

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.4007.2

(08/2016)

SERIES Q: SWITCHING AND SIGNALLING

Testing specifications – Testing specifications for SIP-IMS

**Explicit communication transfer using IP
multimedia core network subsystem;
Conformance testing – Part 2: Network side;
Test structure and test purposes**

Recommendation ITU-T Q.4007.2

ITU-T Q-SERIES RECOMMENDATIONS
SWITCHING AND SIGNALLING

SIGNALLING IN THE INTERNATIONAL MANUAL SERVICE	Q.1–Q.3
INTERNATIONAL AUTOMATIC AND SEMI-AUTOMATIC WORKING	Q.4–Q.59
FUNCTIONS AND INFORMATION FLOWS FOR SERVICES IN THE ISDN	Q.60–Q.99
CLAUSES APPLICABLE TO ITU-T STANDARD SYSTEMS	Q.100–Q.119
SPECIFICATIONS OF SIGNALLING SYSTEMS No. 4, 5, 6, R1 AND R2	Q.120–Q.499
DIGITAL EXCHANGES	Q.500–Q.599
INTERWORKING OF SIGNALLING SYSTEMS	Q.600–Q.699
SPECIFICATIONS OF SIGNALLING SYSTEM No. 7	Q.700–Q.799
Q3 INTERFACE	Q.800–Q.849
DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 1	Q.850–Q.999
PUBLIC LAND MOBILE NETWORK	Q.1000–Q.1099
INTERWORKING WITH SATELLITE MOBILE SYSTEMS	Q.1100–Q.1199
INTELLIGENT NETWORK	Q.1200–Q.1699
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR IMT-2000	Q.1700–Q.1799
SPECIFICATIONS OF SIGNALLING RELATED TO BEARER INDEPENDENT CALL CONTROL (BICC)	Q.1900–Q.1999
BROADBAND ISDN	Q.2000–Q.2999
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR THE NGN	Q.3000–Q.3709
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR SDN	Q.3710–Q.3899
TESTING SPECIFICATIONS	Q.3900–Q.4099
Testing specifications for next generation networks	Q.3900–Q.3999
Testing specifications for SIP-IMS	Q.4000–Q.4039
Testing specifications for Cloud computing	Q.4040–Q.4059

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T Q.4007.2

Explicit communication transfer using IP multimedia core network subsystem; Conformance testing – Part 2: Network side; Test suite structure and test purposes

Summary

Recommendation ITU-T Q.4007.2 is Part 2 of the testing specifications for explicit communication transfer (ECT) using IP multimedia core network subsystem for the network side. The standard specifies the test suite structure and test purposes (TSS&TP) for the network side which can be used for testing against Recommendation ITU-T Q.3623 v.1.

The version number, v.1, indicates that this is version one of Recommendation ITU-T Q.4007.2, and that it relates to Release 10 of the relevant 3GPP/ETSI standard.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T Q.4007.2 v.1	2016-08-29	11	11.1002/1000/12994

Keywords

Explicit communication transfer, ECT, IP multimedia subsystem, IMS, network side, PICS, session description protocol, SDP, session initiation protocol, SIP, testing, user side.

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2017

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

Table of Contents

	Page
1 Scope.....	1
2 References.....	1
3 Definitions	1
4 Abbreviations and acronyms	1
5 Test suite structure and configuration.....	2
5.1 Configuration.....	2
6 Test purposes	3
6.1 Introduction	3
6.2 Signalling requirements.....	3

Recommendation ITU-T Q.4007.2

Explicit communication transfer (ECT) using IP multimedia core network subsystem; Conformance testing – Part 2: Network side; Test suite structure and test purposes

1 Scope

This Recommendation provides the test suite structure and test purposes (TSS&TP) for the protocol specification as defined in explicit communication transfer (ECT) using IP multimedia (IM) core network (CN) subsystem in compliance with the relevant requirements.

This Recommendation 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: "Network side; Test suite structure and test purposes (TSS&TP)";

Part 3: "User side; Test suite structure and test purposes (TSS&TP)".

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T Q.3623 v.1] Recommendation ITU-T Q.3623 v.1 (2016), *Explicit communication transfer using IP multimedia core network subsystem – Protocol specification*.

[ITU-T Q.4007.1 v.1] Recommendation ITU-T Q.4007.1 v.1 (2016), *Explicit communication transfer using IP multimedia core network subsystem; Conformance testing – Part 1: Network side and user side; Protocol implementation conformance statement*.

[ETSI TS 124 628] ETSI TS 124 628 (2011), *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 version 10.3.0 Release 10)*.

3 Definitions

None.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ACR-CB Anonymous Communication Rejection- Communication Barring

AS Application Server

CN	Core Network
ISC	IM-CN Service Control
IM	IP Multimedia
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

5 Test suite structure and configuration

Netw		
	TransferorAS	ECT_N01_XXX
	TransfereeAS	ECT_N02_XXX
Interaction	OIR	ECT_N03_XXX
	ACR-CB	ECT_N04_XXX
	CONF	ECT_N05_XXX
	ECT	ECT_N06_XXX

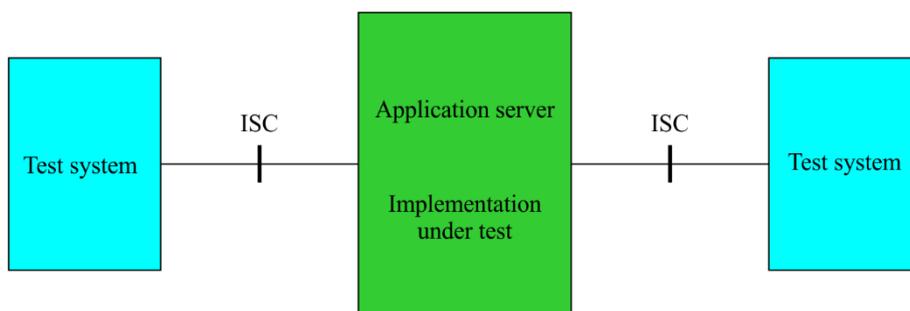
Figure 5-1 – Test suite structure

5.1 Configuration

The scope of this Recommendation is to test the signalling and procedural aspects of the stage 3 requirements as described in [ITU-T Q.3623 v.1]. The stage 3 description respects the requirements of several network entities and also requirements regarding end devices. Therefore several interfaces (reference points) are addressed to satisfy the test of the different entities.

To test the appropriate entities the configurations below are applicable:

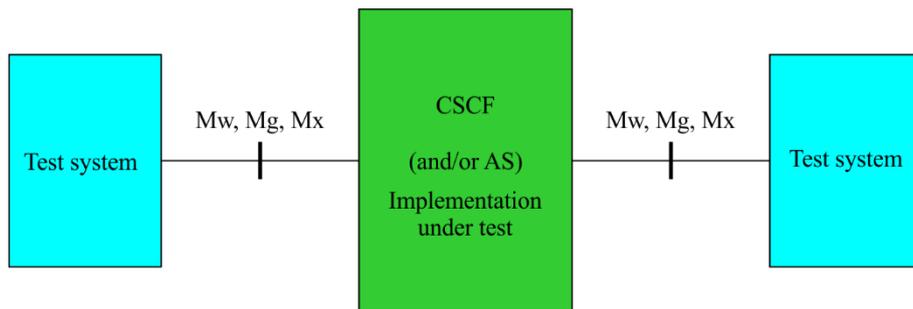
Testing of the application server (AS): The application server performs the service. Hence the IM-CN service control (ISC) interface is the appropriate access point as shown in Figure 5.1-1.



Q.4007.2v1(16)_F5.1-1

Figure 5.1-1 – Applicable interface to test AS functionalities

If the ISC interface is not accessible the test can be done using any NNI (Mw, Mg, Mx) (see Figure 5.1-2). The Gm interface shall be used instead, if it is the only interface available. In this case, be aware that verification of several requirements is impeded.



Q.4007.2v1(16)_F5.1-2

Figure 5.1-2 –Interfaces applicable to testing using the (generic) NNI

Figure 5.1-2 illustrates the usage of any NNI.

6 Test purposes

6.1 Introduction

For each test requirement a test purpose (TP) is defined.

6.1.1 TP naming convention

Test purposes (TPs) are numbered, starting at 001, within each group. Groups are organized according to the test suite structure (TSS). Additional references are added to identify the actual test suite and whether it applies to the network or the user (see Table 6.1-1).

Table 6.1-1 – TP identifier naming convention scheme

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

6.1.2 Test strategy

As the base standard [ITU-T Q.3623 v.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 [ITU-T Q.4007.1 v.1].

6.2 Signalling requirements

6.2.1 Actions at the transferor application server

TSS Netw/TransferorAS	TP ECT_N01_001	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]																																																																																																																				
Test purpose <i>Communication transfer: Assured transfer. Transferor was originator of the originating call.</i> Ensure that a transferor can successfully transfer the communication with the transferee set on hold before and the transferor is notified about the processing. After the communication between the transferee and the transfer target is confirmed, the communication between transferor and transferee is terminated. The transferor was the initiator of the originating communication.																																																																																																																							
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI REFER 2: Refer-To contains ECT Session Identifier URI; method=invite Referred-By contains ISC#ISC#1 URI INVITE 3: Request URI = ECT Session Identifier URI INVITE 4: Request URI = ISC#3 URI NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																																																							
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: left;">ISC#2</th> <th style="text-align: left;">ISC#3</th> </tr> </thead> <tbody> <tr> <td>INVITE 1</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>← 180 Ringing</td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td>← 200 OK (INVITE)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>→ ACK</td> <td></td> </tr> <tr> <td>INVITE 2 (sendonly)</td> <td style="text-align: center;">→</td> <td>→ INVITE (sendonly)</td> <td></td> </tr> <tr> <td>200 OK (recvonly)</td> <td style="text-align: center;">←</td> <td>← 200 OK (recvonly)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>→ ACK</td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER 2</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>INVITE (inactive)</td> <td style="text-align: center;">←</td> <td>← INVITE (inactive)</td> <td></td> </tr> <tr> <td>200 OK (inactive)</td> <td style="text-align: center;">→</td> <td>→ 200 OK (inactive)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">←</td> <td>← ACK</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>← NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>→ 200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>← NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>→ 200 OK NOTIFY</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>→ BYE</td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>← 200 OK (BYE)</td> <td></td> </tr> </tbody> </table> <p style="text-align: right; margin-right: 100px;">Communication ISC#2 with ISC#3</p> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE 1	→	→ INVITE		180 Ringing	←	← 180 Ringing		200 OK (INVITE)	←	← 200 OK (INVITE)		ACK	→	→ ACK		INVITE 2 (sendonly)	→	→ INVITE (sendonly)		200 OK (recvonly)	←	← 200 OK (recvonly)		ACK	→	→ ACK		REFER 1	→	REFER				REFER 2				202 Accepted		202 Accepted	←	202 Accepted		INVITE (inactive)	←	← INVITE (inactive)		200 OK (inactive)	→	→ 200 OK (inactive)		ACK	←	← ACK		NOTIFY(100)	←	← NOTIFY(100)		200 OK NOTIFY	→	→ 200 OK NOTIFY				INVITE				INVITE 4				180 Ringing	→ INVITE			180 Ringing	← 180 Ringing			200 OK				200 OK	← 200 OK			200 OK				ACK	→ ACK	NOTIFY(200)	←	← NOTIFY(200)		200 OK NOTIFY	→	→ 200 OK NOTIFY		BYE	→	→ BYE		200 OK (BYE)	←	← 200 OK (BYE)	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																																				
INVITE 1	→	→ INVITE																																																																																																																					
180 Ringing	←	← 180 Ringing																																																																																																																					
200 OK (INVITE)	←	← 200 OK (INVITE)																																																																																																																					
ACK	→	→ ACK																																																																																																																					
INVITE 2 (sendonly)	→	→ INVITE (sendonly)																																																																																																																					
200 OK (recvonly)	←	← 200 OK (recvonly)																																																																																																																					
ACK	→	→ ACK																																																																																																																					
REFER 1	→	REFER																																																																																																																					
		REFER 2																																																																																																																					
		202 Accepted																																																																																																																					
202 Accepted	←	202 Accepted																																																																																																																					
INVITE (inactive)	←	← INVITE (inactive)																																																																																																																					
200 OK (inactive)	→	→ 200 OK (inactive)																																																																																																																					
ACK	←	← ACK																																																																																																																					
NOTIFY(100)	←	← NOTIFY(100)																																																																																																																					
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																																					
		INVITE																																																																																																																					
		INVITE 4																																																																																																																					
		180 Ringing	→ INVITE																																																																																																																				
		180 Ringing	← 180 Ringing																																																																																																																				
		200 OK																																																																																																																					
		200 OK	← 200 OK																																																																																																																				
		200 OK																																																																																																																					
		ACK	→ ACK																																																																																																																				
NOTIFY(200)	←	← NOTIFY(200)																																																																																																																					
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																																					
BYE	→	→ BYE																																																																																																																					
200 OK (BYE)	←	← 200 OK (BYE)																																																																																																																					

