the Transfe eINVITE is sent to erred-By header wi method=invite?Rep equire=replaces RI rted-Identity=ISC# rted-Identity=ISC# expires=(any valu SIP/2.0 100 Trying	Not implemented indication AS when a 501 Not implemented indication of the P-Asserted_identition ror. the Transferee containing the transferee conta	PICS 4.7.1/4 ng the Transferee does not plemented is received upon a ty of the Transferee and the ng the P-Asserted_identity of nsferor.
Comments: ISC#1 Ses	AS Establishn ssion #1 on hole	nent of session #2	ISC#2 1	ISC#3
REFER 1	→ REFER	REFER	<ul> <li>→ REFER</li> <li>← 501 Not implement</li> </ul>	ited
202 Accepted	← 202 Acc		trol applies ➔	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> <li>→ ACK</li> </ul>
NOTIFY(100) 200 OK NOTIFY	<ul> <li>← NOTIFY</li> <li>→ 200 OK</li> </ul>	NOTIFY	→ INVITE	
NOTIFY(200) 200 OK NOTIFY	<ul> <li>← NOTIFY</li> <li>→ 200 OK</li> </ul>	ACK		
BYE(S1) 200 OK (BYE)	<ul> <li>→ BYE</li> <li>← 200 OK</li> </ul>	(BYE)		
BYE 200 OK (BYE)	<ul> <li>← BYE(S2</li> <li>→ 200 OK</li> </ul>		st routine	

	TP	Reference	Selection expression
TSS Netw/TransferorAS	ECT_N01_020	4.5.2.4.1.2.3,	PICS 4.5.1/2 AND
Netw/ HansierorAS		4.7.2.9.7/ [3]	PICS 4.7.1/2 AND
		4.7.2.9.77 [3]	PICS 4.7.1/2 AND PICS 4.7.1/5
Test purpose			FIC3 4.7.1/5
Assured transfer. The Transf	eror AS initiate the special REI	ER handling procedur	es directly
			S has prior <b>knowledge</b> that <b>the</b>
Transferee is not allowed to			
<ul> <li>A 202 Accepted for th</li> </ul>		ie nel en memou.	
	sent to the Transferor containing	na a message/sinfrag h	ody set to 'SIP/2 0 100 Trying'
after the REFER requ		iy a messaye/sipitay b	ouy set to Sil /2.0 100 Hying
	he Transfer Target containing	the P Accorted identity	of the Transferred and the
	vith the identity of the Transfer		
	ceived, a reINVITE is sent to the		a the P Assorted identity of
	nd the Referred-By header with		
	sent to the Transferor containing		
	munication is confirmed.	ig a message/sipitag b	ouy set to SIF/2.0 200 OK
SIP header values:			
REFER 1: Refer-To contains IS	C#3 LIRI: method-invite		
Referred-By contains			
INVITE 3: Request URI = ISC		Referred-By-ISC#1	
INVITE 4: Request URI = ISC			
NOTIFY(100):Event contains r		Referred-Dy=100#1	
	te: active;expires=(any value	)	
	contains SIP/2.0 100 Trying	/	
NOTIFY(200):Event contains r			
	contains SIP/2.0 200 OK		
	te: terminated;reason=noresou	irce	
Comments:	ite: terminated;reason=noresot	ILCE	
Comments: ISC#1	AS Transferor	ISC#2	ISC#3
Comments: ISC#1	AS Transferor Establishment of session #1		ISC#3
Comments: ISC#1	AS Transferor		ISC#3
Comments: ISC#1 ISC#1 Session	AS Transferor Establishment of session #1 #1 on hold		ISC#3
Comments: ISC#1 Session REFER 1 →	AS Transferor Establishment of session #1 #1 on hold REFER		ISC#3
Comments: ISC#1 ISC#1 Session	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted	ISC#2	ISC#3
Comments: ISC#1 Session REFER 1 →	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr	ISC#2 ol applies	
Comments: ISC#1 Session REFER 1 →	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3	ISC#2 ol applies ➔	→ INVITE
Comments: ISC#1 Session REFER 1 →	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing	ISC#2 ol applies <del>}</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
Comments: ISC#1 Session REFER 1 →	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK	ISC#2 ol applies <del>}</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 Session REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK	ISC#2 ol applies <del>}</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK	ISC#2 ol applies <del>}</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 Session REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK	ISC#2 ol applies <del>}</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY	ISC#2 ol applies <del>}</del> <del>←</del> <del>←</del>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4	ISC#2 ol applies → ← ← → INVITE	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ←	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK	ISC#2 ol applies → + + + + + + + + + + + 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ← NOTIFY(100) ← 200 OK NOTIFY →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	ISC#2 ol applies → ← ← → INVITE	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ← NOTIFY(100) ← 200 OK NOTIFY →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200)	ISC#2 ol applies → + + + + + + + + + + + 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments: ISC#1 REFER 1 → 202 Accepted ← NOTIFY(100) ← 200 OK NOTIFY →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	ISC#2 ol applies → + + + + + + + + + + + 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments:         ISC#1         I           ISC#1         Session           REFER 1         →           202 Accepted         ←           NOTIFY(100)         ←           200 OK NOTIFY         →           NOTIFY(200)         ←           200 OK NOTIFY         →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200) 200 OK NOTIFY	ISC#2 ol applies → + + + + + + + + + + + 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments:         ISC#1         I           ISC#1         Session           REFER 1         →           202 Accepted         ←           NOTIFY(100)         ←           200 OK NOTIFY         →           NOTIFY(200)         ←           200 OK NOTIFY         →           BYE         →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200) 200 OK NOTIFY BYE	ISC#2 ol applies → + + + + + + + + + + + 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
Comments:         ISC#1         I           ISC#1         Session           REFER 1         →           202 Accepted         ←           NOTIFY(100)         ←           200 OK NOTIFY         →           NOTIFY(200)         ←           200 OK NOTIFY         →	AS Transferor Establishment of session #1 a #1 on hold REFER 202 Accepted 3 party call contr INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200) 200 OK NOTIFY	ISC#2	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>

TSS	ТР	Reference	Selectio	on expression
Netw/TransferorAS	ECT_N01_021	4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4.	5.1/2 AND 7.1/1 AND
Test purpose				
Blind transfer. The Transferor	AS initiate the special REFEF	R handling procedures	directly.	
Ensure that three party call cont	rol applies directly at the Tran	nsferor AS when the A	S has prior kn	owledge that the
Transferee is not allowed to re	eceive or does not support t	he REFER method:		
<ul> <li>A 202 Accepted for the</li> </ul>	REFER is sent.			
<ul> <li>A NOTIFY request is s after the REFER reque</li> </ul>	ent to the Transferor containing	ng a message/sipfrag	body set to 'S	P/2.0 100 Trying'
	e Transfer Target containing	the D Accerted identit	hy of the Trope	force and the
	th the identity of the Transfer			leiee and the
	eived, a reINVITE is sent to t		ing the P Acc	ntod identity of
	d the Referred-By header with			eneu_luentity of
	ent to the Transferor containing			
after the referred com		ng a message/sipirag	body set to Si	F/2.0 200 OK
SIP header values:	idnication is commed.			
REFER 1: Refer-To contains IS	C#3 LIRI: method-invite			
Referred-By contains				
INVITE 3: Request URI = ISC#3		Referred-By-ISC#1		
INVITE 4: Request URI = ISC#2				
NOTIFY(100):Event contains re		, Referred-Dy=100#1		
	e: active;expires=(any value	2)		
	contains SIP/2.0 100 Trying	•)		
NOTIFY(200):Event contains re				
	contains SIP/2.0 200 OK			
	e: terminated;reason=noreso	lice		
Comments:	· · · · · · · · · · · · · · · · · · ·			
ISC#1	AS Transferor	ISC#2	1	SC#3
Es	tablishment of session #1			
Session #	1 on hold			
REFER 1 →	REFER			
202 Accepted	202 Accepted			
BYE 🔶				
200 OK (BYE) 🗧 🗲				
200 OK (BYE)	3 party call cont	rol applies		
200 OK (BYE)		rol applies Ə	→	NVITE
200 OK (BYE)	INVITE 3		←	180 Ringing
200 OK (BYE)	INVITE 3	<b>&gt;</b>	←	
NOTIFY(100)	INVITE 3	→	←	180 Ringing
	INVITE 3	→	←	180 Ringing
NOTIFY(100)	INVITE 3 180 Ringing 200 OK ACK	→ ÷	<ul><li>←</li><li>←</li></ul>	180 Ringing
NOTIFY(100) <b>←</b>	INVITE 3 180 Ringing 200 OK ACK	→	<ul><li>←</li><li>←</li></ul>	180 Ringing 200 OK
NOTIFY(100) ←	INVITE 3 180 Ringing 200 OK ACK INVITE 4	→	<ul><li>←</li><li>←</li></ul>	180 Ringing 200 OK
NOTIFY(100)	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	NVITE	<ul><li>←</li><li>←</li></ul>	180 Ringing 200 OK
NOTIFY(100) ← 200 OK NOTIFY → NOTIFY(200) ←	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	<ul> <li>INVITE</li> <li>200 OK</li> </ul>	<ul><li>←</li><li>←</li></ul>	180 Ringing 200 OK
NOTIFY(100) ← 200 OK NOTIFY →	INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	<ul> <li>INVITE</li> <li>200 OK</li> </ul>	<ul><li>←</li><li>←</li></ul>	180 Ringing 200 OK

TSS	TP	Reference	Selection expression	on
Netw/TransferorAS	ECT_N01_022	4.5.2.4.1.2.3,	PICS 4.5.1/2 AND	011
		4.7.2.9.7/ [3]	PICS 4.7.1/3 AND	
			PICS 4.7.1/5	
Test purpose	Civiliate the exercis		a du una a alivra a thu	
<b>Consultative transfer</b> . The Transferor As Ensure that three party call control applies	S Initiate the special s directly at the Tran	I REFER handling proce	eaures airectiy. thes prior <b>knowledge</b> the	at <b>the</b>
<b>Transferee is not allowed</b> to receive or <b>o</b>			nas phor <b>knowledge</b> the	
A 202 Accepted for the REFER i				
A NOTIFY request is sent to the		ng a message/sipfrag b	ody set to 'SIP/2.0 100 Ti	rying'
after the REFER request is acce		5 5 7 5	,	, 0
A reINVITE is sent to the Transfer			y of the Transferee and th	he
Referred-By header with the ider				
After the 200 OK is received, a return the Transfer Target and the Defense of the Defense o				y of
<ul> <li>the Transfer Target and the Refe</li> <li>A NOTIFY request is sent to the</li> </ul>				NK'
after the referred communication		ng a message/sipilag b	ouy set to SIF/2.0 200 O	
SIP header values:				
REFER 1: Refer-To contains ISC#3 URI;				
Referred-By contains ISC#1 U				
INVITE 3: Request URI = ISC#3, P-Asser				
INVITE 4: Request URI = ISC#2, P-Asser NOTIFY(100):Event contains refer	tea-identity=ISC#3	, Keterrea-By=ISC#1		
Subscription-State: active;	expires=(any value	a)		
message/sipfrag contains		•)		
NOTIFY(200):Event contains refer	, ,			
message/sipfrag contains S				
Subscription-State: termina	ted;reason=noreso	urce		
Comments: ISC#1 AS	Transferor	ISC#2	ISC#3	
	nent of session #1	100#2	150#5	
Session #1 on hold				
Establishm	nent of session #2			
REFER 1→REFER202 Accepted€202 Acce	ontod			
	3 party call conti	rol applies		
	INVITE 3		→ INVITE	
	180 Ringing	÷	180 Ringing	g
	200 OK		← 200 OK	
	ACK	<b>→</b>	→ ACK	
NOTIFY(100)         ←         NOTIFY           200 OK NOTIFY         →         200 OK				
200 OK NOTIFY → 200 OK	NOTIFI			
	INVITE 4	→ INVITE		
	200 OK			
		→ ACK		
NOTIFY(200) ← NOTIFY				
200 OK NOTIFY → 200 OK	NOTIFY			
BYE → BYE				
200 OK (BYE)	(BYE)			
BYE	· /			
200 OK (BYE) → 200 OK	(BYE)			
	Apply post tes	_		

### 5.2.3 Actions at the Transferee UE

TSS	TP	Reference	Selection expression
User/Transferee	ECT_U02_001	4.5.2.5	PICS 4.5.1/1 AND
			(PICS 4.6.1/1
			OR PICS 4.6.1/2) AND
			PICS 4.6.1/5
Test purpose			
The User Equipment receives t	he request to establish a cor	nmunication to the	transfer target (Transferee
Blind/assured transfer)			
			uest was received containing a
			est sent by the UE is set to the URI
			e INVITE request.Ensure that a
			Trying' after the REFER request is
accepted.Ensure that a NOTIFY	request is sent containing a	a message/sipfrag b	body set to 'SIP/2.0 200 OK' after
the referred communication is c	onfirmed.		
SIP header values:			
REFER: Request URI: Gm#1			
Refer-To: contains G	m#3 URI;method=invite		
Referred-By: contain	s <b>Gm#2</b> URI		
NOTIFY(100):Event contains re	fer		
Subscription-State: a	ctive;expires=(any value)		
message/sipfrag con	tains SIP/2.0 100 Trying		
NOTIFY(200):Event contains re	fer		
message/sipfrag con	tains <b>SIP/2.0 200 OK</b>		
INVITE: Request URI: Gm#3			
Referred-By contains	5 <b>Gm#2</b> URI		

Comments: UE ( Gm#1)	Establishment of session	Test equipment ( Gm#2) #1 Session #1 on hold
REFER	<del>&lt;</del>	REFER
CASE A 202 Accepted (Session #1)	<b>→</b>	202 Accepted
NOTIFY(100)	→	NOTIFY(100)
200 OK NOTIFY	←	200 OK NOTIFY
INVITE(inactive/sendonly) ( <b>Session #1</b> )	→	INVITE
200 OK INVITE	←	200 OK INVITE(inactive/recvonly)
ACK	→	ACK
INVITE ( <b>Session #2</b> )	→	INVITE
180 Ringing	←	180 Ringing
200 OK INVITE	←	200 OK INVITE
ACK	→	ACK
NOTIFY(200)	→	NOTIFY(200)
200 OK NOTIFY	←	200 OK NOTIFY
CASE B NOTIFY(100) (Session #1) 200 OK NOTIFY	→ ←	NOTIFY(100) 200 OK NOTIFY
202 Accepted (Session #1)	<b>→</b>	202 Accepted
INVITE(inactive/sendonly) ( <b>Session #1</b> )	→	INVITE
200 OK INVITE	←	200 OK INVITE(inactive/recvonly)
ACK	→	ACK
INVITE ( <b>Session #2</b> )	→	INVITE
180 Ringing	←	180 Ringing
200 OK INVITE (Session #2)	←	200 OK INVITE
ACK	→	ACK
NOTIFY(200) (Session #1) 200 OK NOTIFY	→ ← Apply post test routine	NOTIFY(200) 200 OK NOTIFY

TSS	ТР	Reference	Selection expression
User/Transferee	ECT_U02_002	4.5.2.5	Selection expression PICS 4.5.1/1 AND PICS 4.6.1/3 AND PICS 4.6.1/5
Test purpose			1100 1101/10
The User Equipment receives the reques	st to establish a comi	munication to the tra	ansfer target (Transferee
consultative transfer)			Ũ Ń
Ensure that the UE establishes a sessior			
Refer-To header and a Referred-By head			
received in the Refer-To header. The rec			INVITE request. The Replaces
header escaped in the received REFER			
Ensure that a NOTIFY request is sent co	ntaining a message/s	siptrag body set to	SIP/2.0 100 Trying after the
REFER request is accepted. Ensure that a NOTIFY request is sent co	ntaining a massage/	sinfrag hady sat to '	SIR/2.0.200 OK' after the referred
communication is confirmed.	Intaining a message/	sipilay body set to	SIF/2.0 200 OK alter the relefted
SIP header values:			
REFER: Request URI: <b>Gm#1</b>			
Refer-To: contains <b>Gm#3</b> URI	: method=invite?Rep	laces= <anv value=""></anv>	%3Bto-tag%3D <anv tag<="" td="" to=""></anv>
	%3D <any from="" tag<="" td=""><td></td><td></td></any>		
Referred-By: contains Gm#2			
NOTIFY(100):Event contains refer			
Subscription-State: active;exp			
message/sipfrag contains SIP	/2.0 100 Trying		
NOTIFY(200):Event contains refer	12 0 200 01		
message/sipfrag contains SIP INVITE: Request URI: Gm#3	12.0 200 OK		
Referred-By contains <b>Gm#2</b> L	IRI		
Replaces: <any value="">;to-tag=</any>		=from-tag= <any fro<="" td=""><td>m tag values</td></any>	m tag values
Require: contains <b>replaces</b>			tag talder
Comments:			
UE ( Gm#1)		Test equ	ipment ( Gm#2)
	Establishment of		
	-		<sup>t</sup> 1 on hold
REFER	+	REFER	
CASE A	<b>→</b>	202 4 000	ntod
202 Accepted (Session #1)	7	202 Acce	pied
NOTIFY(100)	<b>→</b>	NOTIFY(	100)
200 OK NOTIFY	÷	200 OK N	,
INVITE(inactive/sendonly) (Session #1)	→	INVITE	
200 OK INVITE	+	200 OK I	NVITE(inactive/recvonly)
ACK	<b>→</b>	ACK	
INVITE (Session #2)	<b>→</b>	INVITE	
180 Ringing	<b>+</b>	180 Ring	
200 OK INVITE	+ +	200 OK I	NVITE
ACK	7	ACK	
NOTIFY(200)	<b>→</b>	NOTIFY(	200)
200 OK NOTIFY	÷	200 OK N	
-			
CASE B			
NOTIFY(100) (Session #1)	<b>→</b>	NOTIFY(	
	→ ←	NOTIFY( 200 OK N	
NOTIFY(100) (Session #1) 200 OK NOTIFY	+	200 OK Ì	NOTIFY
NOTIFY(100) (Session #1)			NOTIFY
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1)	<b>←</b> →	200 OK N 202 Acce	NOTIFY
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> )	← → →	200 OK N 202 Acce INVITE	NOTIFY pted
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE	← → + +	200 OK N 202 Acce INVITE 200 OK I	NOTIFY
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK	+ + + + +	200 OK N 202 Acce INVITE 200 OK I ACK	NOTIFY pted
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK INVITE ( <b>Session #2</b> )	← → + +	200 OK N 202 Acce INVITE 200 OK I ACK INVITE	NOTIFY pted NVITE(inactive/recvonly)
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK	+ + + + + + +	200 OK N 202 Acce INVITE 200 OK I ACK	NOTIFY pted NVITE(inactive/recvonly) ing
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK INVITE ( <b>Session #2</b> ) 180 Ringing	+ + + + + + +	200 OK N 202 Acce INVITE 200 OK I ACK INVITE 180 Ring	NOTIFY pted NVITE(inactive/recvonly) ing
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK INVITE ( <b>Session #2</b> ) 180 Ringing 200 OK INVITE ACK	+ + + + + + + + + + + + +	200 OK N 202 Acce INVITE 200 OK I ACK INVITE 180 Ring 200 OK I ACK	NOTIFY pted NVITE(inactive/recvonly) ing NVITE
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK INVITE ( <b>Session #2</b> ) 180 Ringing 200 OK INVITE ACK NOTIFY(200) (Session #1)	+ + + + + + + + + + + + + + + + + + +	200 OK N 202 Acce INVITE 200 OK I ACK INVITE 180 Ring 200 OK I ACK NOTIFY(	NOTIFY pted NVITE(inactive/recvonly) ing NVITE 200)
NOTIFY(100) (Session #1) 200 OK NOTIFY 202 Accepted (Session #1) INVITE(inactive/sendonly) ( <b>Session #1</b> ) 200 OK INVITE ACK INVITE ( <b>Session #2</b> ) 180 Ringing 200 OK INVITE ACK	¥ → →++++++	200 OK N 202 Acce INVITE 200 OK I ACK INVITE 180 Ring 200 OK I ACK NOTIFY( 200 OK N	NOTIFY pted NVITE(inactive/recvonly) ing NVITE 200)

TSS	TP	Reference	Selection expression
User/Transferee	ECT_U02_003	4.5.2.5 [1]	PICS 4.5.1/1 AND
			NOT PICS 4.6.1/5
Test purpose			
UE has not the capability to ha	ndle the REFER request.		
Ensure that the UE is able to s	end a 403 Forbidden or 501	Not implemented un	successful final response if the
REFER handling is not implem	iented.	•	
<b>.</b> .			
SIP header values:			
REFER: Request URI=Gm#*		); method=invite	
Referred-By contair	is <b>Gm#2</b> URI		
Comments:			
UE ( Gm#1)		Test eq	uipment (Gm#2)
	Establishment of	of session #1	
	Session #1	on hold	
REFER	•	REFER	
CASE A			
403 Forbidden	•		bidden
CASE A			
	_		implemented
501 Not implemented	Amply set to		implemented
	Apply post te	est routine	