TSS Netw/TransferorAS	TP ECT_N01_002	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
Test purpose			
<i>Communication transfer: Assured transfer. Transferee was originator of the originating call.</i>			
Ensure that a transferor can successfully transfer the communication with the transferee set on hold before and the transferor is notified about the processing. After the communication between the transferee and the transfer target is confirmed, the communication between transferor and transferee is terminated. The transferee was the initiator of the originating communication.			
SIP header values:			
REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI			
REFER 2: Refer-To contains ECT Session Identifier URI; method=invite Referred-By contains ISC#1 URI			
INVITE 3: Request URI = ECT Session Identifier URI			
INVITE 4: Request URI = ISC#3 URI			
NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying			
NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
INVITE	←	← INVITE 1	
180 Ringing	→	→ 180 Ringing	
200 OK (INVITE)	→	→ 200 OK (INVITE)	
ACK	←	← ACK	
INVITE 2 (sendonly)	→	→ INVITE (sendonly)	
200 OK (recvonly)	←	← 200 OK (recvonly)	
ACK	→	→ ACK	
REFER 1	→ REFER	→ REFER 2	
		← 202 Accepted	
202 Accepted	← 202 Accepted		
INVITE (inactive)	←	← INVITE (inactive)	
200 OK (inactive)	→	→ 200 OK (inactive)	
ACK	←	← ACK	
NOTIFY(100)	←	← NOTIFY(100)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
		← INVITE 3	
		→ INVITE 4	→ INVITE
		← 180 Ringing	← 180 Ringing
		→ 180 Ringing	
		← 200 OK	← 200 OK
		→ 200 OK	
			ACK → ACK
NOTIFY(200)	←	← NOTIFY(200)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
BYE	→	→ BYE	
200 OK (BYE)	←	← 200 OK (BYE)	
Communication ISC#2 with ISC#3			
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_003	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
Test purpose <i>Communication transfer: Blind transfer. Transferor was originator of the originating call.</i> Ensure that a transferor can successfully transfer the communication with the transferee set on hold before and the transferor is notified about the processing. After the REFER request to the transferee is sent, the communication between transferor and transferee is terminated. The transferor was the initiator of the originating communication.			
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI REFER 2: Refer-To contains ECT Session Identifier URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ECT Session Identifier URI INVITE 4: Request URI = ISC#3 URI NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
INVITE 1	→	→ INVITE	
180 Ringing	←	← 180 Ringing	
200 OK (INVITE)	←	← 200 OK (INVITE)	
ACK	→	→ ACK	
INVITE 2 (sendonly)	→	→ INVITE (sendonly)	
200 OK (recvonly)	←	← 200 OK (recvonly)	
ACK	→	→ ACK	
REFER 1	→ REFER	REFER 2 → REFER	
		202 Accepted ← 202 Accepted	
202 Accepted	← 202 Accepted		
BYE	→	→ BYE	
200 OK (BYE)	←	← 200 OK (BYE)	
NOTIFY(100)	←	← NOTIFY(100)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
		INVITE ← INVITE 3	
		INVITE 4 →	→ INVITE
		180 Ringing ←	← 180 Ringing
		180 Ringing → 180 Ringing	
		200 OK ←	← 200 OK
		200 OK → 200 OK	
			ACK → ACK
NOTIFY(200)	←	← NOTIFY(200)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
Communication ISC#2 with ISC#3			
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_004	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]																																																																																																
Test purpose <i>Communication transfer: Blind transfer. Transferee was originator of the originating call.</i> Ensure that a transferor can successfully transfer the communication with the transferee set on hold before and the transferor is notified about the processing. After the REFER request to the transferee is sent, the communication between transferor and transferee is terminated. The transferee was the initiator of the originating communication.																																																																																																			
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI REFER 2: Refer-To contains ECT Session Identifier URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ECT Session Identifier URI INVITE 4: Request URI = ISC#3 URI NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																																			
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: left;">ISC#2</th> <th style="text-align: left;">ISC#3</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">←</td> <td>← INVITE 1</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">→</td> <td>→ 180 Ringing</td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">→</td> <td>→ 200 OK (INVITE)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">←</td> <td>← ACK</td> <td></td> </tr> <tr> <td>INVITE 2 (sendonly)</td> <td style="text-align: center;">→</td> <td>→ INVITE (sendonly)</td> <td></td> </tr> <tr> <td>200 OK (recvonly)</td> <td style="text-align: center;">←</td> <td>← 200 OK (recvonly)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>→ ACK</td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>← 202 Accepted</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>→ BYE</td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>← 200 OK (BYE)</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>← NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>→ 200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">→ 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">→ 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>← NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>→ 200 OK NOTIFY</td> <td></td> </tr> </tbody> </table> <p style="text-align: right; margin-right: 50px;">Communication ISC#2 with ISC#3</p> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE	←	← INVITE 1		180 Ringing	→	→ 180 Ringing		200 OK (INVITE)	→	→ 200 OK (INVITE)		ACK	←	← ACK		INVITE 2 (sendonly)	→	→ INVITE (sendonly)		200 OK (recvonly)	←	← 200 OK (recvonly)		ACK	→	→ ACK		REFER 1	→	REFER				202 Accepted		202 Accepted	←	← 202 Accepted		BYE	→	→ BYE		200 OK (BYE)	←	← 200 OK (BYE)		NOTIFY(100)	←	← NOTIFY(100)		200 OK NOTIFY	→	→ 200 OK NOTIFY				INVITE				INVITE 4	→ INVITE			180 Ringing	← 180 Ringing			180 Ringing	→ 180 Ringing			200 OK	← 200 OK			200 OK	→ 200 OK			ACK	→ ACK	NOTIFY(200)	←	← NOTIFY(200)		200 OK NOTIFY	→	→ 200 OK NOTIFY	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																
INVITE	←	← INVITE 1																																																																																																	
180 Ringing	→	→ 180 Ringing																																																																																																	
200 OK (INVITE)	→	→ 200 OK (INVITE)																																																																																																	
ACK	←	← ACK																																																																																																	
INVITE 2 (sendonly)	→	→ INVITE (sendonly)																																																																																																	
200 OK (recvonly)	←	← 200 OK (recvonly)																																																																																																	
ACK	→	→ ACK																																																																																																	
REFER 1	→	REFER																																																																																																	
		202 Accepted																																																																																																	
202 Accepted	←	← 202 Accepted																																																																																																	
BYE	→	→ BYE																																																																																																	
200 OK (BYE)	←	← 200 OK (BYE)																																																																																																	
NOTIFY(100)	←	← NOTIFY(100)																																																																																																	
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																	
		INVITE																																																																																																	
		INVITE 4	→ INVITE																																																																																																
		180 Ringing	← 180 Ringing																																																																																																
		180 Ringing	→ 180 Ringing																																																																																																
		200 OK	← 200 OK																																																																																																
		200 OK	→ 200 OK																																																																																																
		ACK	→ ACK																																																																																																
NOTIFY(200)	←	← NOTIFY(200)																																																																																																	
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																	

TSS Netw/TransferorAS	TP ECT_N01_005	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]																																																																																																																
Test purpose <i>Communication transfer: Consultative transfer. Transferor was originator of the originating call.</i> Ensure that a transferor can successfully transfer the communication with the transferee set on hold before and the transferor is notified about the processing. The transferor has a session with transferee and the transfer target set on hold. The transferor refers the transferee to establish a session to the transfer target. After the successful session between transferee and transfer target, the sessions of the transferor are released by the transferor. The transferor was the initiator of the originating communication.																																																																																																																			
SIP header values: REFER 1: Refer-To contains ISC#3 URI ; method=invite?Replaces=call-id1%3Bto-tag%3DS1%3B from-tag%3DS1&Require=replaces Referred-By contains ISC#1 URI REFER 2: Refer-To contains ECT Session Identifier URI ;method=invite Referred-By contains ISC#1 URI INVITE 3:Request URI = ECT Session Identifier URI Referred-By contains ISC#1 URI INVITE 4:Request URI = ISC#3 URI ; Replaces: call-id1;to-tag=S1;from-tag=S1 Require: replaces Referred-By contains ISC#1 URI NOTIFY(100): Event contains refer ; Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer ; message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																																																			
Comments: <table border="0" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: left;">ISC#2</th> <th style="text-align: left;">ISC#3</th> </tr> </thead> <tbody> <tr> <td>INVITE 1</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>← 180 Ringing</td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td>← 200 OK (INVITE)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>→ ACK</td> <td></td> </tr> <tr> <td>INVITE (sendonly)</td> <td style="text-align: center;">→</td> <td>→ INVITE (sendonly)</td> <td></td> </tr> <tr> <td>200 OK (recvonly)</td> <td style="text-align: center;">←</td> <td>← 200 OK (recvonly)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>→ ACK</td> <td></td> </tr> <tr> <td>INVITE 2</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>INVITE (sendonly)</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE (sendonly)</td> </tr> <tr> <td>200 OK (recvonly)</td> <td style="text-align: center;">←</td> <td></td> <td>← 200 OK (recvonly)</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>REFER 2 → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>202 Accepted ← 202 Accepted</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>INVITE (inactive)</td> <td style="text-align: center;">←</td> <td>← INVITE (inactive)</td> <td></td> </tr> <tr> <td>200 OK (inactive)</td> <td style="text-align: center;">→</td> <td>→ 200 OK (inactive)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">←</td> <td>← ACK</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>← NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>→ 200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE ← INVITE 3</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing → 180 Ringing</td> <td></td> </tr> </tbody> </table>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE 1	→	→ INVITE		180 Ringing	←	← 180 Ringing		200 OK (INVITE)	←	← 200 OK (INVITE)		ACK	→	→ ACK		INVITE (sendonly)	→	→ INVITE (sendonly)		200 OK (recvonly)	←	← 200 OK (recvonly)		ACK	→	→ ACK		INVITE 2	→		→ INVITE	180 Ringing	←		← 180 Ringing	200 OK (INVITE)	←		← 200 OK (INVITE)	ACK	→		→ ACK	INVITE (sendonly)	→		→ INVITE (sendonly)	200 OK (recvonly)	←		← 200 OK (recvonly)	ACK	→		→ ACK	REFER 1	→	REFER				REFER 2 → REFER				202 Accepted ← 202 Accepted		202 Accepted	←	202 Accepted		INVITE (inactive)	←	← INVITE (inactive)		200 OK (inactive)	→	→ 200 OK (inactive)		ACK	←	← ACK		NOTIFY(100)	←	← NOTIFY(100)		200 OK NOTIFY	→	→ 200 OK NOTIFY				INVITE ← INVITE 3				INVITE 4 →	→ INVITE			180 Ringing ←	← 180 Ringing			180 Ringing → 180 Ringing	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																																
INVITE 1	→	→ INVITE																																																																																																																	
180 Ringing	←	← 180 Ringing																																																																																																																	
200 OK (INVITE)	←	← 200 OK (INVITE)																																																																																																																	
ACK	→	→ ACK																																																																																																																	
INVITE (sendonly)	→	→ INVITE (sendonly)																																																																																																																	
200 OK (recvonly)	←	← 200 OK (recvonly)																																																																																																																	
ACK	→	→ ACK																																																																																																																	
INVITE 2	→		→ INVITE																																																																																																																
180 Ringing	←		← 180 Ringing																																																																																																																
200 OK (INVITE)	←		← 200 OK (INVITE)																																																																																																																
ACK	→		→ ACK																																																																																																																
INVITE (sendonly)	→		→ INVITE (sendonly)																																																																																																																
200 OK (recvonly)	←		← 200 OK (recvonly)																																																																																																																
ACK	→		→ ACK																																																																																																																
REFER 1	→	REFER																																																																																																																	
		REFER 2 → REFER																																																																																																																	
		202 Accepted ← 202 Accepted																																																																																																																	
202 Accepted	←	202 Accepted																																																																																																																	
INVITE (inactive)	←	← INVITE (inactive)																																																																																																																	
200 OK (inactive)	→	→ 200 OK (inactive)																																																																																																																	
ACK	←	← ACK																																																																																																																	
NOTIFY(100)	←	← NOTIFY(100)																																																																																																																	
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																																	
		INVITE ← INVITE 3																																																																																																																	
		INVITE 4 →	→ INVITE																																																																																																																
		180 Ringing ←	← 180 Ringing																																																																																																																
		180 Ringing → 180 Ringing																																																																																																																	

TSS Netw/TransferorAS	TP ECT_N01_0 06	Reference Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
INVITE 2 → 180 Ringing ← 200 OK (INVITE) ← ACK →			→ INVITE ← 180 Ringing ← 200 OK (INVITE) → ACK
INVITE (sendonly) → 200 OK (recvonly) ← ACK →			→ INVITE (sendonly) ← 200 OK (recvonly) → ACK
REFER 1 →	REFER	→REFER 2 ←202 Accepted 202 Accepted ←INVITE (inactive) →200 OK (inactive) ←ACK	
NOTIFY(100) ← 200 OK NOTIFY →		←NOTIFY(100) →200 OK NOTIFY	
	INVITE INVITE 4 → 180 Ringing ← 180 Ringing → 200 OK ← 200 OK →	←INVITE 3 → INVITE ← 180 Ringing →180 Ringing ← 200 OK →200 OK	ACK → ACK
NOTIFY(200) ← 200 OK NOTIFY →		←NOTIFY(200) →200 OK NOTIFY	
BYE ← 200 OK (BYE) → BYE → 200 OK (BYE) ←		→BYE ←200 OK (BYE)	← BYE → 200 OK (BYE)
Communication ISC#2 with ISC#3 Apply post test routine			

TSS	TP ECT_N01_008	Reference Clause 4.5.2.4.1.2.2 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 [ITU-T Q.4007.1 v.1]
Test purpose <i>The request-URI is not targeted at the same UE instance that is involved in the dialog.</i> Ensure that the ECT simulation service does not apply if the request URI is not the transferee URI. The REFER request is rejected.			
SIP header values: REFER: Request URI contained the other URI (PIXIT) Refer-To contains the URI of ISC#3 , method=invite Referred-By contains SIP or tel URI of ISC#1			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
INVITE	→	→ INVITE	
180 Ringing	←	← 180 Ringing	
200 OK (INVITE)	←	← 200 OK (INVITE)	
ACK	→	→ ACK	
INVITE (sendonly)	→	→ INVITE (sendonly)	
200 OK (recvonly)	←	← 200 OK (recvonly)	
ACK	→	→ ACK	
REFER	→	REFER	
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response	
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_009	Reference Clause 4.5.2.4.1.2.2 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 [ITU-T Q.4007.1 v.1]
Test purpose <i>There is no method parameter contained in the Refer-To header.</i> Ensure that the REFER request is rejected if there is no method parameter contained in the Refer-To header.			
SIP header values: REFER: Refer-To To contains ISC#3 URI (no method parameter) Referred-By contains ISC#1 URI			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
INVITE	→	→ INVITE	
180 Ringing	←	← 180 Ringing	
200 OK (INVITE)	←	← 200 OK (INVITE)	
ACK	→	→ ACK	
INVITE (sendonly)	→	→ INVITE (sendonly)	
200 OK (recvonly)	←	← 200 OK (recvonly)	
ACK	→	→ ACK	
		ISC#1 transfers ISC#2 to ISC#3	
REFER	→	REFER	
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response	
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_010	Reference Clause 4.5.2.4.2.1 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]																																																																																																								
<p>Test purpose</p> <p><i>In the REFER request, the Referred-By header does not contain the valid identity of the served user.</i></p> <p>A Referred-By header is available in the REFER request, the AS verifies if the provided Referred-By header contains a valid identity of the served user. If not it will replace the Referred-By header with a valid value matching the REFER request's P-Asserted-Identity.</p>																																																																																																											
<p>SIP header values:</p> <p>REFER 1: Request URI: ISC#2 Referred-By contains ISC#x URI (PIXIT any value) P-Asserted-Identity=ISC#1</p> <p>REFER 1: Request URI: ISC#2 Referred-By contains ISC#1 URI</p>																																																																																																											
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">ISC#1</th> <th style="text-align: center; width: 30%;">AS Transferor</th> <th style="text-align: left; width: 20%;">ISC#2</th> <th style="text-align: left; width: 30%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td colspan="4" style="text-align: center;">Establishment of session #2</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #2 on hold</td> </tr> <tr> <td colspan="4" style="text-align: center;">ISC#1 transfers ISC#2 to ISC#3</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER 2</td> <td style="text-align: center;">→</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted</td> <td style="text-align: center;">←</td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>INVITE (inactive)</td> <td style="text-align: center;">←</td> <td>INVITE (inactive)</td> <td></td> </tr> <tr> <td>200 OK (inactive)</td> <td style="text-align: center;">→</td> <td>200 OK (inactive)</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">←</td> <td>ACK</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">←</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4</td> <td style="text-align: center;">→</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">←</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">→</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">←</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">→</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">ACK →</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>BYE</td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>200 OK (BYE)</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	Establishment of session #1				Session #1 on hold				Establishment of session #2				Session #2 on hold				ISC#1 transfers ISC#2 to ISC#3				REFER 1	→	REFER				REFER 2	→			202 Accepted	←	202 Accepted	←	202 Accepted		INVITE (inactive)	←	INVITE (inactive)		200 OK (inactive)	→	200 OK (inactive)		ACK	←	ACK		NOTIFY(100)	←	NOTIFY(100)		200 OK NOTIFY	→	200 OK NOTIFY				INVITE	←			INVITE 4	→			180 Ringing	←			180 Ringing	→			200 OK	←			200 OK	→				ACK →	NOTIFY(200)	←	NOTIFY(200)		200 OK NOTIFY	→	200 OK NOTIFY		BYE	→	BYE		200 OK (BYE)	←	200 OK (BYE)	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																								
Establishment of session #1																																																																																																											
Session #1 on hold																																																																																																											
Establishment of session #2																																																																																																											
Session #2 on hold																																																																																																											
ISC#1 transfers ISC#2 to ISC#3																																																																																																											
REFER 1	→	REFER																																																																																																									
		REFER 2	→																																																																																																								
		202 Accepted	←																																																																																																								
202 Accepted	←	202 Accepted																																																																																																									
INVITE (inactive)	←	INVITE (inactive)																																																																																																									
200 OK (inactive)	→	200 OK (inactive)																																																																																																									
ACK	←	ACK																																																																																																									
NOTIFY(100)	←	NOTIFY(100)																																																																																																									
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																									
		INVITE	←																																																																																																								
		INVITE 4	→																																																																																																								
		180 Ringing	←																																																																																																								
		180 Ringing	→																																																																																																								
		200 OK	←																																																																																																								
		200 OK	→																																																																																																								
			ACK →																																																																																																								
NOTIFY(200)	←	NOTIFY(200)																																																																																																									
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																									
BYE	→	BYE																																																																																																									
200 OK (BYE)	←	200 OK (BYE)																																																																																																									