### 5.2.4 Action at the Transferee AS

TSS	TP	Reference	Selection expression
Netw/TransfereeAS	ECT_N02_0	01 4.5.2.7	PICS 4.5.1/2
Test purpose			
	ssured transfer applicable		
			quest, the INVITE request and the
	at is transferred as an assure	ed transfer.	
SIP header values: REFER 1: Refer-To ISC#3	LIPI: mothod_invito		
	ntains ISC#1 URI		
REFER 2: Refer-To ISC#3			
	ntains ISC#1 URI		
INVITE 3: Request URI =			
INVITE 4: Request URI =			
NOTIFY(100):Event conta	ns <b>refer</b>		
	g contains <b>SIP/2.0 100 Tryin</b>	g	
NOTIFY(200):Event conta			
	g contains SIP/2.0 200 OK		
Comments:		100 110	100/14
ISC#2	AS Transferee	ISC#3 ent of session #1	ISC#1
	Establishing		ssion #1 on hold
	ISC#1 transfe	ers ISC#2 to ISC#3	
		R <b>←</b>	← REFER 1
REFER	← REFER 2		
202 Accepted	→ 202 Accepted		
	202 Accepte	ed 🗲	→ 202 Accepted
	→ ←		<ul> <li>→ NOTIFY(100)</li> <li>← 200 OK NOTIFY</li> </ul>
200 OK NOTIFY	4		← 200 OK NOTIFY
INVITE 3 (S2)	→ INVITE		
	INVITE	4 → INVITE	
	180 Ringir		
180 Ringing	← 180 Ringing	.9	
5 5	5 5	← 200 OK	
200 OK			
ACK		→ ACK	-
NOTIFY(200)	<b>→</b>		→ NOTIFY(200)
200 OK NOTIFY	<b>+</b>		← 200 OK NOTIFY
BYE	L		← BYE (S1)
200 OK (BYE)	← →		<ul> <li>← BYE (S1)</li> <li>→ 200 OK (BYE)</li> </ul>
	-	st test routine	

TSS		ТР		Reference		tion expression
Netw/TransfereeAS		ECT_N02_002		4.5.2.7	PICS	4.5.1/2
Test purpose						
Communication transfer.						
Ensure that the Transfer				he REFER reque	st, the IN	VITE request and the
BYE request for the call	that is transferr	ed as a blind transfe	er.			
SIP header values:						
REFER 1: Refer-To ISC						
	ontains ISC#1					
REFER 2: Refer-To ISC	,					
	ontains ISC#1	URI				
INVITE 3: Request URI						
INVITE 4: Request URI						
NOTIFY(100):Event con		CID/2 0 400 T				
		s SIP/2.0 100 Trying	l			
NOTIFY(200):Event con		s SIP/2.0 200 OK				
Comments:	sipiray contains	51F/2.0 200 UK				
ISC#2		AS Transferee		ISC#3		ISC#1
190#2		Establishment	of ses			150#1
			01 303		ion #1 o	n hold
		ISC#1 transfers I	SC#2			
		REFER	<del>```</del>		←	REFER 1
REFER	🗲 REF	ER 2	-		-	
202 Accepted		Accepted				
	-	202 Accepted	→		→	202 Accepted
BYE	←	·			←	BYE (S1)
200 OK (BYE)	<b>→</b>				→	200 ÔK (BYE)
( )						
NOTIFY(100)	→				→	NOTIFY(100)
200 OK NOTIFY	÷				←	200 OK NOTIFY
INVITE 3	→ INV	··-				
		INVITE 4	→	INVITE		
		180 Ringing	←	180 Ringing		
180 Ringing	<b>←</b> 180	Ringing				
	_		÷	200 OK		
200 OK		OK	-			
ACK			→	ACK	-	
NOTIFY(200)	<b>→</b>				→	NOTIFY(200)
200 OK NOTIFY	+	A			+	200 OK NOTIFY
		Apply post te	est rou	itine		

TSS		ТР		Reference	Sal	ation overagoion
Netw/TransfereeAS		ECT_N02_003		4.5.2.7		ection expression S 4.5.1/2
Test purpose		LCT_N02_003		4.3.2.7		3 4.3.1/2
Communication transfer: Co	nsultative tr	ansfer annlicahl	le at t	he Transferee AS		
Ensure that the Transferee					lest the l	NVITE request and the
BYE request for the call that	t is transferred	t as a Consultati	ive tra	ansfer		
SIP header values:						
REFER 1: Refer-To ISC#3 L	IRI-method-i	nvite?Replaces-	-call-i	d1%3Bto-tag%3D	<b>S1</b> %3B	
		equire=replaces				
Referred-By cont						
REFER 2: Refer-To contains			atho	-invito		
Referred-By cont						
INVITE 3: Request URI = IS						
Referred-By cont						
INVITE 4: Request URI = IS						
Replaces: call-id		rom-tag=S1				
Referred-By cont						
Require: replaces						
NOTIFY(100):Event contain						
		SIP/2.0 100 Tryii	na			
NOTIFY(200):Event contain			5			
		SIP/2.0 200 OK				
Comments:	- <b>G</b>					
ISC#2	AS	Transferee		ISC#3		ISC#1
	_	Establishment	of s	ession #1		
			Ses	sion #1 on hold		
		Establishment	ofs	ession #2		
			Ses	sion #2 on hold		
IS	C#1 transfer	s ISC#2 to ISC#	ŧ3			
		REFER	←		←	REFER 1
REFER	← REFER	2				
202 Accepted	→ 202 Acc	epted				
		202 Accepted	→		→	202 Accepted
INVITE (S2 inactive)	➔ INVITE	(inactive)				
200 OK (inactive)	← 200 OK	(S2 inactive)				
ACK	→ ACK					
NOTIFY(100)	→				→	NOTIFY(100)
200 OK NOTIFY	÷				+	200 OK NOTIFY
INVITE 3	➔ INVITE					
		INVITE 4	→	INVITE		
		180 Ringing	←	180 Ringing		
180 Ringing	← 180 Rin	ging				
			←	200 OK		
200 OK						
ACK	→ ACK					
	_	ACK	→	ACK		
NOTIFY(200)	<b>→</b>				→	NOTIFY(200)
200 OK NOTIFY	÷				÷	200 OK NOTIFY
BYE	+					BYE (S1)
200 OK (BYE)	→				→	200 OK (BYE)
		Apply post	test i	outine		

<b>TSS</b> Netw/TransfereeAS		TP EC	CT_N02_004		<b>Reference</b> 4.5.2.7.3	PICS	<b>ction expression</b> 6 4.5.1/2 AND 6 4.7.1/7
Test purpose The Referred-By header is replaced. If a Referred-By header conta Referred-By header conta If no match is found, the v received in the REFER re SIP header values: REFER 2: Refer-To URI; Referred-By IS INVITE 3: Referred-By IS INVITE 4: Referred-By IS	availa ains th alue c quest. metho <b>C#1</b> her U	able in the IN e value store f the Referre d=invite	VITE request s d in the receive	ent t d RE	o the Transfer Ta EFER request.	arget, the	AS verifies the provided
Comments: ISC#2			ansferee stablishment o	of se	ISC#3 ssion #1		ISC#1
REFER 202 Accepted	<b>←</b> →	Es REFER 2 202 Accept	stablishment o REFER red		Ses	ssion #2 nsfers IS <del>←</del>	on hold SC#2 to ISC#3 REFER 1
NOTIFY(100) 200 OK NOTIFY INVITE 3	→ ← →		202 Accepted	→		→ → ←	202 Accepted NOTIFY(100) 200 OK NOTIFY
180 Ringing 200 Oł ACł	+ + ( +	180 Ringing 200 OK ACK	INVITE 4 180 Ringing g	<b>→</b> ←	INVITE 180 Ringing 200 OK		
NOTIFY(200) 200 OK NOTIFY	→ ←		ACK	<b>→</b>	ACK	→ ←	NOTIFY(200) 200 OK NOTIFY
BYE 200 OK (BYE)	÷ ≯					← →	BYE 200 OK (BYE)
			Apply post te	st ro	outine		

TSS		ТР	Reference	Selection expression
Netw/TransfereeAS		ECT N02 005	4.5.2.7.3	PICS 4.5.1/2 AND
				PICS 4.7.1/6
Test purpose				·
The Referred-By heade	r in the receiv	ed INVITE does not co	ontain the valid identi	ty of the served user. The request
is rejected.				
If a Referred-By header	is available in	the INVITE request s	sent to the Transfer Ta	arget, the AS verifies if the
provided Referred-By h	eader contain	s the value stored in th	ne received REFER re	equest.
If no match is found, the	INVITE requ	est is rejected.		-
SIP header values:		-		
REFER 2: Refer-To UR	l; method=inv	ite		
Referred-By	ISC#1			
INVITE 3: Referred-By	other URI (PI	XIT)		
Comments:		·		
ISC#2		AS Transferee	ISC#3	ISC#1
		Establishment of	of session #1	
			Se	ssion #1 on hold
		Establishment of	of session #2	
			Se	ssion #2 on hold
			ISC#1 tra	ansfers ISC#2 to ISC#3
		REFER	÷	🗲 REFER 1
REFER	🗲 REF	ER 2		
202 Accepted	→ 202	Accepted		
		202 Accepted	→	→ 202 Accepted
NOTIFY(100)	→			→ NOTIFY(100)
200 OK NOTIFY	←			<ul> <li>200 OK NOTIFY</li> </ul>
INVITE 3	→ INV	••=		
4xx	<ul><li>← 4xx</li></ul>			
ACK	→ ACł	=		
1		Apply post te	est routine	

TSS Netw/TransfereeAS		TP EC	CT_N02_006		<b>Reference</b> 4.5.2.7.3	PICS	ction expression 4.5.1/2 AND 4.7.1/8
Test purpose The received INVITE does If no Referred-By header is By header and the value is SIP header values: REFER 2: Refer-To URI; m Referred-By ISC INVITE 3: (no Referred-By INVITE 4: Referred-By ISC	s ava <u>equa</u> ethoo <b>#1</b> head	ilable in the l I to the value d=invite	<b>NVITE</b> request	sen			e AS inserts a Referred-
Comments: ISC#2			ansferee stablishment o	f	ISC#3		ISC#1
			stablishment o		Ses ssion #2	sion #1 o	
REFER		REFER 2	REFER	÷		sion #1 o nsfers IS ←	on hold C#2 to ISC#3 REFER 1
202 Accepted	<b>→</b>	202 Accept	ed 202 Accepted	→		<b>→</b>	202 Accepted
NOTIFY(100) 200 OK NOTIFY INVITE 3	→ ← →	INVITE	INVITE 4	<b>→</b>	INVITE	→ ←	NOTIFY(100) 200 OK NOTIFY
180 Ringing	←	180 Ringin	180 Ringing	÷	180 Ringing		
200 OK ACK		200 OK ACK		<b>+</b>	200 OK		
NOTIFY(200) 200 OK NOTIFY	→ ←		ACK	<b>→</b>	ACK	<b>→</b> ←	NOTIFY(200) 200 OK NOTIFY
BYE 200 OK (BYE)	← →					← →	BYE 200 OK (BYE)
			Apply post te	st ro	outine		