TSS Netw/TransferorAS	TP ECT_N01_011	Reference Clause 4.5.2.4.2.1 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
Test purpose <i>The REFER request does not contain a Referred-By header.</i> If no Referred-By header is available in the REFER request a Referred-By header is added that matches the REFER method's P-Asserted-Identity.			
SIP header values: REFER 1: Request URI: ISC#2 Referred-By not present 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
	Establishment of session #1		
	Session #1 on hold		
	Establishment of session #2		
	Session #2 on hold		
	ISC#1 transfers ISC#2 to ISC#3		
REFER 1	→ REFER		
		REFER 2 → REFER	
		202 Accepted ←	202 Accepted
202 Accepted	← 202 Accepted		
INVITE (inactive)	←	← INVITE (inactive)	
200 OK (inactive)	→	→ 200 OK (inactive)	
ACK	←	← ACK	
NOTIFY(100)	←	← NOTIFY(100)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
		INVITE ←	INVITE 3
		INVITE 4 →	→ INVITE
		180 Ringing ←	← 180 Ringing
		180 Ringing →	180 Ringing
		200 OK ←	← 200 OK
		200 OK →	200 OK
			ACK → ACK
NOTIFY(200)	←	← NOTIFY(200)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
BYE	→	→ BYE	
200 OK (BYE)	←	← 200 OK (BYE)	
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_012	Reference Clause 4.5.2.4.2.1 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
Test purpose			
<i>The Referred-By header in the received INVITE does not contain the valid identity of the served user.</i>			
If a Referred-By header is available in the INVITE request, the AS verifies if the provided Referred-By header contains a valid identity of the served user. If not it will replace the Referred-By header with a valid value matching the REFER request's P-Asserted-Identity.			
SIP header values:			
REFER 1: Refer-To contains ISC#3 URI; method=invite P-Asserted-Identity= ISC#1			
INVITE 3: Request URI = ECT Session Identifier URI Referred-By contains ISC#x URI (PIXIT any value)			
INVITE 4: Request URI = ISC#3 URI Referred-By contains ISC#1 URI			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
	Establishment of session #1		
	Session #1 on hold		
	Establishment of session #2		
	Session #2 on hold		
	ISC#1 transfers ISC#2 to ISC#3		
REFER 1	→ REFER		
		REFER 2 → REFER	
		202 Accepted ←	202 Accepted
202 Accepted	← 202 Accepted		
INVITE (inactive)	←	← INVITE (inactive)	
200 OK (inactive)	→	→ 200 OK (inactive)	
ACK	←	← ACK	
NOTIFY(100)	←	← NOTIFY(100)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
		INVITE ← INVITE 3	
		INVITE 4 →	→ INVITE
		180 Ringing ←	← 180 Ringing
		180 Ringing →	180 Ringing
		200 OK ←	← 200 OK
		200 OK →	200 OK
			ACK → ACK
NOTIFY(200)	←	← NOTIFY(200)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_013	Reference Clause 4.5.2.4.2.1 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND NOT (PICS 5.7.1/4 OR PICS 5.7.1/5) [ITU-T Q.4007.1 v.1]
Test purpose <i>The received INVITE does not contain a Referred-By header.</i> If no Referred-By header is available in the INVITE request a Referred-By header is added that matches the REFER request's P-Asserted-Identity.			
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite P-Asserted-Identity= ISC#1 INVITE 3: Request URI = ECT Session Identifier URI Referred-By not present INVITE 4: Request URI = ISC#3 URI Referred-By contains ISC#1 URI			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
Establishment of session #1			
Session #1 on hold			
Establishment of session #2			
Session #2 on hold			
ISC#1 transfers ISC#2 to ISC#3			
REFER 1	→ REFER		
		REFER 2 → REFER	
		202 Accepted ←	202 Accepted
202 Accepted	← 202 Accepted		
INVITE (inactive)	←	← INVITE (inactive)	
200 OK (inactive)	→	→ 200 OK (inactive)	
ACK	←	← ACK	
NOTIFY(100)	←	← NOTIFY(100)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
		INVITE ←	INVITE 3
		INVITE 4 →	→ INVITE
		180 Ringing ←	← 180 Ringing
		180 Ringing →	180 Ringing
		200 OK ←	← 200 OK
		200 OK →	200 OK
			ACK → ACK
NOTIFY(200)	←	← NOTIFY(200)	
200 OK NOTIFY	→	→ 200 OK NOTIFY	
BYE	→	→ BYE	
200 OK (BYE)	←	← 200 OK (BYE)	
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_014	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																																																												
Test purpose <i>Assured transfer. The transferor AS receives a 403 Forbidden indicating that the transferee does not support the REFER method.</i> Ensure that three party call control applies at the transferor AS when a 403 Forbidden is received upon a REFER was sent to the transferee: <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																																																																															
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1 NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																																																																															
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">ISC#1</th> <th style="text-align: center; width: 10%;"></th> <th style="text-align: center; width: 40%;">AS Transferor</th> <th style="text-align: center; width: 10%;"></th> <th style="text-align: center; width: 10%;">ISC#2</th> <th style="text-align: center; width: 10%;"></th> <th style="text-align: center; width: 10%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">Establishment of session #1</td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">Session #1 on hold</td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> <td>REFER →REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>403 Forbidden ←403 Forbidden</td> <td></td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">3 party call control applies</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>INVITE 3 →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>180 Ringing ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>200 OK ←</td> <td></td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ACK →</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>NOTIFY(100)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>INVITE 4 →INVITE</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>200 OK ←200 OK</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ACK →ACK</td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>BYE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>200 OK (BYE)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1		AS Transferor		ISC#2		ISC#3			Establishment of session #1							Session #1 on hold					REFER 1	→	REFER		REFER →REFER							403 Forbidden ←403 Forbidden			202 Accepted	←	202 Accepted							3 party call control applies									INVITE 3 →		→ INVITE					180 Ringing ←		← 180 Ringing					200 OK ←		← 200 OK					ACK →		→ ACK	NOTIFY(100)	←	NOTIFY(100)					200 OK NOTIFY	→	200 OK NOTIFY									INVITE 4 →INVITE							200 OK ←200 OK							ACK →ACK			NOTIFY(200)	←	NOTIFY(200)					200 OK NOTIFY	→	200 OK NOTIFY					BYE	→	BYE					200 OK (BYE)	←	200 OK (BYE)				
ISC#1		AS Transferor		ISC#2		ISC#3																																																																																																																																									
		Establishment of session #1																																																																																																																																													
		Session #1 on hold																																																																																																																																													
REFER 1	→	REFER		REFER →REFER																																																																																																																																											
				403 Forbidden ←403 Forbidden																																																																																																																																											
202 Accepted	←	202 Accepted																																																																																																																																													
		3 party call control applies																																																																																																																																													
				INVITE 3 →		→ INVITE																																																																																																																																									
				180 Ringing ←		← 180 Ringing																																																																																																																																									
				200 OK ←		← 200 OK																																																																																																																																									
				ACK →		→ ACK																																																																																																																																									
NOTIFY(100)	←	NOTIFY(100)																																																																																																																																													
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																																																													
				INVITE 4 →INVITE																																																																																																																																											
				200 OK ←200 OK																																																																																																																																											
				ACK →ACK																																																																																																																																											
NOTIFY(200)	←	NOTIFY(200)																																																																																																																																													
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																																																													
BYE	→	BYE																																																																																																																																													
200 OK (BYE)	←	200 OK (BYE)																																																																																																																																													

TSS Netw/TransferorAS	TP ECT_N01_015	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																				
<p>Test purpose</p> <p>Blind transfer. The transferor AS receives a 403 Forbidden indicating the transferee does not support the REFER method.</p> <p>Ensure that three party call control applies at the transferor AS when a 403 Forbidden is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																							
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																																							
<p>Comments:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: center;">ISC#2</th> <th style="text-align: center;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER →</td> <td style="text-align: center;">REFER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">403 Forbidden ←</td> <td style="text-align: center;">403 Forbidden</td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3 party call control applies</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 →</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold			REFER 1	→ REFER					REFER →	REFER			403 Forbidden ←	403 Forbidden	202 Accepted	← 202 Accepted			BYE	→			200 OK (BYE)	←				3 party call control applies					INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	←			200 OK NOTIFY	→					INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																				
	Establishment of session #1																																																																																						
	Session #1 on hold																																																																																						
REFER 1	→ REFER																																																																																						
		REFER →	REFER																																																																																				
		403 Forbidden ←	403 Forbidden																																																																																				
202 Accepted	← 202 Accepted																																																																																						
BYE	→																																																																																						
200 OK (BYE)	←																																																																																						
	3 party call control applies																																																																																						
		INVITE 3 →	→ INVITE																																																																																				
		180 Ringing ←	← 180 Ringing																																																																																				
		200 OK ←	← 200 OK																																																																																				
		ACK →	→ ACK																																																																																				
NOTIFY(100)	←																																																																																						
200 OK NOTIFY	→																																																																																						
		INVITE 4 →	INVITE																																																																																				
		200 OK ←	200 OK																																																																																				
		ACK →	ACK																																																																																				
NOTIFY(200)	← NOTIFY(200)																																																																																						
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																						

TSS Netw/TransferorAS	TP ECT_N01_016	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																
Test purpose <p><i>Consultative transfer. The transferor AS receives a 403 Forbidden indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferor AS when a 403 Forbidden is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted • A reINVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the Transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																																			
SIP header values: REFER 1: Refer-To contains ISC#3 URI;method=invite?Replaces= call-id1%3Bto-tag%3DS1%3Bfrom-tag%3DS1&Require=replaces Referred-By contains ISC#1 URI INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1 NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																																			
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">ISC#1</th> <th style="text-align: center; width: 40%;">AS Transferor</th> <th style="text-align: center; width: 20%;">ISC#2</th> <th style="text-align: center; width: 20%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Establishment of session #2</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #2 on hold</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td style="text-align: center;">REFER →</td> <td style="text-align: center;">REFER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">403 Forbidden ←</td> <td style="text-align: center;">403 Forbidden</td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3 party call control applies</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 →</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE(S1)</td> <td style="text-align: center;">→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">← 200 OK (BYE)</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">← BYE(S2)</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→ 200 OK (BYE)</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2				Session #2 on hold			REFER 1	→ REFER	REFER →	REFER			403 Forbidden ←	403 Forbidden	202 Accepted	← 202 Accepted				3 party call control applies					INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY					INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE(S1)	→ BYE			200 OK (BYE)	← 200 OK (BYE)			BYE	← BYE(S2)			200 OK (BYE)	→ 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																
	Establishment of session #1																																																																																																		
	Session #1 on hold																																																																																																		
	Establishment of session #2																																																																																																		
	Session #2 on hold																																																																																																		
REFER 1	→ REFER	REFER →	REFER																																																																																																
		403 Forbidden ←	403 Forbidden																																																																																																
202 Accepted	← 202 Accepted																																																																																																		
	3 party call control applies																																																																																																		
		INVITE 3 →	→ INVITE																																																																																																
		180 Ringing ←	← 180 Ringing																																																																																																
		200 OK ←	← 200 OK																																																																																																
		ACK →	→ ACK																																																																																																
NOTIFY(100)	← NOTIFY(100)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
		INVITE 4 →	INVITE																																																																																																
		200 OK ←	200 OK																																																																																																
		ACK →	ACK																																																																																																
NOTIFY(200)	← NOTIFY(200)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
BYE(S1)	→ BYE																																																																																																		
200 OK (BYE)	← 200 OK (BYE)																																																																																																		
BYE	← BYE(S2)																																																																																																		
200 OK (BYE)	→ 200 OK (BYE)																																																																																																		

TSS Netw/TransferorAS	TP ECT_N01_017	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																												
<p>Test purpose</p> <p>Assured transfer. The transferor AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</p> <p>Ensure that three party call control applies at the Transferor AS when a 501 Not implemented is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the Transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																															
<p>Comments:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">ISC#1</td> <td style="width: 25%; text-align: center;">AS Transferor</td> <td style="width: 25%; text-align: center;">ISC#2</td> <td style="width: 25%; text-align: center;">ISC#3</td> </tr> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td>→ REFER</td> <td>REFER → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>501 Not implemented ←</td> <td>501 Not implemented</td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td colspan="2" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>← 200 OK (BYE)</td> <td></td> <td></td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	Establishment of session #1				Session #1 on hold				REFER 1	→ REFER	REFER → REFER				501 Not implemented ←	501 Not implemented	202 Accepted	← 202 Accepted	3 party call control applies				INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY					INVITE 4 →	→ INVITE			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE	→ BYE			200 OK (BYE)	← 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																												
Establishment of session #1																																																																															
Session #1 on hold																																																																															
REFER 1	→ REFER	REFER → REFER																																																																													
		501 Not implemented ←	501 Not implemented																																																																												
202 Accepted	← 202 Accepted	3 party call control applies																																																																													
		INVITE 3 →	→ INVITE																																																																												
		180 Ringing ←	← 180 Ringing																																																																												
		200 OK ←	← 200 OK																																																																												
		ACK →	→ ACK																																																																												
NOTIFY(100)	← NOTIFY(100)																																																																														
200 OK NOTIFY	→ 200 OK NOTIFY																																																																														
		INVITE 4 →	→ INVITE																																																																												
		200 OK ←	← 200 OK																																																																												
		ACK →	→ ACK																																																																												
NOTIFY(200)	← NOTIFY(200)																																																																														
200 OK NOTIFY	→ 200 OK NOTIFY																																																																														
BYE	→ BYE																																																																														
200 OK (BYE)	← 200 OK (BYE)																																																																														

TSS Netw/TransferorAS	TP ECT_N01_018	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																				
<p>Test purpose</p> <p>Blind transfer. The transferor AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</p> <p>Ensure that three party call control applies at the transferor AS when a 501 Not implemented is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 																																																																																							
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																																							
<p>Comments:</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: center;">ISC#2</th> <th style="text-align: right;">ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td>→ REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>REFER → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>501 Not implemented ← 501 Not implemented</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>→</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>←</td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>←</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>←</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td>200 OK NOTIFY</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	Establishment of session #1				Session #1 on hold				REFER 1	→ REFER					REFER → REFER				501 Not implemented ← 501 Not implemented		202 Accepted	← 202 Accepted			BYE	→			200 OK (BYE)	←			3 party call control applies						INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	←			200 OK NOTIFY	→					INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	←	NOTIFY(200)		200 OK NOTIFY	→	200 OK NOTIFY	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																				
Establishment of session #1																																																																																							
Session #1 on hold																																																																																							
REFER 1	→ REFER																																																																																						
		REFER → REFER																																																																																					
		501 Not implemented ← 501 Not implemented																																																																																					
202 Accepted	← 202 Accepted																																																																																						
BYE	→																																																																																						
200 OK (BYE)	←																																																																																						
3 party call control applies																																																																																							
		INVITE 3 →	→ INVITE																																																																																				
		180 Ringing ←	← 180 Ringing																																																																																				
		200 OK ←	← 200 OK																																																																																				
		ACK →	→ ACK																																																																																				
NOTIFY(100)	←																																																																																						
200 OK NOTIFY	→																																																																																						
		INVITE 4 →	INVITE																																																																																				
		200 OK ←	200 OK																																																																																				
		ACK →	ACK																																																																																				
NOTIFY(200)	←	NOTIFY(200)																																																																																					
200 OK NOTIFY	→	200 OK NOTIFY																																																																																					

TSS Netw/TransferorAS	TP ECT_N01_019	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																
<p>Test purpose</p> <p><i>Consultative transfer. The transferor AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferor AS when a 501 Not implemented is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A reINVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 																																																																																																			
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI;method=invite?Replaces=call-id1%3Bto-tag%3DS1%3Bfrom-tag%3DS1&Require=replaces Referred-By contains ISC#1 URI</p> <p>INVITE 3:Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4:Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																																																			
<p>Comments:</p> <table border="0"> <thead> <tr> <th>ISC#1</th> <th>AS Transferor</th> <th>ISC#2</th> <th>ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td>Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Establishment of session #2</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Session #2 on hold</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td>→ REFER</td> <td>REFER → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>501 Not implemented ← 501 Not implemented</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">3 party call control applies</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE(S1)</td> <td>→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>← 200 OK (BYE)</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>← BYE(S2)</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>→ 200 OK (BYE)</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2				Session #2 on hold			REFER 1	→ REFER	REFER → REFER				501 Not implemented ← 501 Not implemented		202 Accepted	← 202 Accepted				3 party call control applies					INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY					INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE(S1)	→ BYE			200 OK (BYE)	← 200 OK (BYE)			BYE	← BYE(S2)			200 OK (BYE)	→ 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																
	Establishment of session #1																																																																																																		
	Session #1 on hold																																																																																																		
	Establishment of session #2																																																																																																		
	Session #2 on hold																																																																																																		
REFER 1	→ REFER	REFER → REFER																																																																																																	
		501 Not implemented ← 501 Not implemented																																																																																																	
202 Accepted	← 202 Accepted																																																																																																		
	3 party call control applies																																																																																																		
		INVITE 3 →	→ INVITE																																																																																																
		180 Ringing ←	← 180 Ringing																																																																																																
		200 OK ←	← 200 OK																																																																																																
		ACK →	→ ACK																																																																																																
NOTIFY(100)	← NOTIFY(100)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
		INVITE 4 →	INVITE																																																																																																
		200 OK ←	200 OK																																																																																																
		ACK →	ACK																																																																																																
NOTIFY(200)	← NOTIFY(200)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
BYE(S1)	→ BYE																																																																																																		
200 OK (BYE)	← 200 OK (BYE)																																																																																																		
BYE	← BYE(S2)																																																																																																		
200 OK (BYE)	→ 200 OK (BYE)																																																																																																		

TSS Netw/TransferorAS	TP ECT_N01_020	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																												
<p>Test purpose</p> <p><i>Assured transfer. The transferor AS initiate the special REFER handling procedures directly.</i></p> <p>Ensure that three party call control applies directly at the transferor AS when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																															
<p>Comments:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS transferor</th> <th style="text-align: center;">ISC#2</th> <th style="text-align: center;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="3" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">➔</td> <td>REFER</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">➔</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 ➔</td> <td>➔ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ➔</td> <td>➔ 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ➔</td> <td>➔ 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK ➔</td> <td>➔ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">➔</td> <td>NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 ➔</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ➔</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK ➔</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">➔</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">➔</td> <td>BYE</td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">➔</td> <td>200 OK (BYE)</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold			REFER 1	➔	REFER		202 Accepted	➔	202 Accepted			3 party call control applies					INVITE 3 ➔	➔ INVITE			180 Ringing ➔	➔ 180 Ringing			200 OK ➔	➔ 200 OK			ACK ➔	➔ ACK	NOTIFY(100)	➔	NOTIFY(100)		200 OK NOTIFY	➔	200 OK NOTIFY				INVITE 4 ➔	INVITE			200 OK ➔	200 OK			ACK ➔	ACK	NOTIFY(200)	➔	NOTIFY(200)		200 OK NOTIFY	➔	200 OK NOTIFY		BYE	➔	BYE		200 OK (BYE)	➔	200 OK (BYE)	
ISC#1	AS transferor	ISC#2	ISC#3																																																																												
	Establishment of session #1																																																																														
	Session #1 on hold																																																																														
REFER 1	➔	REFER																																																																													
202 Accepted	➔	202 Accepted																																																																													
	3 party call control applies																																																																														
		INVITE 3 ➔	➔ INVITE																																																																												
		180 Ringing ➔	➔ 180 Ringing																																																																												
		200 OK ➔	➔ 200 OK																																																																												
		ACK ➔	➔ ACK																																																																												
NOTIFY(100)	➔	NOTIFY(100)																																																																													
200 OK NOTIFY	➔	200 OK NOTIFY																																																																													
		INVITE 4 ➔	INVITE																																																																												
		200 OK ➔	200 OK																																																																												
		ACK ➔	ACK																																																																												
NOTIFY(200)	➔	NOTIFY(200)																																																																													
200 OK NOTIFY	➔	200 OK NOTIFY																																																																													
BYE	➔	BYE																																																																													
200 OK (BYE)	➔	200 OK (BYE)																																																																													

TSS Netw/TransferorAS	TP ECT_N01_021	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																												
<p>Test purpose</p> <p><i>Blind transfer. The transferor AS initiate the special REFER handling procedures directly.</i></p> <p>Ensure that three party call control applies directly at the transferor AS when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource</p>																																																																															
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">ISC#1</th> <th style="text-align: center; width: 20%;">AS transferor</th> <th style="text-align: center; width: 20%;">ISC#2</th> <th style="text-align: right; width: 20%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS transferor	ISC#2	ISC#3	Establishment of session #1				Session #1 on hold				REFER 1	→	REFER		202 Accepted	←	202 Accepted		BYE	→			200 OK (BYE)	←			3 party call control applies						INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK	NOTIFY(100)	←			200 OK NOTIFY	→					ACK →	→ ACK			INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	←	NOTIFY(200)		200 OK NOTIFY	→	200 OK NOTIFY	
ISC#1	AS transferor	ISC#2	ISC#3																																																																												
Establishment of session #1																																																																															
Session #1 on hold																																																																															
REFER 1	→	REFER																																																																													
202 Accepted	←	202 Accepted																																																																													
BYE	→																																																																														
200 OK (BYE)	←																																																																														
3 party call control applies																																																																															
		INVITE 3 →	→ INVITE																																																																												
		180 Ringing ←	← 180 Ringing																																																																												
		200 OK ←	← 200 OK																																																																												
NOTIFY(100)	←																																																																														
200 OK NOTIFY	→																																																																														
		ACK →	→ ACK																																																																												
		INVITE 4 →	INVITE																																																																												
		200 OK ←	200 OK																																																																												
		ACK →	ACK																																																																												
NOTIFY(200)	←	NOTIFY(200)																																																																													
200 OK NOTIFY	→	200 OK NOTIFY																																																																													

TSS Netw/TransferorAS	TP ECT_N01_022	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																																								
Test purpose <i>Consultative transfer. The transferor AS initiate the special REFER handling procedures directly.</i> Ensure that three party call control applies directly at the transferor AS when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method : <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • A reINVITE is sent to the Transfer Target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																																											
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1 NOTIFY(100): Event contains refer Subscription-State: active;expires=(any value) message/sipfrag contains SIP/2.0 100 Trying NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK Subscription-State: terminated;reason=noresource																																																																																											
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 25%;">ISC#1</th> <th style="text-align: center; width: 50%;">AS Transferor</th> <th style="text-align: right; width: 25%;">ISC#2</th> <th style="text-align: right; width: 25%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Establishment of session #2</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td></td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3 party call control applies</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td></td> <td style="text-align: right;">→ INVITE</td> </tr> <tr> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td></td> <td style="text-align: right;">← 180 Ringing</td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK ←</td> <td></td> <td style="text-align: right;">← 200 OK</td> </tr> <tr> <td></td> <td style="text-align: center;">ACK →</td> <td></td> <td style="text-align: right;">→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">INVITE 4 →</td> <td style="text-align: center;">INVITE</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">200 OK</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">ACK</td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">← 200 OK (BYE)</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">← BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→ 200 OK (BYE)</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2			REFER 1	→ REFER			202 Accepted	← 202 Accepted				3 party call control applies				INVITE 3 →		→ INVITE		180 Ringing ←		← 180 Ringing		200 OK ←		← 200 OK		ACK →		→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY				INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK		NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE	→ BYE			200 OK (BYE)	← 200 OK (BYE)			BYE	← BYE			200 OK (BYE)	→ 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																								
	Establishment of session #1																																																																																										
	Session #1 on hold																																																																																										
	Establishment of session #2																																																																																										
REFER 1	→ REFER																																																																																										
202 Accepted	← 202 Accepted																																																																																										
	3 party call control applies																																																																																										
	INVITE 3 →		→ INVITE																																																																																								
	180 Ringing ←		← 180 Ringing																																																																																								
	200 OK ←		← 200 OK																																																																																								
	ACK →		→ ACK																																																																																								
NOTIFY(100)	← NOTIFY(100)																																																																																										
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																										
	INVITE 4 →	INVITE																																																																																									
	200 OK ←	200 OK																																																																																									
	ACK →	ACK																																																																																									
NOTIFY(200)	← NOTIFY(200)																																																																																										
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																										
BYE	→ BYE																																																																																										
200 OK (BYE)	← 200 OK (BYE)																																																																																										
BYE	← BYE																																																																																										
200 OK (BYE)	→ 200 OK (BYE)																																																																																										

6.2.2 Action at the transferee AS

TSS	TP	Reference	Selection expression																																																																																				
Netw/TransfereeAS	ECT_N02_001	Clause 4.5.2.7 of [ITU-T Q.3623 v.1]	PICS 5.5.1/2 [ITU-T Q.4007.1 v.1]																																																																																				
<p>Test purpose</p> <p><i>Communication transfer: Assured transfer applicable at the Transferee AS.</i></p> <p>Ensure that the transferee AS can act as a proxy when receives the REFER request, the INVITE request and the BYE request for the call that is transferred as an assured transfer.</p>																																																																																							
<p>SIP header values:</p> <p>REFER 1: Refer-To ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>REFER 2: Refer-To ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3URI</p> <p>INVITE 4: Request URI = ISC#3 URI</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																							
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#2</th> <th style="text-align: center;">AS Transferee</th> <th style="text-align: center;">ISC#3</th> <th style="text-align: right;">ISC#1</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: right;">Session #1 on hold</td> </tr> <tr> <td colspan="4" style="text-align: center;">ISC#1 transfers ISC#2 to ISC#3</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER ←</td> <td style="text-align: right;">← REFER 1</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">←</td> <td>REFER 2</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">→</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted →</td> <td style="text-align: right;">→ 202 Accepted</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: right;">→ NOTIFY(100)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: right;">← 200 OK NOTIFY</td> </tr> <tr> <td>INVITE 3 (S2)</td> <td style="text-align: center;">→</td> <td>INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 →</td> <td style="text-align: right;">INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: right;">180 Ringing</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>180 Ringing</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">← 200 OK</td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK ←</td> <td>200 OK</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">ACK →</td> <td></td> <td style="text-align: right;">→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: right;">→ NOTIFY(200)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: right;">← 200 OK NOTIFY</td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: right;">← BYE (S1)</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: right;">→ 200 OK (BYE)</td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#2	AS Transferee	ISC#3	ISC#1	Establishment of session #1				Session #1 on hold				ISC#1 transfers ISC#2 to ISC#3						REFER ←	← REFER 1	REFER	←	REFER 2		202 Accepted	→	202 Accepted				202 Accepted →	→ 202 Accepted	NOTIFY(100)	→		→ NOTIFY(100)	200 OK NOTIFY	←		← 200 OK NOTIFY	INVITE 3 (S2)	→	INVITE				INVITE 4 →	INVITE			180 Ringing ←	180 Ringing	180 Ringing	←	180 Ringing					← 200 OK		200 OK ←	200 OK			ACK →		→ ACK	NOTIFY(200)	→		→ NOTIFY(200)	200 OK NOTIFY	←		← 200 OK NOTIFY	BYE	←		← BYE (S1)	200 OK (BYE)	→		→ 200 OK (BYE)
ISC#2	AS Transferee	ISC#3	ISC#1																																																																																				
Establishment of session #1																																																																																							
Session #1 on hold																																																																																							
ISC#1 transfers ISC#2 to ISC#3																																																																																							
		REFER ←	← REFER 1																																																																																				
REFER	←	REFER 2																																																																																					
202 Accepted	→	202 Accepted																																																																																					
		202 Accepted →	→ 202 Accepted																																																																																				
NOTIFY(100)	→		→ NOTIFY(100)																																																																																				
200 OK NOTIFY	←		← 200 OK NOTIFY																																																																																				
INVITE 3 (S2)	→	INVITE																																																																																					
		INVITE 4 →	INVITE																																																																																				
		180 Ringing ←	180 Ringing																																																																																				
180 Ringing	←	180 Ringing																																																																																					
			← 200 OK																																																																																				
	200 OK ←	200 OK																																																																																					
	ACK →		→ ACK																																																																																				
NOTIFY(200)	→		→ NOTIFY(200)																																																																																				
200 OK NOTIFY	←		← 200 OK NOTIFY																																																																																				
BYE	←		← BYE (S1)																																																																																				
200 OK (BYE)	→		→ 200 OK (BYE)																																																																																				