<b>TSS</b> Netw/TransfereeAS		<b>TP</b> ECT_N02_007	<b>Reference</b> 4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	Selection expression PICS 4.5.1/2 AND PICS 4.7.1/2 AND PICS 4.7.1/4
Test purpose				
	e Transferee A	S receives a 403 Forbide	den indicating the Trai	nsferee does not support the
REFER method.			0	
		oplies at the Transferee A	AS when a 403 Forbid	den is received upon a REFER
was sent to the Transfe				
A 202 Accepte				
	ntaining a mes	sage/sipfrag body set to	'SIP/2.0 100 Trying' if	the REFER request is
accepted.		antes Trends containing d	the D Asserted identit	v of the Trenefore cloud the
		e identity of the Transferd		y of the Transferee and the
				ng the P-Asserted_identity of
		Referred-By header with		
				e refered communication is
established.		<u></u>		
SIP header values:				
REFER 1: Refer-To co				
	contains ISC#			
		Asserted-Identity=ISC#2,		
		Asserted-Identity=ISC#3,	Referred-By=ISC#1	
NOTIFY(100):Event co		SIP/2.0 100 Trying		
NOTIFY(200):Event co		SIF/2.0 100 Trying		
		SIP/2.0 200 OK		
Comments:	inag containe			
ISC#1		AS Transferor	ISC#2	ISC#3
	Establis	shment of session #1		
Ś	Session #1 or	n hold		
REFER 1	→ R			
		EFER		
		EFER REFER	REFER	
		REFER	<ul><li>REFER</li><li>403 Forbidden</li></ul>	
202 Accepted		REFER • 403 Forbidden • 02 Accepted	403 Forbidden	
		REFER 403 Forbidden 402 Accepted 3 party call contr	<ul><li>403 Forbidden</li><li>ol applies</li></ul>	
		REFER 403 Forbidden 403 Forbidden 402 Accepted 3 party call contr INVITE 3	<ul> <li>403 Forbidden</li> <li>ol applies</li> </ul>	
		REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing	← 403 Forbidden ol applies → ←	<ul> <li>180 Ringing</li> </ul>
		REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK	← 403 Forbidden ol applies → ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK	← 403 Forbidden ol applies → ←	<ul> <li>180 Ringing</li> </ul>
202 Accepted NOTIFY(100)	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100)	← 403 Forbidden ol applies → ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK	← 403 Forbidden ol applies → ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100)	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY	← 403 Forbidden ol applies → ←	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100)	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>invite</li> <li>invite</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100) 200 OK NOTIFY	← 20	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>ol applies<td><ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul></td></li></ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	← 20 ← →	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK ACK	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>invite</li> <li>invite</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100) 200 OK NOTIFY	← 20 ← 3	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>invite</li> <li>invite</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY	← 20 ← → ← →	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK NOTIFY(200) 200 OK NOTIFY	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>invite</li> <li>invite</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
202 Accepted NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	← 20 ← → → B	REFER 403 Forbidden 02 Accepted <b>3 party call contr</b> INVITE 3 180 Ringing 200 OK ACK NOTIFY(100) 200 OK NOTIFY INVITE 4 200 OK ACK ACK	<ul> <li>403 Forbidden</li> <li>ol applies</li> <li>invite</li> <li>invite</li> <li>200 OK</li> </ul>	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>

		TD			Onland	
TSS		TP		eference		on expression
Netw/TransfereeAS		ECT_N02_008		.5.2.4.1.2.3,		5.1/2 AND
			4	.7.2.9.7/ [3]		7.1/1 AND
					PICS 4.	7.1/4
Test purpose						
Blind transfer. The Transfe	eree AS	S receives a 403 Forbidder	n indica	ting the Transfe	ree does no	ot support the
REFER method.						
Ensure that three party call	control	applies at the Transferee	AS whe	en a 403 Forbido	den is recei	ved upon a REFER
was sent to the Transferee:						
<ul> <li>A 202 Accepted for</li> </ul>	r the R	EFER is sent.				
<ul> <li>A NOTIFY containi</li> </ul>	ng a m	essage/sipfrag body set to	'SIP/2	.0 100 Trying' if	the REFER	request is
accepted.	-					
An INVITE is sent	to the <sup>-</sup>	Fransfer Target containing	the P-A	Asserted_identity	y of the Tra	nsferee and the
		the identity of the Transfer				
		ed, a reINVITE is sent to t		nsferee containii	ng the P-As	serted identity of
		ne Referred-By header witl				_ ,
		essage/sipfrag body set to				mmunication is
established.	3					
SIP header values:						
REFER 1: Refer-To contains	s <b>ISC</b> #	3 URI; method=invite				
Referred-By cont						
INVITE 3: Request URI = IS			Referr	ed-Bv=ISC#1		
INVITE 4: Request URI = IS						
NOTIFY(100):Event contain			,			
		ns SIP/2.0 100 Trying				
NOTIFY(200):Event contain						
		ns <b>SIP/2.0 200 OK</b>				
Comments:	o o					
ISC#1		AS Transferor	I	SC#2		ISC#3
	Estab	lishment of session #1				
Sess		on hold				
REFER 1	→	REFER				
	-		→ F	REFER		
				03 Forbidden		
202 Accepted	←	202 Accepted				
202 Accepted	← →	202 Accepted				
BYE	→	202 Accepted				
				lies		
BYE	→	3 party call cont	rol app	lies	÷	INIVITE
BYE	→	<b>3 party call cont</b> INVITE 3	rol app ➔	lies	→ 4	INVITE
BYE	→	<b>3 party call cont</b> INVITE 3 180 Ringing	rol app ➔ ←	lies	+	180 Ringing
BYE	→	<b>3 party call cont</b> INVITE 3 180 Ringing 200 OK	rol app ➔ ← ←	lies	÷	180 Ringing 200 OK
BYE 200 OK (BYE)	<b>→</b> ←	<b>3 party call cont</b> INVITE 3 180 Ringing 200 OK	rol app ➔ ←	lies	+	180 Ringing
BYE 200 OK (BYE) NOTIFY(100)	→ ←	<b>3 party call cont</b> INVITE 3 180 Ringing 200 OK	rol app ➔ ← ←	lies	÷	180 Ringing 200 OK
BYE 200 OK (BYE)	<b>→</b> ←	<b>3 party call cont</b> INVITE 3 180 Ringing 200 OK ACK	rol app ➔ ← ✦ ➔		÷	180 Ringing 200 OK
BYE 200 OK (BYE) NOTIFY(100)	→ ←	<b>3 party call cont</b> INVITE 3 180 Ringing 200 OK ACK INVITE 4	rol app → ← ← →	NVITE	÷	180 Ringing 200 OK
BYE 200 OK (BYE) NOTIFY(100)	→ ←	3 party call contr INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	rol app → ← ← →    ← 2	NVITE 00 OK	÷	180 Ringing 200 OK
BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY	<b>→</b>	3 party call contr INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	rol app → ← ← →    ← 2	NVITE	÷	180 Ringing 200 OK
BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	<b>+</b>	3 party call contr INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK NOTIFY(200)	rol app → ← ← →    ← 2	NVITE 00 OK	÷	180 Ringing 200 OK
BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY	<b>→</b>	3 party call contr INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	rol app → ← ← → ॥ ← 2 → Å	NVITE 000 OK NCK	÷	180 Ringing 200 OK

TSS		ТР		Reference	Salaati	
Netw/TransfereeAS		ECT_N02_009	Э	4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4.	<b>on expression</b> 5.1/2 AND 7.1/3 AND 7.1/4
Test purpose Consultative transfer. The T the REFER method. Ensure that three party call co was sent to the Transferee: • A 202 Accepted for tt • A NOTIFY containing accepted. • A reINVITE is sent to Referred-By header • After the 200 OK is re the Transfer Target a • A NOTIFY containing established. SIP header values: REFER 1: Refer-To contains I Referred-By contail INVITE 3: Request URI = ISC INVITE 4: Request URI = ISC NOTIFY(100):Event contains message/sipfrag co	ontrol applies a he REFER is s g a message/si o the Transfer <sup>-</sup> with the identit eceived, a relN and the Referre g a message/si <b>ISC#3</b> URI; me ns <b>ISC#1</b> URI <b>#3</b> , P-Asserted <b>refer</b> ontains <b>SIP/2.0</b>	t the Transfere ent. ipfrag body set Target containi y of the Transf IVITE is sent to ed-By header v ipfrag body set ethod=invite d-Identity=ISCa	e AS w to 'SIF ng the eror. o the T vith the to 'SIF	when a 403 Forbido P/2.0 100 Trying' if P-Asserted_identit ransferee containir identity of the Tran P/2.0 200 OK' if the	Transferee len is recei the REFEF y of the Tra ng the P-As	does not support ved upon a REFER R request is ansferee and the sserted_identity of
message/sipfrag co		200 OK				
Sessio E	AS Tr Establishment n #1 on hold Establishment n #2 on hold			ISC#2		ISC#3
REFER 1	→ REFER 40	REFER 3 Forbidden	→ ←	REFER 403 Forbidden		
202 Accepted NOTIFY(100) 200 OK NOTIFY		Party call co INVITE 3 180 Ringing 200 OK ACK 100)	ntrol a → ← → →	pplies	<b>+ + +</b> +	INVITE 180 Ringing 200 OK ACK
NOTIFY(200)	NOTIFY(	INVITE 4 200 OK ACK 200)	→ ← →	INVITE 200 OK ACK		
200 OK NOTIFY	→ 200 OK I					
BYE(S1) 200 OK (BYE)	<ul> <li>→ BYE</li> <li>← 200 OK (</li> </ul>	(BYE)				
BYE 200 OK (BYE)	<ul> <li>← BYE(S2)</li> <li>→ 200 OK (</li> </ul>		est rou	itine		