TSS Netw/TransfereeAS	TP ECT_N02_002	Reference Clause 4.5.2.7 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 [ITU-T Q.4007.1 v.1]																																																																																								
<p>Test purpose</p> <p><i>Communication transfer: Blind transfer applicable at the transferee AS.</i></p> <p>Ensure that the transferee AS can act as a proxy when receives the REFER request, the INVITE request and the BYE request for the call that is transferred as a blind transfer.</p>																																																																																											
<p>SIP header values:</p> <p>REFER 1: Refer-To ISC#3 URI;method=invite Referred-By contains ISC#1 URI</p> <p>REFER 2: Refer-To ISC#3 URI;method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3:Request URI = ISC#3 URI</p> <p>INVITE 4:Request URI = ISC#3 URI</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																											
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#2</th> <th style="text-align: center;">AS Transferee</th> <th style="text-align: center;">ISC#3</th> <th style="text-align: center;">ISC#1</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: right;">Session #1 on hold</td> </tr> <tr> <td colspan="4" style="text-align: center;">ISC#1 transfers ISC#2 to ISC#3</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER ←</td> <td style="text-align: center;">← REFER 1</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">←</td> <td>REFER 2</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">→</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted →</td> <td style="text-align: center;">→ 202 Accepted</td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← BYE (S1)</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ 200 OK (BYE)</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ NOTIFY(100)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 200 OK NOTIFY</td> </tr> <tr> <td>INVITE 3</td> <td style="text-align: center;">→</td> <td>INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 →</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: center;">180 Ringing</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>180 Ringing</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK ←</td> <td>200 OK</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">ACK →</td> <td></td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ NOTIFY(200)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 200 OK NOTIFY</td> </tr> <tr> <td colspan="4" style="text-align: center;">Apply post test routine</td> </tr> </tbody> </table>				ISC#2	AS Transferee	ISC#3	ISC#1	Establishment of session #1				Session #1 on hold				ISC#1 transfers ISC#2 to ISC#3						REFER ←	← REFER 1	REFER	←	REFER 2		202 Accepted	→	202 Accepted				202 Accepted →	→ 202 Accepted	BYE	←		← BYE (S1)	200 OK (BYE)	→		→ 200 OK (BYE)	NOTIFY(100)	→		→ NOTIFY(100)	200 OK NOTIFY	←		← 200 OK NOTIFY	INVITE 3	→	INVITE				INVITE 4 →	INVITE			180 Ringing ←	180 Ringing	180 Ringing	←	180 Ringing					← 200 OK		200 OK ←	200 OK			ACK →		→ ACK	NOTIFY(200)	→		→ NOTIFY(200)	200 OK NOTIFY	←		← 200 OK NOTIFY	Apply post test routine			
ISC#2	AS Transferee	ISC#3	ISC#1																																																																																								
Establishment of session #1																																																																																											
Session #1 on hold																																																																																											
ISC#1 transfers ISC#2 to ISC#3																																																																																											
		REFER ←	← REFER 1																																																																																								
REFER	←	REFER 2																																																																																									
202 Accepted	→	202 Accepted																																																																																									
		202 Accepted →	→ 202 Accepted																																																																																								
BYE	←		← BYE (S1)																																																																																								
200 OK (BYE)	→		→ 200 OK (BYE)																																																																																								
NOTIFY(100)	→		→ NOTIFY(100)																																																																																								
200 OK NOTIFY	←		← 200 OK NOTIFY																																																																																								
INVITE 3	→	INVITE																																																																																									
		INVITE 4 →	INVITE																																																																																								
		180 Ringing ←	180 Ringing																																																																																								
180 Ringing	←	180 Ringing																																																																																									
			← 200 OK																																																																																								
	200 OK ←	200 OK																																																																																									
	ACK →		→ ACK																																																																																								
NOTIFY(200)	→		→ NOTIFY(200)																																																																																								
200 OK NOTIFY	←		← 200 OK NOTIFY																																																																																								
Apply post test routine																																																																																											

TSS Netw/TransfereeAS	TP ECT_N02_007	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																																																												
<p>Test purpose</p> <p><i>Assured transfer. The transferee AS receives a 403 Forbidden indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferee AS when a 403 Forbidden is received upon a REFER was sent to the Transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the Transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																																																																															
<p>Comments:</p> <table border="0"> <thead> <tr> <th>ISC#1</th> <th></th> <th>AS Transferor</th> <th></th> <th>ISC#2</th> <th></th> <th>ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">Establishment of session #1</td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">Session #1 on hold</td> <td></td> </tr> <tr> <td>REFER 1</td> <td>→</td> <td>REFER</td> <td></td> <td>REFER</td> <td>→</td> <td>REFER</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>403 Forbidden</td> <td>←</td> <td>403 Forbidden</td> </tr> <tr> <td>202 Accepted</td> <td>←</td> <td>202 Accepted</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="4" style="text-align: center;">3 party call control applies</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 3</td> <td>→</td> <td></td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing</td> <td>←</td> <td></td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK</td> <td>←</td> <td></td> <td></td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK</td> <td>→</td> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>←</td> <td>NOTIFY(100)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td>200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4</td> <td>→</td> <td>INVITE</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>200 OK</td> <td>←</td> <td>200 OK</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>ACK</td> <td>→</td> <td>ACK</td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td>←</td> <td>NOTIFY(200)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td>200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>→</td> <td>BYE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>←</td> <td>200 OK (BYE)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1		AS Transferor		ISC#2		ISC#3			Establishment of session #1							Session #1 on hold					REFER 1	→	REFER		REFER	→	REFER					403 Forbidden	←	403 Forbidden	202 Accepted	←	202 Accepted							3 party call control applies							INVITE 3	→			→ INVITE			180 Ringing	←			← 180 Ringing			200 OK	←			← 200 OK			ACK	→			→ ACK	NOTIFY(100)	←	NOTIFY(100)					200 OK NOTIFY	→	200 OK NOTIFY							INVITE 4	→	INVITE					200 OK	←	200 OK					ACK	→	ACK			NOTIFY(200)	←	NOTIFY(200)					200 OK NOTIFY	→	200 OK NOTIFY					BYE	→	BYE					200 OK (BYE)	←	200 OK (BYE)				
ISC#1		AS Transferor		ISC#2		ISC#3																																																																																																																																									
		Establishment of session #1																																																																																																																																													
		Session #1 on hold																																																																																																																																													
REFER 1	→	REFER		REFER	→	REFER																																																																																																																																									
				403 Forbidden	←	403 Forbidden																																																																																																																																									
202 Accepted	←	202 Accepted																																																																																																																																													
		3 party call control applies																																																																																																																																													
		INVITE 3	→			→ INVITE																																																																																																																																									
		180 Ringing	←			← 180 Ringing																																																																																																																																									
		200 OK	←			← 200 OK																																																																																																																																									
		ACK	→			→ ACK																																																																																																																																									
NOTIFY(100)	←	NOTIFY(100)																																																																																																																																													
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																																																													
		INVITE 4	→	INVITE																																																																																																																																											
		200 OK	←	200 OK																																																																																																																																											
		ACK	→	ACK																																																																																																																																											
NOTIFY(200)	←	NOTIFY(200)																																																																																																																																													
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																																																													
BYE	→	BYE																																																																																																																																													
200 OK (BYE)	←	200 OK (BYE)																																																																																																																																													

TSS Netw/TransfereeAS	TP ECT_N02_008	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																																																																			
<p>Test purpose</p> <p><i>Blind transfer. The transferee AS receives a 403 Forbidden indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferee AS when a 403 Forbidden is received upon a REFER was sent to the Transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																																																																																						
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																																																																																						
<p>Comments:</p> <table border="0"> <thead> <tr> <th>ISC#1</th> <th></th> <th>AS Transferor</th> <th></th> <th>ISC#2</th> <th></th> <th>ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="7" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td>→</td> <td>REFER</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>REFER</td> <td>→</td> <td>REFER</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>403 Forbidden</td> <td>←</td> <td>403 Forbidden</td> </tr> <tr> <td>202 Accepted</td> <td>←</td> <td>202 Accepted</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>→</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>←</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="7" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>INVITE 3</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>180 Ringing</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>200 OK</td> <td>←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ACK</td> <td>→</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>←</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>INVITE 4</td> <td>→</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>200 OK</td> <td>←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>ACK</td> <td>→</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>←</td> <td>NOTIFY(200)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td>200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1		AS Transferor		ISC#2		ISC#3	Establishment of session #1							Session #1 on hold							REFER 1	→	REFER									REFER	→	REFER					403 Forbidden	←	403 Forbidden	202 Accepted	←	202 Accepted					BYE	→						200 OK (BYE)	←						3 party call control applies											INVITE 3	→	→ INVITE					180 Ringing	←	← 180 Ringing					200 OK	←	← 200 OK					ACK	→	→ ACK	NOTIFY(100)	←						200 OK NOTIFY	→										INVITE 4	→	INVITE					200 OK	←	200 OK					ACK	→	ACK	NOTIFY(200)	←	NOTIFY(200)					200 OK NOTIFY	→	200 OK NOTIFY				
ISC#1		AS Transferor		ISC#2		ISC#3																																																																																																																																																
Establishment of session #1																																																																																																																																																						
Session #1 on hold																																																																																																																																																						
REFER 1	→	REFER																																																																																																																																																				
				REFER	→	REFER																																																																																																																																																
				403 Forbidden	←	403 Forbidden																																																																																																																																																
202 Accepted	←	202 Accepted																																																																																																																																																				
BYE	→																																																																																																																																																					
200 OK (BYE)	←																																																																																																																																																					
3 party call control applies																																																																																																																																																						
				INVITE 3	→	→ INVITE																																																																																																																																																
				180 Ringing	←	← 180 Ringing																																																																																																																																																
				200 OK	←	← 200 OK																																																																																																																																																
				ACK	→	→ ACK																																																																																																																																																
NOTIFY(100)	←																																																																																																																																																					
200 OK NOTIFY	→																																																																																																																																																					
				INVITE 4	→	INVITE																																																																																																																																																
				200 OK	←	200 OK																																																																																																																																																
				ACK	→	ACK																																																																																																																																																
NOTIFY(200)	←	NOTIFY(200)																																																																																																																																																				
200 OK NOTIFY	→	200 OK NOTIFY																																																																																																																																																				

TSS Netw/TransfereeAS	TP ECT_N02_009	Reference Clause 4.5.2.4.1.2.3of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																																																																						
Test purpose <p><i>Consultative transfer. The transferee AS receives a 403 Forbidden indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferee AS when a 403 Forbidden is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 100 Trying' if the REFER request is accepted. • A reINVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY containing a message/sipfrag body set to 'SIP/2.0 200 OK' if the referred communication is established. 																																																																																																																																																									
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1 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: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">ISC#1</th> <th style="text-align: center; width: 40%;">AS Transferor</th> <th style="width: 20%;"></th> <th style="text-align: right; width: 20%;">ISC#2</th> <th style="width: 20%;"></th> <th style="text-align: right;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Establishment of session #2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #2 on hold</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER → REFER</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">403 Forbidden ← 403 Forbidden</td> <td></td> <td></td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">3 party call control applies</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td></td> <td style="text-align: right;">→ INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td></td> <td style="text-align: right;">← 180 Ringing</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td></td> <td style="text-align: right;">← 200 OK</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td></td> <td style="text-align: right;">→ ACK</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">← NOTIFY(100)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 → INVITE</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ← 200 OK</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK → ACK</td> <td></td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">← NOTIFY(200)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE(S1)</td> <td style="text-align: center;">→ BYE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">← 200 OK (BYE)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">← BYE(S2)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→ 200 OK (BYE)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor		ISC#2		ISC#3		Establishment of session #1						Session #1 on hold						Establishment of session #2						Session #2 on hold					REFER 1	→ REFER							REFER → REFER						403 Forbidden ← 403 Forbidden				202 Accepted	← 202 Accepted							3 party call control applies						INVITE 3 →		→ INVITE				180 Ringing ←		← 180 Ringing				200 OK ←		← 200 OK				ACK →		→ ACK		NOTIFY(100)	← NOTIFY(100)					200 OK NOTIFY	→ 200 OK NOTIFY							INVITE 4 → INVITE						200 OK ← 200 OK						ACK → ACK				NOTIFY(200)	← NOTIFY(200)					200 OK NOTIFY	→ 200 OK NOTIFY					BYE(S1)	→ BYE					200 OK (BYE)	← 200 OK (BYE)					BYE	← BYE(S2)					200 OK (BYE)	→ 200 OK (BYE)				
ISC#1	AS Transferor		ISC#2		ISC#3																																																																																																																																																				
	Establishment of session #1																																																																																																																																																								
	Session #1 on hold																																																																																																																																																								
	Establishment of session #2																																																																																																																																																								
	Session #2 on hold																																																																																																																																																								
REFER 1	→ REFER																																																																																																																																																								
		REFER → REFER																																																																																																																																																							
		403 Forbidden ← 403 Forbidden																																																																																																																																																							
202 Accepted	← 202 Accepted																																																																																																																																																								
		3 party call control applies																																																																																																																																																							
		INVITE 3 →		→ INVITE																																																																																																																																																					
		180 Ringing ←		← 180 Ringing																																																																																																																																																					
		200 OK ←		← 200 OK																																																																																																																																																					
		ACK →		→ ACK																																																																																																																																																					
NOTIFY(100)	← NOTIFY(100)																																																																																																																																																								
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																																																																								
		INVITE 4 → INVITE																																																																																																																																																							
		200 OK ← 200 OK																																																																																																																																																							
		ACK → ACK																																																																																																																																																							
NOTIFY(200)	← NOTIFY(200)																																																																																																																																																								
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																																																																								
BYE(S1)	→ BYE																																																																																																																																																								
200 OK (BYE)	← 200 OK (BYE)																																																																																																																																																								
BYE	← BYE(S2)																																																																																																																																																								
200 OK (BYE)	→ 200 OK (BYE)																																																																																																																																																								