TSS Netw/TransfereeAS		<b>TP</b> ECT_N02_010	<b>Reference</b> 4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	Selection expression PICS 4.5.1/2 AND PICS 4.7.1/2 AND PICS 4.7.1/4
the REFER method. Ensure that three party REFER was sent to the A 202 Accepte An INVITE is s Referred-By h After the 200 0 the Transfer T SIP header values: REFER 1: Refer-To cor Referred-By INVITE 3: Request UR INVITE 4: Request UR NOTIFY(100):Event co message/sip NOTIFY(200):Event co	call control applie Transferee: ed for the REFER sent to the Transfe eader with the ide DK is received, a r arget and the Refe ntains ISC#3 URI; contains ISC#1 U I = ISC#3, P-Asse I = ISC#2, P-Asse ntains refer frag contains SIP/ ntains refer	s at the Transferent is sent. In Target containing natity of the Transfe eINVITE is sent to erred-By header w method=invite RI rted-Identity=ISC# rted-Identity=ISC# 2.0 100 Trying	e AS when a 501 Not imp g the P-Asserted_identity eror. the Transferee containir ith the identity of the Tran 2, Referred-By=ISC#1	the Transferee does not support plemented is received upon a plot of the Transferee and the the P-Asserted_identity of the P-Asserted_identity of the P-Asserted_identity of
Comments: ISC#1	-	ransferor nent of session #	ISC#2 1	ISC#3
REFER 1 202 Accepted NOTIFY(100) 200 OK NOTIFY	<ul> <li>→ REFER</li> <li>501 N</li> <li>202 Acce</li> <li>← NOTIFY(</li> <li>→ 200 OK N</li> </ul>	3 party call con INVITE 3 180 Ringing 200 OK ACK 100)	<ul> <li>→ REFER</li> <li>← 501 Not impleme</li> <li>trol applies</li> <li>→</li> <li>←</li> <li>→</li> <li>→</li> </ul>	<ul> <li>INVITE</li> <li>€ 180 Ringing</li> <li>€ 200 OK</li> <li>→ ACK</li> </ul>
NOTIFY(200) 200 OK NOTIFY BYE 200 OK (BYE)	<ul> <li>← NOTIFY(2</li> <li>→ 200 OK N</li> <li>→ BYE</li> <li>← 200 OK (1</li> </ul>	IOTIFY	<ul> <li>→ INVITE</li> <li>← 200 OK</li> <li>→ ACK</li> <li>st routine</li> </ul>	

		TP		Reference	Salac	tion expression
TSS Netw/TransfereeAS		ECT_N02_01	1	4.5.2.4.1.2.3,		4.5.1/2 AND
Netw/ HansiereeAS			1	4.7.2.9.7/ [3]		4.7.1/1 AND
				4.7.2.9.77 [3]		4.7.1/1 AND 4.7.1/4
Test purpose					FIC3	4.7.1/4
Blind transfer. The Tra	nsforoo AS roc	eives a 501 Not imr	homor	ted indicating the Tran	sforoo	does not support the
REFER method.			Jemen	ited indicating the man	310100	
Ensure that three party of	control and	lips at the Transford		when a 501 Not implem	nontod	is received upon a
REFER was sent to the				when a son not implen	lenteu	is received upon a
A 202 Accepted		P is cont				
			a tha	P-Asserted_identity of	the Tre	notoroo and tha
All INVITE IS S	ador with the i	dentity of the Transf	ig the	r-Asserted_identity of	line ITa	insièree and the
				ransferee containing t		sserted_identity of
	irget and the R	eterred-By neader v	vith the	e identity of the Transfe	eror.	
SIP header values:		- بني المعطلة مع المع				
REFER 1: Refer-To cont						
	contains ISC#1			( I.D. 100//4		
INVITE 3: Request URI						
INVITE 4: Request URI		serted-Identity=ISC	#3, Re	terred-By=ISC#1		
NOTIFY(100):Event con						
message/sipt	rag contains S	IP/2.0 100 Trying				
NOTIFY(200):Event con						
• ·	rag contains S	IP/2.0 200 OK				
Comments:						
		<b>• • ·</b>		100 //0		10.0 %
ISC#1	=	S Transferor		ISC#2		ISC#3
ISC#1	Establish	ment of session #	1	ISC#2		ISC#3
ISC#1	=	ment of session #	1	ISC#2		ISC#3
ISC#1 Se	Establish ssion #1 on h	old	1	ISC#2		ISC#3
ISC#1	Establish	ment of session # old ER	-			ISC#3
ISC#1 Se	Establish ssion #1 on h → REFE	iment of session # old ER REFER	<b>→</b>	REFER		ISC#3
ISC#1 Se	Establish ssion #1 on h ➔ REFE 501	iment of session # old ER REFER Not implemented	-			ISC#3
ISC#1 Se REFER 1 202 Accepted	Establish ssion #1 on h → REFE 501 ← 202 /	iment of session # old ER REFER	<b>→</b>	REFER		ISC#3
ISC#1 Se REFER 1 202 Accepted BYE	Establish ssion #1 on h → REFE 501 ← 202 / →	iment of session # old ER REFER Not implemented	<b>→</b>	REFER		ISC#3
ISC#1 Se REFER 1 202 Accepted	Establish ssion #1 on h → REFE 501 ← 202 /	ament of session # old ER REFER Not implemented Accepted	→ ←	REFER 501 Not implemented		ISC#3
ISC#1 Se REFER 1 202 Accepted BYE	Establish ssion #1 on h → REFE 501 ← 202 / →	ment of session # old ER REFER Not implemented Accepted 3 party call co	÷ ←	REFER 501 Not implemented		
ISC#1 Se REFER 1 202 Accepted BYE	Establish ssion #1 on h → REFE 501 ← 202 / →	Reference of session # old ER Not implemented Accepted 3 party call co INVITE 3	→ ← ntrol a	REFER 501 Not implemented	<b>→</b>	INVITE
ISC#1 Se REFER 1 202 Accepted BYE	Establish ssion #1 on h → REFE 501 ← 202 / →	Ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing	$ \begin{array}{c} \rightarrow \\ \leftarrow \end{array} \\ ntrol a \\ \rightarrow \\ \leftarrow \end{array} $	REFER 501 Not implemented	→ ←	INVITE 180 Ringing
ISC#1 Se REFER 1 202 Accepted BYE	Establish ssion #1 on h → REFE 501 ← 202 / →	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ ntrol \\ \rightarrow \\ \leftarrow \\ \leftarrow \\ \leftarrow \end{array}$	REFER 501 Not implemented	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	Ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing	$ \begin{array}{c} \rightarrow \\ \leftarrow \end{array} \\ ntrol a \\ \rightarrow \\ \leftarrow \end{array} $	REFER 501 Not implemented	→ ←	INVITE 180 Ringing
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ ntrol \\ \rightarrow \\ \leftarrow \\ \leftarrow \\ \leftarrow \end{array}$	REFER 501 Not implemented	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK ACK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ \rightarrow \\ \leftarrow \\ \rightarrow \\ \leftarrow \\ \rightarrow \end{array}$	REFER 501 Not implemented	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ ntrol \\ \rightarrow \\ \leftarrow \\ \leftarrow \\ \leftarrow \end{array}$	REFER 501 Not implemented	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK ACK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ \rightarrow \\ \leftarrow \\ \rightarrow \\ \leftarrow \\ \rightarrow \end{array}$	REFER 501 Not implemented	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Establish ssion #1 on h → REFE 501 ← 202 A → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK ACK INVITE 4	$\begin{array}{c} \rightarrow \\ \leftarrow \\ \rightarrow \\ \leftarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$	REFER 501 Not implemented applies	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Establish ssion #1 on h → REFE 501 ← 202 / → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ \leftarrow$	REFER 501 Not implemented applies INVITE 200 OK	+ + +	INVITE 180 Ringing 200 OK
ISC#1 Se REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY	Establish ssion #1 on h → REFE 501 ← 202 / → ←	ament of session # old ER Not implemented Accepted 3 party call co INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	$\begin{array}{c} \rightarrow \\ \leftarrow \\ \leftarrow$	REFER 501 Not implemented applies INVITE 200 OK	+ + +	INVITE 180 Ringing 200 OK

TSS		TP	Reference	Selection expression
Netw/TransfereeAS		ECT_N02_012		PICS 4.5.1/2 AND PICS 4.7.1/3 AND PICS 4.7.1/4
Test purpose				
		ee AS receives a 501	Not implemented indicat	ting the Transferee does not
support the REFER meth		н <i>са</i> <b>т</b> с	<b>10</b> 1 <b>5</b> 04 <b>1</b> 4	
Ensure that three party ca REFER was sent to the T		plies at the Transferee	e AS when a 501 Not im	plemented is received upon a
<ul> <li>A 202 Accepted</li> </ul>		EP is cont		
			na the P-Asserted ident	ity of the Transferee and the
		identity of the Transfe		
				ing the P-Asserted_identity of
			ith the identity of the Tra	
SIP header values:				
REFER 1: Refer-To conta				
Referred-By co			2 Deferred Dr. 10014	
INVITE 3: Request URI = INVITE 4: Request URI =				
NOTIFY(100):Event conta		sserieu-iuerility=i3C#	o, Neleneu-Dy=100#1	
		SIP/2.0 100 Trying		
NOTIFY(200):Event conta				
		SIP/2.0 200 OK		
Comments:				
ISC#1		AS Transferor	ISC#2	ISC#3
		shment of session #	1	
Ses	sion #1 on	noid shment of session #	า	
Ses	sion #2 on		2	
REFER 1	→ REF		→ REFER	
	ţ		<ul><li>✓ 501 Not implement</li></ul>	nted
202 Accepted		Accepted		
•		3 party call con	trol applies	
		INVITE 3		→ INVITE
		180 Ringing		← 180 Ringing
		200 OK ACK		<ul> <li>← 200 OK</li> <li>→ ACK</li> </ul>
NOTIFY(100)		TIFY(100)	7	ACK
200 OK NOTIFY		OK NOTIFY		
		INVITE 4	→ INVITE	
		200 OK		
		ACK	→ ACK	
NOTIFY(200) 200 OK NOTIFY		FIFY(200) OK NOTIFY		
	- 200			
BYE(S1)	→ BYE			
200 OK (BYE)		OK (BYE)		
BYE	← BYE			
200 OK (BYE)	→ 200	OK (BYE)	at revilian	
		Apply post te	stroutine	

TSS	Т	P	Reference	Selection expression
Netw/TransfereeAS		CT_N02_013	4.5.2.4.1.2.3, 4.7.2.9.7/ [3]	PICS 4.5.1/2 AND PICS 4.7.1/2 AND PICS 4.7.1/5
Test purpose				· · · · · · · · · · · · · · · · · · ·
Assured transfer. The Tran				
Ensure that three party call of				
the Transferee is not allow			t the REFER method	1:
<ul> <li>A 202 Accepted for</li> </ul>				
<ul> <li>A NOTIFY request after the REFER re</li> </ul>			g a message/sipfrag b	ody set to 'SIP/2.0 100 Trying'
			e P-Asserted identity	of the Transferee and the
Referred-By heade				
				ng the P-Asserted_identity of
			the identity of the Tra	
				ody set to 'SIP/2.0 200 OK'
after the referred co			g a moodago, oipmag c	
SIP header values:				
REFER 1: Refer-To contains	ISC#3 URI: met	nod=invite		
Referred-By conta				
INVITE 3: Request URI = IS		Identity=ISC#2	Referred-By=ISC#1	
INVITE 4: Request URI = IS				
NOTIFY(100):Event contains		100million - 100mo, 1		
message/sipfrag		100 Trying		
NOTIFY(200):Event contains		loo ir ying		
message/sipfrag				
Comments:	Jontains <b>On 72.0</b> 2			
ISC#1	AS Trans	sferor	ISC#2	ISC#3
	Establishment		100/12	100#0
Sessi	on #1 on hold			
00331				
REFER 1	REFER			
202 Accepted	<ul> <li>202 Accepted</li> </ul>			
202 Accepted			l annlies	
202 Accepted		party call contro		
202 Accepted	3	oarty call contro INVITE 3 →	,	→ INVITE
202 Accepted	3	oarty call contro INVITE 3 → 80 Ringing ←		← 180 Ringing
202 Accepted	3	Darty call contro INVITE 3 → 80 Ringing ← 200 OK ←		<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
	3 <sub>1</sub> 1	oarty call contro INVITE 3 → 80 Ringing ←		← 180 Ringing
NOTIFY(100)	3   1 - NOTIFY(100)	oarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK →		<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
	3   1 - NOTIFY(100)	oarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK →		<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100)	3   1 - NOTIFY(100)	oarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK →		<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100)	3   1 - NOTIFY(100)	Sarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY	INVITE	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100)	3   1 - NOTIFY(100)	INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ←	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100)	3   1 - NOTIFY(100) 200 OK NOTI	Sarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100) 200 OK NOTIFY NOTIFY(200)	3   1 - NOTIFY(100) 200 OK NOTI - NOTIFY(200)	INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ← ACK →	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100)	3   1 - NOTIFY(100) 200 OK NOTI	INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ← ACK →	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY	3   1 - NOTIFY(100) 200 OK NOTI - NOTIFY(200) 200 OK NOTI	INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ← ACK →	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY BYE	3   1 - NOTIFY(100) 200 OK NOTI - NOTIFY(200) 200 OK NOTI BYE	Sarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ← ACK →	INVITE 200 OK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(100) 200 OK NOTIFY NOTIFY(200) 200 OK NOTIFY	3   1 - NOTIFY(100) 200 OK NOTI - NOTIFY(200) 200 OK NOTI - BYE - 200 OK (BYE)	Sarty call contro INVITE 3 → 80 Ringing ← 200 OK ← ACK → FY INVITE 4 → 200 OK ← ACK →	INVITE 200 OK ACK	<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>

TSS		TP	Reference	Selection expression
Netw/TransfereeAS				Selection expression PICS 4.5.1/2 AND
Netw/ mansiereeAS		ECT_N02_014		
			4.7.2.9.7/ [3]	PICS 4.7.1/1 AND PICS 4.7.1/5
Test numbers				FICS 4.7.1/5
Test purpose	Tranafaraa	AS initiate the energial DEFI	-D handling procedure	a directly
		AS initiate the special REF		
				AS has prior <b>knowledge</b> that
		to receive or does not supp	bort the REFER metho	
		REFER is sent.	. ,.,	
	•		ning a message/sipfrag	body set to 'SIP/2.0 100 Trying'
		est is accepted.		
				ity of the Transferee and the
		th the identity of the Transfe		
				ing the P-Asserted_identity of
		d the Referred-By header wi		
			ning a message/sipfrag	body set to 'SIP/2.0 200 OK'
after the refe	erred comn	nunication is confirmed.		
SIP header values:				
REFER 1: Refer-To c	ontains IS	C#3 URI; method=invite		
Referred-B	By contains	ISC#1 URI		
<b>INVITE 3: Request U</b>	RI = ISC#3	B, P-Asserted-Identity=ISC#2	2, Referred-By=ISC#1	
INVITE 4: Request U	RI = ISC#2	2, P-Asserted-Identity=ISC#	3, Referred-By=ISC#1	
NOTIFY(100): Event of	contains <b>re</b>	fer		
	ipfrag con			
		tains SIP/2.0 100 Trying		
message/s NOTIFY(200):Event of	contains re	tains SIP/2.0 100 Trying		
message/s NOTIFY(200):Event of	contains re	tains SIP/2.0 100 Trying fer		
message/s NOTIFY(200):Event o message/s	contains re	tains SIP/2.0 100 Trying fer	ISC#2	ISC#3
message/s NOTIFY(200):Event o message/s Comments:	contains <b>re</b> sipfrag cont	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK		ISC#3
message/s NOTIFY(200):Event o message/s Comments: ISC#1	contains re sipfrag con	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor		ISC#3
message/s NOTIFY(200):Event o message/s Comments: ISC#1	contains re sipfrag con Es Session #	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 f1 on hold		ISC#3
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1	contains re sipfrag con Es Session # →	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER		ISC#3
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted	ipfrag con Es Session # ←	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 f1 on hold		ISC#3
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1 202 Accepted BYE	sontains re sipfrag con Es Session # + + + +	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER		ISC#3
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted	ipfrag con Es Session # ←	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 t1 on hold REFER 202 Accepted		ISC#3
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1 202 Accepted BYE	sontains re sipfrag con Es Session # + + + +	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER 202 Accepted 3 party call con	trol applies	
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1 202 Accepted BYE	sontains re sipfrag con Es Session # + + + +	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER 202 Accepted 3 party call con INVITE 3	trol applies ➔	→ INVITE
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1 202 Accepted BYE	sontains re sipfrag con Es Session # + + + +	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 t1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing	trol applies ➔	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE)	sontains re sipfrag con Es Session # + + + +	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER 202 Accepted 3 party call con INVITE 3	trol applies ➔	→ INVITE
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 t1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing	trol applies ➔	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	ipfrag con Es Session # ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 t1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing	trol applies ➔	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
message/s NOTIFY(200):Event o message/s Comments: ISC#1 REFER 1 202 Accepted BYE	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 t1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing	trol applies ➔	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing 200 OK ACK	trol applies ➔ ← ←	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing 200 OK ACK	trol applies → ← ←	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 e1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing 200 OK ACK INVITE 4	trol applies → ← ← → INVITE	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100) 200 OK NOTIFY	contains re sipfrag con Es Session # ↔ ↔ ↔	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 e1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK ACK	trol applies → ← ← → INVITE ← 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
message/s NOTIFY(200):Event of message/s Comments: ISC#1 REFER 1 202 Accepted BYE 200 OK (BYE) NOTIFY(100)	Session #	tains SIP/2.0 100 Trying fer tains SIP/2.0 200 OK AS Transferor tablishment of session #1 e1 on hold REFER 202 Accepted 3 party call con INVITE 3 180 Ringing 200 OK ACK INVITE 4 200 OK	trol applies → ← ← → INVITE ← 200 OK	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>

TSS	TP	Reference	Selection expression
Netw/TransfereeAS	ECT_N02_015	4.5.2.4.1.2.3,	PICS 4.5.1/2 AND
	ECT_102_015	4.7.2.9.7/ [3]	PICS 4.7.1/3 AND
		4.7.2.0.17 [0]	PICS 4.7.1/5
Test purpose			
Consultative transfer. The Tran	nsferee AS initiate the specia	al REFER handling proc	edures directlv.
Ensure that three party call cont			
the Transferee is not allowed t			
A 202 Accepted for the			
		ing a message/sipfrag b	ody set to 'SIP/2.0 100 Trying'
after the REFER reque		0 0 1 0	, , , ,
	ne Transfer Target containing	g the P-Asserted_identit	y of the Transferee and the
Referred-By header wit	h the identity of the Transfer	or.	
			g the P-Asserted_identity of
	the Referred-By header wit		
	ent to the Transferor contain	ing a message/sipfrag b	ody set to 'SIP/2.0 200 OK'
after the referred comm	nunication is confirmed.		
SIP header values:			
REFER 1: Refer-To contains ISC			
Referred-By contains			
INVITE 3: Request URI = ISC#3			
INVITE 4: Request URI = ISC#2		s, Referred-By=ISC#1	
NOTIFY(100):Event contains re			
NOTIFY(200):Event contains re	ains SIP/2.0 100 Trying		
message/sipfrag cont			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
	stablishment of session #1		
Session #			
E	stablishment of session #2		
	REFER		
202 Accepted +	202 Accepted		
	3 party call cont		
	INVITE 3		→ INVITE
	180 Ringing 200 OK		<ul> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
	200 OK ACK	<del>←</del> →	<ul> <li>€ 200 OK</li> <li>→ ACK</li> </ul>
NOTIFY(100)	NOTIFY(100)	7	ACK
200 OK NOTIFY	200 OK NOTIFY		
	INVITE 4	→ INVITE	
	200 OK		
	ACK	→ ACK	
NOTIFY(200)	NOTIFY(200)		
200 OK NOTIFY	200 OK NOTIFY		
200 OK NOTIFY →	200 OK NOTIFY		
200 OK NOTIFY → BYE(S1) →	200 OK NOTIFY BYE		
200 OK NOTIFY →	200 OK NOTIFY		
200 OK NOTIFY → BYE(S1) → 200 OK (BYE) ←	200 OK NOTIFY BYE 200 OK (BYE)		
200 OK NOTIFY       →         BYE(S1)       →         200 OK (BYE)       ←         BYE       ←	200 OK NOTIFY BYE 200 OK (BYE) BYE(S2)		
200 OK NOTIFY → BYE(S1) → 200 OK (BYE) ←	200 OK NOTIFY BYE 200 OK (BYE)	4	