TSS Netw/TransfereeAS	TP ECT_N02_010	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																				
<p>Test purpose</p> <p><i>Assured transfer. The transferee AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferee AS when a 501 Not implemented is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 																																																																																							
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																							
<p>Comments:</p> <table border="0"> <thead> <tr> <th>ISC#1</th> <th>AS Transferor</th> <th>ISC#2</th> <th>ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td>→ REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>REFER → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td>501 Not implemented ←</td> <td>501 Not implemented</td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td>← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 →</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK →</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>← 200 OK (BYE)</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	Establishment of session #1				Session #1 on hold				REFER 1	→ REFER					REFER → REFER				501 Not implemented ←	501 Not implemented	202 Accepted	← 202 Accepted			3 party call control applies						INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY					INVITE 4 →	INVITE			200 OK ←	200 OK			ACK →	ACK	NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE	→ BYE			200 OK (BYE)	← 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																				
Establishment of session #1																																																																																							
Session #1 on hold																																																																																							
REFER 1	→ REFER																																																																																						
		REFER → REFER																																																																																					
		501 Not implemented ←	501 Not implemented																																																																																				
202 Accepted	← 202 Accepted																																																																																						
3 party call control applies																																																																																							
		INVITE 3 →	→ INVITE																																																																																				
		180 Ringing ←	← 180 Ringing																																																																																				
		200 OK ←	← 200 OK																																																																																				
		ACK →	→ ACK																																																																																				
NOTIFY(100)	← NOTIFY(100)																																																																																						
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																						
		INVITE 4 →	INVITE																																																																																				
		200 OK ←	200 OK																																																																																				
		ACK →	ACK																																																																																				
NOTIFY(200)	← NOTIFY(200)																																																																																						
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																						
BYE	→ BYE																																																																																						
200 OK (BYE)	← 200 OK (BYE)																																																																																						

TSS Netw/TransfereeAS	TP ECT_N02_011	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]
Test purpose			
<i>Blind transfer. The transferee AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</i>			
Ensure that three party call control applies at the transferee AS when a 501 Not implemented is received upon a REFER was sent to the transferee:			
<ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 			
SIP header values:			
REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI			
INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1			
INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1			
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:			
ISC#1	AS Transferor	ISC#2	ISC#3
Establishment of session #1			
Session #1 on hold			
REFER 1	→ REFER		
		REFER → REFER	
		501 Not implemented ←	501 Not implemented
202 Accepted	← 202 Accepted		
BYE	→		
200 OK (BYE)	←		
3 party call control applies			
		INVITE 3 →	→ INVITE
		180 Ringing ←	← 180 Ringing
		200 OK ←	← 200 OK
		ACK →	→ ACK
NOTIFY(100)	←		
200 OK NOTIFY	→		
		INVITE 4 →	INVITE
		200 OK ←	200 OK
		ACK →	ACK
NOTIFY(200)	← NOTIFY(200)		
200 OK NOTIFY	→ 200 OK NOTIFY		
Apply post test routine			

TSS Netw/TransfereeAS	TP ECT_N02_012	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/4 [ITU-T Q.4007.1 v.1]																																																																																																
<p>Test purpose</p> <p><i>Consultative transfer. The transferee AS receives a 501 Not implemented indicating the transferee does not support the REFER method.</i></p> <p>Ensure that three party call control applies at the transferee AS when a 501 Not implemented is received upon a REFER was sent to the transferee:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A reINVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. 																																																																																																			
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																																																			
<p>Comments:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: center;">ISC#2</th> <th style="text-align: center;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Establishment of session #2</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #2 on hold</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td style="text-align: center;">REFER → REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">501 Not implemented ← 501 Not implemented</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3 party call control applies</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: center;">← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 → INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ← 200 OK</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK → ACK</td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE(S1)</td> <td style="text-align: center;">→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">← 200 OK (BYE)</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">← BYE(S2)</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">→ 200 OK (BYE)</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2				Session #2 on hold			REFER 1	→ REFER	REFER → REFER				501 Not implemented ← 501 Not implemented		202 Accepted	← 202 Accepted				3 party call control applies					INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK	NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY					INVITE 4 → INVITE				200 OK ← 200 OK				ACK → ACK		NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE(S1)	→ BYE			200 OK (BYE)	← 200 OK (BYE)			BYE	← BYE(S2)			200 OK (BYE)	→ 200 OK (BYE)		
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																
	Establishment of session #1																																																																																																		
	Session #1 on hold																																																																																																		
	Establishment of session #2																																																																																																		
	Session #2 on hold																																																																																																		
REFER 1	→ REFER	REFER → REFER																																																																																																	
		501 Not implemented ← 501 Not implemented																																																																																																	
202 Accepted	← 202 Accepted																																																																																																		
	3 party call control applies																																																																																																		
		INVITE 3 →	→ INVITE																																																																																																
		180 Ringing ←	← 180 Ringing																																																																																																
		200 OK ←	← 200 OK																																																																																																
		ACK →	→ ACK																																																																																																
NOTIFY(100)	← NOTIFY(100)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
		INVITE 4 → INVITE																																																																																																	
		200 OK ← 200 OK																																																																																																	
		ACK → ACK																																																																																																	
NOTIFY(200)	← NOTIFY(200)																																																																																																		
200 OK NOTIFY	→ 200 OK NOTIFY																																																																																																		
BYE(S1)	→ BYE																																																																																																		
200 OK (BYE)	← 200 OK (BYE)																																																																																																		
BYE	← BYE(S2)																																																																																																		
200 OK (BYE)	→ 200 OK (BYE)																																																																																																		

TSS Netw/TransfereeAS	TP ECT_N02_013	Reference Clause 4.5.2.4.1.2.3 of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																												
<p>Test purpose</p> <p><i>Assured transfer. The transferee AS initiate the special REFER handling procedures directly.</i></p> <p>Ensure that three party call control applies at the transferee AS directly when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																															
<p>Comments:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: center;">ISC#2</th> <th style="text-align: center;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="3" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">➔</td> <td>REFER</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td>INVITE 3 ➔</td> <td>➔ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK ➔</td> <td>➔ ACK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td>NOTIFY(100)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td></td> <td></td> <td>INVITE 4 ➔</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>200 OK ←</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td>ACK ➔</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td>200 OK NOTIFY</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">➔</td> <td>BYE</td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>200 OK (BYE)</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold			REFER 1	➔	REFER		202 Accepted	←	202 Accepted			3 party call control applies					INVITE 3 ➔	➔ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK ➔	➔ ACK	NOTIFY(100)	←	NOTIFY(100)		200 OK NOTIFY	➔	200 OK NOTIFY				INVITE 4 ➔	INVITE			200 OK ←	200 OK			ACK ➔	ACK	NOTIFY(200)	←	NOTIFY(200)		200 OK NOTIFY	➔	200 OK NOTIFY		BYE	➔	BYE		200 OK (BYE)	←	200 OK (BYE)	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																												
	Establishment of session #1																																																																														
	Session #1 on hold																																																																														
REFER 1	➔	REFER																																																																													
202 Accepted	←	202 Accepted																																																																													
	3 party call control applies																																																																														
		INVITE 3 ➔	➔ INVITE																																																																												
		180 Ringing ←	← 180 Ringing																																																																												
		200 OK ←	← 200 OK																																																																												
		ACK ➔	➔ ACK																																																																												
NOTIFY(100)	←	NOTIFY(100)																																																																													
200 OK NOTIFY	➔	200 OK NOTIFY																																																																													
		INVITE 4 ➔	INVITE																																																																												
		200 OK ←	200 OK																																																																												
		ACK ➔	ACK																																																																												
NOTIFY(200)	←	NOTIFY(200)																																																																													
200 OK NOTIFY	➔	200 OK NOTIFY																																																																													
BYE	➔	BYE																																																																													
200 OK (BYE)	←	200 OK (BYE)																																																																													

TSS Netw/TransfereeAS	TP ECT_N02_014	Reference Clause 4.5.2.4.1.2.3of [ITU-T Q.3623 v.1] Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																												
<p>Test purpose</p> <p><i>Blind transfer. The transferee AS initiate the special REFER handling procedures directly.</i></p> <p>Ensure that three party call control applies at the transferee AS directly when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method:</p> <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • An INVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																															
<p>SIP header values:</p> <p>REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3, P-Asserted-Identity=ISC#2, Referred-By=ISC#1</p> <p>INVITE 4: Request URI = ISC#2, P-Asserted-Identity=ISC#3, Referred-By=ISC#1</p> <p>NOTIFY(100): Event contains refer message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200): Event contains refer message/sipfrag contains SIP/2.0 200 OK</p>																																																																															
<p>Comments:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">ISC#1</td> <td style="width: 50%; text-align: center;">AS Transferor</td> <td style="width: 25%; text-align: right;">ISC#2</td> <td style="width: 25%; text-align: right;">ISC#3</td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">Establishment of session #1</td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">➔</td> <td>REFER</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">➔</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="3" style="text-align: center;">3 party call control applies</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 ➔</td> <td style="text-align: right;">➔ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td style="text-align: right;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: right;">← 200 OK</td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK ➔</td> <td style="text-align: right;">➔ ACK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 4 ➔</td> <td style="text-align: right;">INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td style="text-align: right;">200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK ➔</td> <td style="text-align: right;">ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">➔</td> <td>200 OK NOTIFY</td> <td></td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold			REFER 1	➔	REFER		202 Accepted	←	202 Accepted		BYE	➔			200 OK (BYE)	←				3 party call control applies					INVITE 3 ➔	➔ INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK	NOTIFY(100)	←			200 OK NOTIFY	➔					ACK ➔	➔ ACK			INVITE 4 ➔	INVITE			200 OK ←	200 OK			ACK ➔	ACK	NOTIFY(200)	←	NOTIFY(200)		200 OK NOTIFY	➔	200 OK NOTIFY	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																												
	Establishment of session #1																																																																														
	Session #1 on hold																																																																														
REFER 1	➔	REFER																																																																													
202 Accepted	←	202 Accepted																																																																													
BYE	➔																																																																														
200 OK (BYE)	←																																																																														
	3 party call control applies																																																																														
		INVITE 3 ➔	➔ INVITE																																																																												
		180 Ringing ←	← 180 Ringing																																																																												
		200 OK ←	← 200 OK																																																																												
NOTIFY(100)	←																																																																														
200 OK NOTIFY	➔																																																																														
		ACK ➔	➔ ACK																																																																												
		INVITE 4 ➔	INVITE																																																																												
		200 OK ←	200 OK																																																																												
		ACK ➔	ACK																																																																												
NOTIFY(200)	←	NOTIFY(200)																																																																													
200 OK NOTIFY	➔	200 OK NOTIFY																																																																													

TSS Netw/TransfereeAS	TP ECT_N02_015	Reference Clause 4.5.2.4.1.2.3 of Clause 4.7.2.9.7 of [ETSI TS 124 628]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 AND PICS 5.7.1/5 [ITU-T Q.4007.1 v.1]																																																																								
Test purpose <i>Consultative transfer. The transferee AS initiate the special REFER handling procedures directly.</i> Ensure that three party call control applies directly at the transferee AS when the AS has prior knowledge that the transferee is not allowed to receive or does not support the REFER method : <ul style="list-style-type: none"> • A 202 Accepted for the REFER is sent. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 100 Trying' after the REFER request is accepted. • A reINVITE is sent to the transfer target containing the P-Asserted_identity of the transferee and the Referred-By header with the identity of the transferor. • After the 200 OK is received, a reINVITE is sent to the transferee containing the P-Asserted_identity of the transfer target and the Referred-By header with the identity of the transferor. • A NOTIFY request is sent to the transferor containing a message/sipfrag body set to 'SIP/2.0 200 OK' after the referred communication is confirmed. 																																																																											
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI INVITE 3: Request URI = ISC#3 , P-Asserted-Identity=ISC#2, Referred-By=ISC#1 INVITE 4: Request URI = ISC#2 , P-Asserted-Identity=ISC#3, Referred-By=ISC#1 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: <table style="width:100%; border:none;"> <tr> <td style="width:25%;">ISC#1</td> <td style="width:25%; text-align:center;">AS Transferor</td> <td style="width:25%; text-align:center;">ISC#2</td> <td style="width:25%; text-align:right;">ISC#3</td> </tr> <tr> <td></td> <td colspan="3" style="text-align:center;">Establishment of session #1</td> </tr> <tr> <td></td> <td colspan="3" style="text-align:center;">Session #1 on hold</td> </tr> <tr> <td></td> <td colspan="3" style="text-align:center;">Establishment of session #2</td> </tr> </table>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2																																																										
ISC#1	AS Transferor	ISC#2	ISC#3																																																																								
	Establishment of session #1																																																																										
	Session #1 on hold																																																																										
	Establishment of session #2																																																																										
<table style="width:100%; border:none;"> <tr> <td style="width:25%;">REFER 1</td> <td style="width:25%;">→ REFER</td> <td style="width:25%;"></td> <td style="width:25%;"></td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="3" style="text-align:center;">3 party call control applies</td> </tr> <tr> <td></td> <td style="text-align:center;">INVITE 3 →</td> <td style="text-align:center;">← INVITE</td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">180 Ringing ←</td> <td style="text-align:center;">← 180 Ringing</td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">200 OK ←</td> <td style="text-align:center;">← 200 OK</td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">ACK →</td> <td style="text-align:center;">→ ACK</td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td>← NOTIFY(100)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">INVITE 4 → INVITE</td> <td style="text-align:center;">← 200 OK</td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">200 OK ← 200 OK</td> <td style="text-align:center;">→ ACK</td> <td></td> </tr> <tr> <td></td> <td style="text-align:center;">ACK → ACK</td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(200)</td> <td>← NOTIFY(200)</td> <td></td> <td></td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→ 200 OK NOTIFY</td> <td></td> <td></td> </tr> <tr> <td>BYE(S1)</td> <td>→ BYE</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>← 200 OK (BYE)</td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td>← BYE(S2)</td> <td></td> <td></td> </tr> <tr> <td>200 OK (BYE)</td> <td>→ 200 OK (BYE)</td> <td></td> <td></td> </tr> </table> <p style="text-align:center;">Apply post test routine</p>				REFER 1	→ REFER			202 Accepted	← 202 Accepted				3 party call control applies				INVITE 3 →	← INVITE			180 Ringing ←	← 180 Ringing			200 OK ←	← 200 OK			ACK →	→ ACK		NOTIFY(100)	← NOTIFY(100)			200 OK NOTIFY	→ 200 OK NOTIFY				INVITE 4 → INVITE	← 200 OK			200 OK ← 200 OK	→ ACK			ACK → ACK			NOTIFY(200)	← NOTIFY(200)			200 OK NOTIFY	→ 200 OK NOTIFY			BYE(S1)	→ BYE			200 OK (BYE)	← 200 OK (BYE)			BYE	← BYE(S2)			200 OK (BYE)	→ 200 OK (BYE)		
REFER 1	→ REFER																																																																										
202 Accepted	← 202 Accepted																																																																										
	3 party call control applies																																																																										
	INVITE 3 →	← INVITE																																																																									
	180 Ringing ←	← 180 Ringing																																																																									
	200 OK ←	← 200 OK																																																																									
	ACK →	→ ACK																																																																									
NOTIFY(100)	← NOTIFY(100)																																																																										
200 OK NOTIFY	→ 200 OK NOTIFY																																																																										
	INVITE 4 → INVITE	← 200 OK																																																																									
	200 OK ← 200 OK	→ ACK																																																																									
	ACK → ACK																																																																										
NOTIFY(200)	← NOTIFY(200)																																																																										
200 OK NOTIFY	→ 200 OK NOTIFY																																																																										
BYE(S1)	→ BYE																																																																										
200 OK (BYE)	← 200 OK (BYE)																																																																										
BYE	← BYE(S2)																																																																										
200 OK (BYE)	→ 200 OK (BYE)																																																																										