## 5.2.5 Actions at the transfer target's UE

TSS	TP	Reference	Selection expression
User/TransferTarget	ECT_U03_001	4.5.2.17	PICS 4.5.1/1 AND
Test purpose			
The User Equipment receives the reque	st to terminate a con	nmunication to the	transferor.
Ensure that a User Equipment in a confi			
and a Replaces header is present (cons			
<ul> <li>The User Equipment accepts the re</li> </ul>			
<ul> <li>The User Equipment terminates the</li> </ul>	-	the Replaces hear	der
SIP header values:		The Replaces field	
INVITE: Request URI: <b>Gm#1</b>			
Referred-By contains any UR	1		
Replaces: <callid #<="" session="" td=""><td></td><td>t1.from_tag=~Sess</td><td>ion #1&gt;</td></callid>		t1.from_tag=~Sess	ion #1>
Comments:	$1^{,10^{-1}ay} = -300001 \pi$	r,1011-lay=<0ess	1011 #12
UE ( Gm#1)		Tost on	uipment ( Gm#2)
	Establishment of		aipment (Gili#2)
	Establishinent of	36331011 #1	
INVITE	←		(Session #2)
180 Ringing	÷	180 Rin	
200 OK INVITE	→ →	200 OK	
ACK	÷	ACK	
	Ľ	7.017	
BYE (Session #1)	→	BYE	
200 OK BYE	+	200 OK	BYE
	Apply post tes		
TSS	TP	Reference	Selection expression
User/TransferTarget	ECT_U03_002	4.5.2.17	PICS 4.5.1/1 AND
Test purpose			
The User Equipment receives a Referre			
<ul> <li>Ensure that a User Equipment rece</li> </ul>	ives a Referred-By h	eader in an INVITE	request accepts the request.
SIP header values:			
INVITE: Request URI: Gm#1			
Referred-By contains any UR			
Comments:			
UE ( Gm#1)			uipment ( Gm#2)
	Establishment of	session #1	
INVITE	+		(Session #2)
	← →		
180 Ringing 200 OK INVITE	-	180 Rin	ging INVITE
ACK	→ +		
AUN	۲	ACK	
BYE (Session #1)	د	BYE	
200 OK BYE		200 OK	RVE
	Apply post tes		

### 5.2.6 Interaction with other services

### 5.2.6.1 Originating identification restriction (OIR)

TSS		ТР	Reference	Selection expression
Interaction/OIR		ECT_N03_001	4.6.5	PICS 4.5.1/2 AND PICS 7.7.2/1
received with the value SIP header values: REFER 1: Refer-To cor Referred-By	eader is present a 'id'.	and the value 'user' is method=invite IRI		ntity. i the Privacy header was
REFER 2: Refer-To cor Referred-By	contains ISC#1 U dentity ISC#1 UR	IRI		
Comments: ISC#1 Sess	Establishm ion #1 on hold Establishm	Transferor ent of session #1 ent of session #2 ers ISC#2 to ISC#3	ISC#2	ISC#3
REFER 1 202 Accepted	<ul> <li>→ REFE</li> <li>← 202 A</li> </ul>	REFER 2	<ul> <li>REFER</li> <li>202 Accepted</li> </ul>	
NOTIFY(100) 200 OK NOTIFY	÷	INVITE INVITE 4 180 Ringing 180 Ringing	<ul> <li>NOTIFY(100)</li> <li>200 OK NOTIFY</li> <li>INVITE 3</li> <li>180 Ringing</li> </ul>	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> </ul>
	÷	200 OK	NOTIFY(200)	← 200 OK ACK → ACK
200 OK NOTIFY BYE 200 OK (BYE)	→ → ←	-	<ul> <li>200 OK NOTIFY</li> <li>BYE</li> <li>200 OK (BYE)</li> <li>routine</li> </ul>	

TSS Interaction/OIR		<b>TP</b> ECT_N03_00	2	Reference 4.6.5	PIC	lection expression CS 4.5.1/2 AND
<b>Test purpose</b> <i>Privacy header in the IN</i> Ensure that the INVITE r received in initial call bet	equest sent t	o the transfer target	has th	ne same privacy requi	vacy ind	
• Transferee sends a	Privacy head	er value 'id' in the 20	0 OK	INVITE of the initial c		
SIP header values:				Tansier larger does in		in a r macy neader.
200 OK INVITE 1: Privad INVITE 3: (no Privacy he INVITE 4: Privacy: id						
Comments:		10 Turn (		100#0		100#2
ISC#1 INVITE 1	→	AS Transferor	→	ISC#2 INVITE		ISC#3
180 Ringing	÷		÷	180 Ringing		
200 OK (INVITE)	+		←	200 OK (INVITE) 1		
ACK	<b>→</b>		→	ACK		
INVITE (sendonly)	→		→	INVITE (sendonly)		
200 OK (recvonly)	÷		+	200 OK (recvonly)		
ACK	<b>→</b>		<b>→</b>	ACK		
INVITE 2	<b>→</b>				→	INVITE
180 Ringing	←					180 Ringing
200 OK (INVITE)	+				÷	
ACK	<b>→</b>				<b>→</b>	ACK
INVITE (sendonly)	→				→	INVITE (sendonly)
200 OK (recvonly)	←				÷	,
ACK	<b>→</b>				<b>→</b>	ACK
REFER	→ RE	EFER REFER	<b>_</b>	REFER		
		202 Accepted	→ ←	202 Accepted		
202 Accepted	← 20	2 Accepted	•			
NOTIFY(100)	←		←	NOTIFY(100)		
200 OK NOTIFY	<b>→</b>		→	200 OK NOTIFY		
		INVITE	+	INVITE 3	_	
		INVITE 4	<b>→</b>		→	
		180 Ringing	+ -	180 Ringing	+	180 Ringing
		180 Ringing 200 OK	→ ←		4	200 OK
		200 OK	÷	200 OK	-	
				A	ск 🔸	ACK
NOTIFY(200)	+		÷	NOTIFY(200)		
200 OK NOTIFY	→ →		→ →	200 OK NOTIFY		
BYE 200 OK (BYE)	→ ←		→ ←	BYE 200 OK (BYE)		
	Υ	Apply post te				

TSS		ТР		Reference		lection expression	
Interaction/OIR			ECT_N03_003 4.6.5		PICS 4.5.1/2 AND PICS 7.7.2/1		
Test purpose							
Privacy header in the INV							
Ensure that the INVITE re received in initial call betw					ements	as previous	
				of the initial call. The S	UT ins	erts a Privacy	
				target does not contair			
SIP header values:		•		0			
INVITE 1: Privacy: id							
INVITE 3: (no Privacy he INVITE 4: Privacy: id	ader)						
Comments:							
ISC#1		AS Transferor	,	ISC#2		ISC#3	
INVITE 180 Ringing	← →		← →	INVITE 1 180 Ringing			
200 OK (INVITE)	→		→	200 OK (INVITE) 1			
ACK	÷		÷	ACK			
INVITE (sendonly)	<b>&gt;</b>		<b>→</b>	INVITE (sendonly)			
200 OK (recvonly)	÷		÷	200 OK (recvonly)			
ACK	<b>→</b>		→	ACK			
INVITE 2	<b>→</b>				→	INVITE	
180 Ringing	÷				÷		
200 OK (INVITE)	←				←	200 OK (INVITE)	
ACK	<b>→</b>				<b>→</b>	ACK	
INVITE (sendonly)	→				<b>→</b>	INVITE (sendonly)	
200 OK (recvonly)	÷				÷	200 OK (recvonly)	
ACK	<b>→</b>				→	ACK	
REFER	→ F	REFER					
		REFER	<b>→</b>	REFER			
		202 Accepted	←	202 Accepted			
202 Accepted	← 2	202 Accepted					
NOTIFY(100)	←		←	NOTIFY(100)			
200 OK NOTIFY	→		→	200 OK NOTIFY			
		INVITE	←	INVITE 3			
		INVITE 4	<b>→</b>		<b>→</b>	INVITE	
		180 Ringing	+		+	180 Ringing	
		180 Ringing 200 OK	→ ←	180 Ringing	4	200 OK	
		200 OK 200 OK	÷	200 OK	•	200 01	
		200 010	-		к 🔸	ACK	
NOTIFY(200)	←		←	NOTIFY(200)			
200 OK NOTIFY	<b>→</b>		<b>→</b>	200 OK NOTIFY			
BYE	<b>→</b>		<b>→</b>	BYE			
200 OK (BYE)	+		←	200 OK (BYE)			

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

TSSInteraction/ACR-CE	3	TP	Reference	Selection expression
		ECT_N04_001	4.6.9	PICS 4.5.1/2 AND
				PICS 7.7.2/2
Test purpose				
transfer requests with a	Transfer Targe	t that is barred by the se	erved users Outgoing	Communication Barring
(OCB) rules.				
Ensure that the As does	s not accept a tra	ansfer requests with a tr	ansfer Target that is I	barred by the Transferor's
Outgoing Communication				
Precondition: The Trai	nsfer Target is b	arred by the Transferor'	s Outgoing Communi	cation Barring rules.
SIP header values:				
REFER 1: Refer-To cor				
Referred-By con	tains <b>ISC#1</b> UR			
-				
Comments:	_			
ISC#1	=	S Transferor	ISC#2	ISC#3
		ment of session #1		
INVITE	+	÷	INVITE 1	
180 Ringing	<b>→</b>	→ →	00	
	→			
200 OK (INVITE)	-		200 OK (INVITE)	
ACK	+	÷	ACK	
ACK	-	÷	ACK	A
ACK INVITE 2 (sendonly)	<b>→</b>	← →	ACK	
ACK INVITE 2 (sendonly) 200 OK (recvonly)	→ ←	← → ←	ACK INVITE (sendonly 200 OK (recvonly	
ACK INVITE 2 (sendonly) 200 OK (recvonly)	→ ← →	← → ← →	ACK	
ACK INVITE 2 (sendonly) 200 OK (recvonly) ACK	→ ← → ISC#1 trans	← → ← • • • • • • •	ACK INVITE (sendonly 200 OK (recvonly	
ACK INVITE 2 (sendonly) 200 OK (recvonly)	→ ← → ISC#1 trans → REF	← → ← • • • • • • •	ACK INVITE (sendonly 200 OK (recvonly	

## 5.2.6.3 CONFerence Calling (CONF)

TSS			- · · · ·
Interaction/CONF	<b>TP</b> ECT_N05_00	<b>Reference</b> 01 4.6.6	Selection expression PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3
<b>Test purpose</b> ECT does not apply if the Refe	er-To header of the REFER	? request dialogue contains ti	·
invited by REFER.			-
Ensure that ECT does not app response in a dialogue to join a	a conference after received	d a REFER request to refer to	
REFER request is rejected wit SIP header values:	n a 4xx or 5xx or 6xx unsuc	cessiul final response.	
INVITE: Request URI=confere	ence factory URI		
200 OK (INVITE) 1:			
Contact: conference			
REFER 1: Request URI=ISC#2			
	e URI;method=invite		
Referred-By ISC#1	UKI		
Comments:			
ISC#ISC#1	AS Transfer	ror Iready established	AS CONF
REFER		REFER	
202 Accepted	<b>→</b>	→ 202 Acc	
	_		
	→ ↓		
180 Ringing 200 OK (INVITE)	<del>+</del> +	← 180 Rin ← 200 OK	iging (INVITE)
ACK	→	→ ACK	
DEEED			
REFER 4xx or 5xx or 6xx Response	<ul> <li>→ REFER</li> <li>← 4xx or 5xx or 6xx Res</li> </ul>	nonse	
		test routine	
		Reference	Selection expression
TSS	TP		
TSS Interaction/CONF	<b>TP</b> ECT_N05_00		PICS 4.5.1/2 AND
			PICS 4.5.1/2 AND PICS 4.7.1/1 AND
Interaction/CONF			PICS 4.5.1/2 AND
Interaction/CONF Test purpose	ECT_N05_0	02 4.6.6	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3
Interaction/CONF Test purpose ECT does not apply if the Refe	ECT_N05_0	02 4.6.6	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3
Interaction/CONF Test purpose ECT does not apply if the Refe	ECT_N05_0	02 4.6.6 R request dialogue contains th	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3
Interaction/CONF Test purpose ECT does not apply if the Refe	ECT_N05_0	02 4.6.6 R request dialogue contains the contact	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF <b>Test purpose</b> <i>ECT does not apply if the Refe</i> <i>invited by INVITE.</i> Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu	ECT_N05_00	02 4.6.6 R request dialogue contains the contact	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values:	ECT_N05_00	02 4.6.6 R request dialogue contains the contact	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received I final response.	02 4.6.6 R request dialogue contains the contact	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received I final response.	02 4.6.6 R request dialogue contains the contact	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received I final response.	02 4.6.6 <i>R request dialogue contains the contains the contains the contains the contains the contains the request. The REF</i>	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 the URI targeted a conference theader of a 1xx or 200 OK
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer	02 4.6.6 <i>R request dialogue contains the contains the contains the contains the contains the contains the request. The REF</i>	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 ne URI targeted a conference at header of a 1xx or 200 OK ER request is rejected with a
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer A conference is a	02 4.6.6 <i>R request dialogue contains th</i> er was received in the Contact d a INVITE request. The REF ror Iready established ← INVITE	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FER request is rejected with a
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE 180 Ringing	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer A conference is a	02 4.6.6 <i>R request dialogue contains th</i> er was received in the Contact d a INVITE request. The REF ror Iready established ← INVITE → 180 Rin	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FER request is rejected with a AS CONF
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE 180 Ringing 200 OK (INVITE)	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer A conference is a →	02 4.6.6 R request dialogue contains the er was received in the Contact d a INVITE request. The REF ror Iready established ← INVITE → 180 Rin → 200 OK	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FER request is rejected with a
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE 180 Ringing	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer A conference is a	02 4.6.6 <i>R request dialogue contains th</i> er was received in the Contact d a INVITE request. The REF ror Iready established ← INVITE → 180 Rin	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FER request is rejected with a AS CONF
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE 180 Ringing 200 OK (INVITE)	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. e URI; isfocus AS Transfer A conference is a →	02 4.6.6 R request dialogue contains the er was received in the Contact d a INVITE request. The REF ror Iready established ← INVITE → 180 Rin → 200 OK	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FER request is rejected with a AS CONF
Interaction/CONF Test purpose ECT does not apply if the Refe invited by INVITE. Ensure that ECT does not app response in a dialogue to join a 4xx or 5xx or 6xx unsuccessfu SIP header values: INVITE: ISC#1 URI Contact: conference Comments: ISC#ISC#1 INVITE 180 Ringing 200 OK (INVITE) ACK	ECT_N05_00 er-To header of the REFER oly if the "Isfocue" paramete a conference after received il final response. AS Transfer A conference is a A conference is a	02 4.6.6 R request dialogue contains the er was received in the Contact d a INVITE request. The REF ror Irready established ← INVITE → 180 Rin → 200 OK ← ACK	PICS 4.5.1/2 AND PICS 4.7.1/1 AND PICS 7.7.2/3 The URI targeted a conference at header of a 1xx or 200 OK FR request is rejected with a AS CONF

TSS		TP	Reference	e Seleo	ction expression
Interaction/CONF		ECT_N05_003	4.6.6	PICS	4.5.1/2 AND
				PICS	4.7.1/1 AND
				PICS	7.7.2/3
Test purpose					
ECT does not apply if the a c	confei	rence controller invokes ECT.			
Ensure that ECT does not ap	ply if	the conference controller invo	okes ECT. TI	ne REFER request i	s rejected with a
4xx or 5xx or 6xx unsuccess	ul fin	al response.			
SIP header values:					
INVITE 1: conference factory	URI				
Comments:					
ISC#ISC#1		AS Transferor		AS	CONF
INVITE 1	→		→	INVITE	
200 OK (INVITE)	←		+	200 OK (INVITE)	
		Invite a	n other user	to the conference	
REFER	→	REFER			
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response			
·		Apply post test re	outine		

## 5.2.6.4 Explicit Communication Transfer (ECT)

TSS		TP		Reference		Sele	ection expression
Interaction/ECT		ECT_N06_00	1	4.6.10.2, 4.6.10	.3		S 4.5.1/2 AND
						PIC	S 4.7.1/1
Test purpose							
Interaction with ECT:	Blind trans	fer.					
		C#2 exists and was trans					
		n which the REFER is re			ansferr	ed co	mmunication
indicated by the prese	nce of a Re	ferred-By header in the I	NVITE	E request the:			
<ul> <li>REFER is forward</li> </ul>	led and the	value of the Refer-To he	eader i	s replaced by the	ECT se	ssion	Identifier.
<ul> <li>The Request URI</li> </ul>	of the INVI	TE request received to for	orward	I to the Transfer T	arget is	repla	ced with the value
of the Transfer Ta	irget.						
SIP header values:							
REFER 1: Refer-To IS							
Referred-B							
		Identifier URI; method=	=invite	)			
Referred-B							
INVITE 2: Request UF							
Referred-B							
INVITE 3: Request UF							
Referred-B	y <b>ISC#1</b> UR						
Comments:				100,000,00			100 1100 10
ISC#ISC#1		AS Transferor		ISC#ISC#2			ISC#ISC#3
		cation already exists					
	sion #1 on →						
REFER 1	7	REFER REFER 2	د	REFER			
			→ ←				
202 Accepted	+	202 Accepted	T	202 Accepted			
BYE	÷ →	202 Accepted	→	BYE			
200 OK (BYE)	÷		÷	200 OK (BYE)			
200 OK (BTL)	•	INVITE	÷	INVITE 2 (S2)			
		INVITE 3	À			→	INVITE
		180 Ringing	÷			÷	180 Ringing
		180 Ringing	À	180 Ringing		•	100 Kinging
		200 OK	÷	.co ranging		←	200 OK
		200 OK 200 OK	÷	200 OK		-	200 010
		200 010	-	200 010	ACK	→	ACK
					AUA	_	AUN

TSS	ТР	Reference		Sele	ection expression
Interaction/ECT	ECT_N06_002	4.6.10.2, 4.6.10			S 4.5.1/2 AND S 4.7.1/2
Test purpose					
Interaction with ECT: Ass	ured transfer.				
	and ISC#2 exists and was transfer				
	dialog on which the REFER is receipt		ransferre	d co	mmunication
	of a Referred-By header in the INV				
	and the value of the Refer-To head				
	he INVITE request received to forw	ard to the Transfer	Farget is r	epla	ced with the value
of the Transfer Targe	t				
SIP header values:					
REFER 1: Refer-To ISC#3					
Referred-By IS					
	Session Identifier URI; method=in	vite			
Referred-By IS					
	ECT Session Identifier URI				
Referred-By IS					
INVITE 3: Request URI = Referred-By IS					
Comments:					
ISC#1	AS Transferor	ISC#2			ISC#3
	mmunication already exists	130#2			100#3
	1 #1 on hold				
REFER 1	→ REFER				
		REFER			
	202 Accepted	202 Accepted			
	INVITE				
	INVITE 3			→	INVITE
	180 Ringing			←	180 Ringing
	180 Ringing	180 Ringing			
	200 OK			←	200 OK
	200 OK 🚽	200 OK			
			ACK	→	ACK
	Apply post tes	t routine			

TSS Interaction/ECT		<b>TP</b> ECT_N06_003	<b>Reference</b> 4.6.10.2, 4.6.10.3	Selection expression PICS 4.5.1/2 AND PICS 4.7.1/3
ndicated by the presence REFER is forwarded The Request URI of of the Transfer Targe SIP header values: NVITE 1: Request URI = REFER 1: Refer-To ISC# fro Referred-By IS REFER 2: Refer-To conta Referred-By c NVITE 2: Request URI = NVITE 3: Request URI =	1 and ISC#2 exi dialog on which e of a Referred- l and the value of the INVITE requent et. = ISC#3 B URI; method= n-tag=S2&Req SC#1 URI ains ECT Session = ECT Session = ISC#3 URI I-id-S2; to-tag=	ists and was transfe in the REFER is rece By header in the IN of the Refer-To head uest received to forv =invite?Replaces=ca uire=replaces on Identifier URI; m JRI	vived is a previously trans VITE request the: der is replaced by the EC vard to the Transfer Targ all-id-S2%3B to-tag=S2 nethod=invite	CT session Identifier. The is replaced with the value
Require: repla Comments: SC#1 A transferred co NVITE 1 (S1) 180 Ringing 200 OK (INVITE) ACK	AS	S Transferor Ilready exists	ISC#2	ISC#3 → INVITE ← 180 Ringing ← 200 OK (INVITE) → ACK
NVITE (sendonly) 200 OK (recvonly) ACK	→ ← →			<ul> <li>→ INVITE (sendonly)</li> <li>← 200 OK (recvonly)</li> <li>→ ACK</li> </ul>
REFER 1 202 Accepted INVITE (inactive) 200 OK (inactive) ACK NOTIFY(100) 200 OK NOTIFY	<ul> <li>→ REFE</li> <li>← 202 /</li> <li>←</li> <li>←</li> <li>←</li> <li>→</li> <li>←</li> <li>→</li> </ul>	REFER 2 202 Accepted Accepted INVITE INVITE 3 180 Ringing 180 Ringing 200 OK	202 Accepted INVITE (inactive) 200 OK (inactive) ACK NOTIFY(100) 200 OK NOTIFY INVITE 2 (S3) 180 Ringing	<ul> <li>→ INVITE</li> <li>← 180 Ringing</li> <li>← 200 OK</li> </ul>
NOTIFY(200) 200 OK NOTIFY	<b>←</b> →	200 OK 🚽	AC NOTIFY(200)	К → АСК
BYE 200 OK (BYE) BYE (S1) 200 OK (BYE)	← → →			<ul> <li>← BYE (S2)</li> <li>→ 200 OK (BYE)</li> </ul>

## Annex A (informative): Bibliography

ETSI TS 123 228: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Stage 2 (3GPP TS 23.228 Release 10)".

# History

Document history				
V5.1.1	October 2012	Publication		