6.2.3 Interaction with other services

6.2.3.1 Originating identification restriction (OIR)

TSS Interaction/OIR	TP ECT_N03_001	Reference Clause 4.6.5 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 7.7.2/1 [ITU-T Q.4007.1 v.1]																																																																																													
Test purpose <i>Referred-By header privacy regarding the requested privacy for the P-Asserted-Identity.</i> Ensure that a privacy header is present and the value 'user' is included in addition if the privacy header was received with the value 'id'.																																																																																																
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI P-Asserted-Identity ISC#1 URI Privacy: id REFER 2: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI P-Asserted-Identity ISC#1 URI Privacy: id, user																																																																																																
Comments: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: left;">ISC#2</th> <th style="text-align: left;">ISC#3</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Establishment of session #1</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Session #1 on hold</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Establishment of session #2</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">ISC#1 transfers ISC#2 to ISC#3</td> <td></td> <td></td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→ REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER 2 →</td> <td>REFER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted ←</td> <td>202 Accepted</td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td>NOTIFY(100)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> </tr> <tr> <td></td> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">←</td> <td>INVITE 3</td> </tr> <tr> <td></td> <td style="text-align: center;">INVITE 4</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td>INVITE</td> </tr> <tr> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td>180 Ringing</td> </tr> <tr> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">→</td> <td>180 Ringing</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td>200 OK</td> </tr> <tr> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">→</td> <td>200 OK</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">ACK →</td> <td>ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td>NOTIFY(200)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td>200 OK NOTIFY</td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td>BYE</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td>200 OK (BYE)</td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3		Establishment of session #1				Session #1 on hold				Establishment of session #2				ISC#1 transfers ISC#2 to ISC#3			REFER 1	→ REFER					REFER 2 →	REFER			202 Accepted ←	202 Accepted	202 Accepted	← 202 Accepted			NOTIFY(100)	←	←	NOTIFY(100)	200 OK NOTIFY	→	→	200 OK NOTIFY		INVITE	←	INVITE 3		INVITE 4	→	→	INVITE		180 Ringing	←	←	180 Ringing		180 Ringing	→	180 Ringing			200 OK	←	←	200 OK		200 OK	→	200 OK				ACK →	ACK	NOTIFY(200)	←	←	NOTIFY(200)	200 OK NOTIFY	→	→	200 OK NOTIFY	BYE	→	→	BYE	200 OK (BYE)	←	←	200 OK (BYE)
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																													
	Establishment of session #1																																																																																															
	Session #1 on hold																																																																																															
	Establishment of session #2																																																																																															
	ISC#1 transfers ISC#2 to ISC#3																																																																																															
REFER 1	→ REFER																																																																																															
		REFER 2 →	REFER																																																																																													
		202 Accepted ←	202 Accepted																																																																																													
202 Accepted	← 202 Accepted																																																																																															
NOTIFY(100)	←	←	NOTIFY(100)																																																																																													
200 OK NOTIFY	→	→	200 OK NOTIFY																																																																																													
	INVITE	←	INVITE 3																																																																																													
	INVITE 4	→	→	INVITE																																																																																												
	180 Ringing	←	←	180 Ringing																																																																																												
	180 Ringing	→	180 Ringing																																																																																													
	200 OK	←	←	200 OK																																																																																												
	200 OK	→	200 OK																																																																																													
		ACK →	ACK																																																																																													
NOTIFY(200)	←	←	NOTIFY(200)																																																																																													
200 OK NOTIFY	→	→	200 OK NOTIFY																																																																																													
BYE	→	→	BYE																																																																																													
200 OK (BYE)	←	←	200 OK (BYE)																																																																																													

TSS Interaction/OIR	TP ECT_N03_002	Reference Clause 4.6.5 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 7.7.2/1 [ITU-T Q.4007.1 v.1]																																																																																																																																
<p>Test purpose</p> <p><i>Privacy header in the INVITE of the transferee is set according previous received privacy indication.</i></p> <p>Ensure that the INVITE request sent to the transfer target has the same privacy requirements as previous received in initial call between the transferee and the transferor.</p> <ul style="list-style-type: none"> Transferee sends a privacy header value 'id' in the 200 OK INVITE of the initial call. The system under test (SUT) inserts a privacy header set to 'id' if the INVITE request sent to the transfer target does not contain a privacy header. 																																																																																																																																			
<p>SIP header values:</p> <p>200 OK INVITE 1: Privacy: id</p> <p>INVITE 3: (no Privacy header)</p> <p>INVITE 4: Privacy: id</p>																																																																																																																																			
<p>Comments:</p> <table border="0"> <thead> <tr> <th data-bbox="183 719 496 741">ISC#1</th> <th data-bbox="596 719 751 741">AS Transferor</th> <th data-bbox="874 719 949 741">ISC#2</th> <th data-bbox="1193 719 1268 741">ISC#3</th> </tr> </thead> <tbody> <tr> <td>INVITE 1</td> <td>→</td> <td>→</td> <td>INVITE</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>←</td> <td>180 Ringing</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>←</td> <td>200 OK (INVITE) 1</td> </tr> <tr> <td>ACK</td> <td>→</td> <td>→</td> <td>ACK</td> </tr> <tr> <td>INVITE (sendonly)</td> <td>→</td> <td>→</td> <td>INVITE (sendonly)</td> </tr> <tr> <td>200 OK (recvonly)</td> <td>←</td> <td>←</td> <td>200 OK (recvonly)</td> </tr> <tr> <td>ACK</td> <td>→</td> <td>→</td> <td>ACK</td> </tr> <tr> <td>INVITE 2</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>INVITE (sendonly)</td> <td>→</td> <td></td> <td>→ INVITE (sendonly)</td> </tr> <tr> <td>200 OK (recvonly)</td> <td>←</td> <td></td> <td>← 200 OK (recvonly)</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>REFER</td> <td>→ REFER</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>REFER</td> <td>→ REFER</td> </tr> <tr> <td></td> <td></td> <td>202 Accepted</td> <td>← 202 Accepted</td> </tr> <tr> <td>202 Accepted</td> <td>← 202 Accepted</td> <td></td> <td></td> </tr> <tr> <td>NOTIFY(100)</td> <td>←</td> <td></td> <td>← NOTIFY(100)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td></td> <td>→ 200 OK NOTIFY</td> </tr> <tr> <td></td> <td></td> <td>INVITE</td> <td>← INVITE 3</td> </tr> <tr> <td></td> <td></td> <td>INVITE 4</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>180 Ringing</td> <td>→ 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>200 OK</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td>200 OK</td> <td>→ 200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td>ACK → ACK</td> </tr> <tr> <td>NOTIFY(200)</td> <td>←</td> <td></td> <td>← NOTIFY(200)</td> </tr> <tr> <td>200 OK NOTIFY</td> <td>→</td> <td></td> <td>→ 200 OK NOTIFY</td> </tr> <tr> <td>BYE</td> <td>→</td> <td></td> <td>→ BYE</td> </tr> <tr> <td>200 OK (BYE)</td> <td>←</td> <td></td> <td>← 200 OK (BYE)</td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE 1	→	→	INVITE	180 Ringing	←	←	180 Ringing	200 OK (INVITE)	←	←	200 OK (INVITE) 1	ACK	→	→	ACK	INVITE (sendonly)	→	→	INVITE (sendonly)	200 OK (recvonly)	←	←	200 OK (recvonly)	ACK	→	→	ACK	INVITE 2	→		→ INVITE	180 Ringing	←		← 180 Ringing	200 OK (INVITE)	←		← 200 OK (INVITE)	ACK	→		→ ACK	INVITE (sendonly)	→		→ INVITE (sendonly)	200 OK (recvonly)	←		← 200 OK (recvonly)	ACK	→		→ ACK	REFER	→ REFER					REFER	→ REFER			202 Accepted	← 202 Accepted	202 Accepted	← 202 Accepted			NOTIFY(100)	←		← NOTIFY(100)	200 OK NOTIFY	→		→ 200 OK NOTIFY			INVITE	← INVITE 3			INVITE 4	→ INVITE			180 Ringing	← 180 Ringing			180 Ringing	→ 180 Ringing			200 OK	← 200 OK			200 OK	→ 200 OK				ACK → ACK	NOTIFY(200)	←		← NOTIFY(200)	200 OK NOTIFY	→		→ 200 OK NOTIFY	BYE	→		→ BYE	200 OK (BYE)	←		← 200 OK (BYE)
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																																																
INVITE 1	→	→	INVITE																																																																																																																																
180 Ringing	←	←	180 Ringing																																																																																																																																
200 OK (INVITE)	←	←	200 OK (INVITE) 1																																																																																																																																
ACK	→	→	ACK																																																																																																																																
INVITE (sendonly)	→	→	INVITE (sendonly)																																																																																																																																
200 OK (recvonly)	←	←	200 OK (recvonly)																																																																																																																																
ACK	→	→	ACK																																																																																																																																
INVITE 2	→		→ INVITE																																																																																																																																
180 Ringing	←		← 180 Ringing																																																																																																																																
200 OK (INVITE)	←		← 200 OK (INVITE)																																																																																																																																
ACK	→		→ ACK																																																																																																																																
INVITE (sendonly)	→		→ INVITE (sendonly)																																																																																																																																
200 OK (recvonly)	←		← 200 OK (recvonly)																																																																																																																																
ACK	→		→ ACK																																																																																																																																
REFER	→ REFER																																																																																																																																		
		REFER	→ REFER																																																																																																																																
		202 Accepted	← 202 Accepted																																																																																																																																
202 Accepted	← 202 Accepted																																																																																																																																		
NOTIFY(100)	←		← NOTIFY(100)																																																																																																																																
200 OK NOTIFY	→		→ 200 OK NOTIFY																																																																																																																																
		INVITE	← INVITE 3																																																																																																																																
		INVITE 4	→ INVITE																																																																																																																																
		180 Ringing	← 180 Ringing																																																																																																																																
		180 Ringing	→ 180 Ringing																																																																																																																																
		200 OK	← 200 OK																																																																																																																																
		200 OK	→ 200 OK																																																																																																																																
			ACK → ACK																																																																																																																																
NOTIFY(200)	←		← NOTIFY(200)																																																																																																																																
200 OK NOTIFY	→		→ 200 OK NOTIFY																																																																																																																																
BYE	→		→ BYE																																																																																																																																
200 OK (BYE)	←		← 200 OK (BYE)																																																																																																																																

TSS Interaction/OIR	TP ECT_N03_003	Reference Clause 4.6.5 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 7.7.2/1 [ITU-T Q.4007.1 v.1]																																																																																																																																
<p>Test purpose</p> <p><i>Privacy header in the INVITE of the transferee is set according previous received privacy indication.</i></p> <p>Ensure that the INVITE request sent to the transfer target has the same privacy requirements as previously received in initial call between the transferee and the transferor.</p> <ul style="list-style-type: none"> Transferee sends a privacy header value 'id' in the INVITE of the initial call. The SUT inserts a privacy header set to 'id' if the INVITE request sent to the transfer target does not contain a privacy header. 																																																																																																																																			
<p>SIP header values:</p> <p>INVITE 1: Privacy: id</p> <p>INVITE 3: (no Privacy header)</p> <p>INVITE 4: Privacy: id</p>																																																																																																																																			
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: left;">ISC#2</th> <th style="text-align: left;">ISC#3</th> </tr> </thead> <tbody> <tr> <td>INVITE</td><td style="text-align: center;">←</td><td>← INVITE 1</td><td></td> </tr> <tr> <td>180 Ringing</td><td style="text-align: center;">→</td><td>→ 180 Ringing</td><td></td> </tr> <tr> <td>200 OK (INVITE)</td><td style="text-align: center;">→</td><td>→ 200 OK (INVITE) 1</td><td></td> </tr> <tr> <td>ACK</td><td style="text-align: center;">←</td><td>← ACK</td><td></td> </tr> <tr> <td>INVITE (sendonly)</td><td style="text-align: center;">→</td><td>→ INVITE (sendonly)</td><td></td> </tr> <tr> <td>200 OK (recvonly)</td><td style="text-align: center;">←</td><td>← 200 OK (recvonly)</td><td></td> </tr> <tr> <td>ACK</td><td style="text-align: center;">→</td><td>→ ACK</td><td></td> </tr> <tr> <td>INVITE 2</td><td style="text-align: center;">→</td><td></td><td>→ INVITE</td> </tr> <tr> <td>180 Ringing</td><td style="text-align: center;">←</td><td></td><td>← 180 Ringing</td> </tr> <tr> <td>200 OK (INVITE)</td><td style="text-align: center;">←</td><td></td><td>← 200 OK (INVITE)</td> </tr> <tr> <td>ACK</td><td style="text-align: center;">→</td><td></td><td>→ ACK</td> </tr> <tr> <td>INVITE (sendonly)</td><td style="text-align: center;">→</td><td></td><td>→ INVITE (sendonly)</td> </tr> <tr> <td>200 OK (recvonly)</td><td style="text-align: center;">←</td><td></td><td>← 200 OK (recvonly)</td> </tr> <tr> <td>ACK</td><td style="text-align: center;">→</td><td></td><td>→ ACK</td> </tr> <tr> <td>REFER</td><td style="text-align: center;">→</td><td>REFER</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">REFER</td><td>→ REFER</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">202 Accepted</td><td>← 202 Accepted</td><td></td> </tr> <tr> <td>202 Accepted</td><td style="text-align: center;">←</td><td>202 Accepted</td><td></td> </tr> <tr> <td>NOTIFY(100)</td><td style="text-align: center;">←</td><td>← NOTIFY(100)</td><td></td> </tr> <tr> <td>200 OK NOTIFY</td><td style="text-align: center;">→</td><td>→ 200 OK NOTIFY</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">INVITE</td><td>← INVITE 3</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">INVITE 4</td><td>→</td><td>→ INVITE</td> </tr> <tr> <td></td><td style="text-align: center;">180 Ringing</td><td>←</td><td>← 180 Ringing</td> </tr> <tr> <td></td><td style="text-align: center;">180 Ringing</td><td>→ 180 Ringing</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">200 OK</td><td>←</td><td>← 200 OK</td> </tr> <tr> <td></td><td style="text-align: center;">200 OK</td><td>→ 200 OK</td><td></td> </tr> <tr> <td></td><td></td><td>ACK</td><td>→ ACK</td> </tr> <tr> <td>NOTIFY(200)</td><td style="text-align: center;">←</td><td>← NOTIFY(200)</td><td></td> </tr> <tr> <td>200 OK NOTIFY</td><td style="text-align: center;">→</td><td>→ 200 OK NOTIFY</td><td></td> </tr> <tr> <td>BYE</td><td style="text-align: center;">→</td><td>→ BYE</td><td></td> </tr> <tr> <td>200 OK (BYE)</td><td style="text-align: center;">←</td><td>← 200 OK (BYE)</td><td></td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE	←	← INVITE 1		180 Ringing	→	→ 180 Ringing		200 OK (INVITE)	→	→ 200 OK (INVITE) 1		ACK	←	← ACK		INVITE (sendonly)	→	→ INVITE (sendonly)		200 OK (recvonly)	←	← 200 OK (recvonly)		ACK	→	→ ACK		INVITE 2	→		→ INVITE	180 Ringing	←		← 180 Ringing	200 OK (INVITE)	←		← 200 OK (INVITE)	ACK	→		→ ACK	INVITE (sendonly)	→		→ INVITE (sendonly)	200 OK (recvonly)	←		← 200 OK (recvonly)	ACK	→		→ ACK	REFER	→	REFER			REFER	→ REFER			202 Accepted	← 202 Accepted		202 Accepted	←	202 Accepted		NOTIFY(100)	←	← NOTIFY(100)		200 OK NOTIFY	→	→ 200 OK NOTIFY			INVITE	← INVITE 3			INVITE 4	→	→ INVITE		180 Ringing	←	← 180 Ringing		180 Ringing	→ 180 Ringing			200 OK	←	← 200 OK		200 OK	→ 200 OK				ACK	→ ACK	NOTIFY(200)	←	← NOTIFY(200)		200 OK NOTIFY	→	→ 200 OK NOTIFY		BYE	→	→ BYE		200 OK (BYE)	←	← 200 OK (BYE)	
ISC#1	AS Transferor	ISC#2	ISC#3																																																																																																																																
INVITE	←	← INVITE 1																																																																																																																																	
180 Ringing	→	→ 180 Ringing																																																																																																																																	
200 OK (INVITE)	→	→ 200 OK (INVITE) 1																																																																																																																																	
ACK	←	← ACK																																																																																																																																	
INVITE (sendonly)	→	→ INVITE (sendonly)																																																																																																																																	
200 OK (recvonly)	←	← 200 OK (recvonly)																																																																																																																																	
ACK	→	→ ACK																																																																																																																																	
INVITE 2	→		→ INVITE																																																																																																																																
180 Ringing	←		← 180 Ringing																																																																																																																																
200 OK (INVITE)	←		← 200 OK (INVITE)																																																																																																																																
ACK	→		→ ACK																																																																																																																																
INVITE (sendonly)	→		→ INVITE (sendonly)																																																																																																																																
200 OK (recvonly)	←		← 200 OK (recvonly)																																																																																																																																
ACK	→		→ ACK																																																																																																																																
REFER	→	REFER																																																																																																																																	
	REFER	→ REFER																																																																																																																																	
	202 Accepted	← 202 Accepted																																																																																																																																	
202 Accepted	←	202 Accepted																																																																																																																																	
NOTIFY(100)	←	← NOTIFY(100)																																																																																																																																	
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																																																	
	INVITE	← INVITE 3																																																																																																																																	
	INVITE 4	→	→ INVITE																																																																																																																																
	180 Ringing	←	← 180 Ringing																																																																																																																																
	180 Ringing	→ 180 Ringing																																																																																																																																	
	200 OK	←	← 200 OK																																																																																																																																
	200 OK	→ 200 OK																																																																																																																																	
		ACK	→ ACK																																																																																																																																
NOTIFY(200)	←	← NOTIFY(200)																																																																																																																																	
200 OK NOTIFY	→	→ 200 OK NOTIFY																																																																																																																																	
BYE	→	→ BYE																																																																																																																																	
200 OK (BYE)	←	← 200 OK (BYE)																																																																																																																																	

6.2.3.2 Anonymous communication rejection and communication barring (ACR/CB)

TSSInteraction/ACR-CB	TP ECT_N04_001	Reference Clause 4.6.9 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 7.7.2/2 [ITU-T Q.4007.1 v.1]
Test purpose <i>Transfer requests with a transfer target that is barred by the served users outgoing communication barring (OCB) rules.</i> Ensure that the AS does not accept a transfer requests with a transfer target that is barred by the transferor's outgoing communication barring (OCB) rules.			
Precondition: The transfer target is barred by the transferor's outgoing communication barring rules.			
SIP header values: REFER 1: Refer-To contains ISC#3 URI; method=invite Referred-By contains ISC#1 URI			
Comments:			
ISC#1	AS Transferor	ISC#2	ISC#3
Establishment of session #1			
INVITE	←	←	INVITE 1
180 Ringing	→	→	180 Ringing
200 OK (INVITE)	→	→	200 OK (INVITE)
ACK	←	←	ACK
INVITE 2 (sendonly)	→	→	INVITE (sendonly)
200 OK (recvonly)	←	←	200 OK (recvonly)
ACK	→	→	ACK
ISC#1 transfers ISC#2 to ISC#3			
REFER 1	→		REFER
403 Forbidden	←		403 Forbidden
Apply post test routine			

TSS Interaction/CONF	TP ECT_N05_002	Reference Clause 4.6.6 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 7.7.2/3 [ITU-T Q.4007.1 v.1]																											
<p>Test purpose</p> <p><i>ECT does not apply if the Refer-To header of the REFER request dialogue contains the URI targeted a conference invited by INVITE.</i></p> <p>Ensure that ECT does not apply if the "Isfocue" parameter was received in the Contact header of a 1xx or 200 OK response in a dialogue to join a conference after received an INVITE request. The REFER request is rejected with a 4xx or 5xx or 6xx unsuccessful final response.</p>																														
<p>SIP header values:</p> <p>INVITE: ISC#1 URI</p> <p style="text-align: center;">Contact: conference URI; isfocus</p>																														
<p>Comments:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: right;">AS CONF</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">A conference is already established</td> </tr> <tr> <td>INVITE</td> <td style="text-align: center;">←</td> <td style="text-align: right;">← INVITE</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">→</td> <td style="text-align: right;">→ 180 Ringing</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">→</td> <td style="text-align: right;">→ 200 OK (INVITE)</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">←</td> <td style="text-align: right;">← ACK</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">→</td> <td style="text-align: right;">REFER</td> </tr> <tr> <td>4xx or 5xx or 6xx Response</td> <td style="text-align: center;">←</td> <td style="text-align: right;">4xx or 5xx or 6xx Response</td> </tr> <tr> <td colspan="3" style="text-align: center;">Apply post test routine</td> </tr> </tbody> </table>				ISC#ISC#1	AS Transferor	AS CONF	A conference is already established			INVITE	←	← INVITE	180 Ringing	→	→ 180 Ringing	200 OK (INVITE)	→	→ 200 OK (INVITE)	ACK	←	← ACK	REFER	→	REFER	4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response	Apply post test routine		
ISC#ISC#1	AS Transferor	AS CONF																												
A conference is already established																														
INVITE	←	← INVITE																												
180 Ringing	→	→ 180 Ringing																												
200 OK (INVITE)	→	→ 200 OK (INVITE)																												
ACK	←	← ACK																												
REFER	→	REFER																												
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response																												
Apply post test routine																														

TSS Interaction/CONF	TP ECT_N05_003	Reference Clause 4.6.6 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 AND PICS 7.7.2/3 [ITU-T Q.4007.1 v.1]																					
<p>Test purpose</p> <p><i>ECT does not apply if the conference controller invokes ECT.</i></p> <p>Ensure that ECT does not apply if the conference controller invokes ECT. The REFER request is rejected with a 4xx or 5xx or 6xx unsuccessful final response.</p>																								
<p>SIP header values:</p> <p>INVITE 1: conference factory URI</p>																								
<p>Comments:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ISC#ISC#1</th> <th style="text-align: center;">AS Transferor</th> <th style="text-align: right;">AS CONF</th> </tr> </thead> <tbody> <tr> <td>INVITE 1</td> <td style="text-align: center;">→</td> <td style="text-align: right;">→ INVITE</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: right;">← 200 OK (INVITE)</td> </tr> <tr> <td colspan="3" style="text-align: center;">Invite another user to the conference</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">→</td> <td style="text-align: right;">REFER</td> </tr> <tr> <td>4xx or 5xx or 6xx Response</td> <td style="text-align: center;">←</td> <td style="text-align: right;">4xx or 5xx or 6xx Response</td> </tr> <tr> <td colspan="3" style="text-align: center;">Apply post test routine</td> </tr> </tbody> </table>				ISC#ISC#1	AS Transferor	AS CONF	INVITE 1	→	→ INVITE	200 OK (INVITE)	←	← 200 OK (INVITE)	Invite another user to the conference			REFER	→	REFER	4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response	Apply post test routine		
ISC#ISC#1	AS Transferor	AS CONF																						
INVITE 1	→	→ INVITE																						
200 OK (INVITE)	←	← 200 OK (INVITE)																						
Invite another user to the conference																								
REFER	→	REFER																						
4xx or 5xx or 6xx Response	←	4xx or 5xx or 6xx Response																						
Apply post test routine																								

6.2.3.4 Explicit communication transfer (ECT)

TSS Interaction/ECT	TP ECT_N06_001	Reference Clauses 4.6.10.2, 4.6.10.3 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/1 [ITU-T Q.4007.1 v.1]																																																																
Test purpose <i>Interaction with ECT: Blind transfer.</i> A session between ISC#1 and ISC#2 exists and was transferred before. Ensure that if the INVITE dialog on which the REFER is received is a previously transferred communication indicated by the presence of a Referred-By header in the INVITE request the: <ul style="list-style-type: none"> REFER is forwarded and the value of the Refer-To header is replaced by the ECT session identifier. The Request URI of the INVITE request received to forward to the transfer target is replaced with the value of the transfer target. 																																																																			
SIP header values: REFER 1: Refer-To ISC#3 URI; method=invite Referred-By ISC#1 URI REFER 2: Refer-To ECT Session Identifier URI; method=invite Referred-By ISC#1 URI INVITE 2: Request URI = ECT Session Identifier URI Referred-By ISC#1 URI INVITE 3: Request URI = ISC#3 URI Referred-By ISC#1 URI																																																																			
Comments: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 25%;">ISC#ISC#1</th> <th style="text-align: center; width: 25%;">AS Transferor</th> <th style="text-align: center; width: 25%;">ISC#ISC#2</th> <th style="text-align: right; width: 25%;">ISC#ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">A transferred communication already exists</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER 2</td> <td style="text-align: center;">→ REFER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted</td> <td style="text-align: center;">← 202 Accepted</td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">←</td> <td>202 Accepted</td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ BYE</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 200 OK (BYE)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">← INVITE 2 (S2)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3</td> <td style="text-align: center;">→</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">←</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">→ 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">←</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK</td> <td style="text-align: center;">→ 200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">ACK → ACK</td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#ISC#1	AS Transferor	ISC#ISC#2	ISC#ISC#3	A transferred communication already exists				Session #1 on hold				REFER 1	→	REFER				REFER 2	→ REFER			202 Accepted	← 202 Accepted	202 Accepted	←	202 Accepted		BYE	→		→ BYE	200 OK (BYE)	←		← 200 OK (BYE)			INVITE	← INVITE 2 (S2)			INVITE 3	→			180 Ringing	←			180 Ringing	→ 180 Ringing			200 OK	←			200 OK	→ 200 OK				ACK → ACK
ISC#ISC#1	AS Transferor	ISC#ISC#2	ISC#ISC#3																																																																
A transferred communication already exists																																																																			
Session #1 on hold																																																																			
REFER 1	→	REFER																																																																	
		REFER 2	→ REFER																																																																
		202 Accepted	← 202 Accepted																																																																
202 Accepted	←	202 Accepted																																																																	
BYE	→		→ BYE																																																																
200 OK (BYE)	←		← 200 OK (BYE)																																																																
		INVITE	← INVITE 2 (S2)																																																																
		INVITE 3	→																																																																
		180 Ringing	←																																																																
		180 Ringing	→ 180 Ringing																																																																
		200 OK	←																																																																
		200 OK	→ 200 OK																																																																
			ACK → ACK																																																																

TSS Interaction/ECT	TP ECT_N06_002	Reference Clauses 4.6.10.2, 4.6.10.3 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/2 [[ITU-T Q.4007.1 v.1]																																																				
<p>Test purpose</p> <p><i>Interaction with ECT: Assured transfer.</i></p> <p>A session between ISC#1 and ISC#2 exists and was transferred before.</p> <p>Ensure that if the INVITE dialog on which the REFER is received is a previously transferred communication indicated by the presence of a Referred-By header in the INVITE request the:</p> <ul style="list-style-type: none"> REFER is forwarded and the value of the Refer-To header is replaced by the ECT session Identifier. The Request URI of the INVITE request received to forward to the transfer target is replaced with the value of the transfer target. 																																																							
<p>SIP header values:</p> <p>REFER 1: Refer-To ISC#3 URI; method=invite Referred-By ISC#1 URI</p> <p>REFER 2: Refer-To ECT Session Identifier URI; method=invite Referred-By ISC#1 URI</p> <p>INVITE 2: Request URI = ECT Session Identifier URI Referred-By ISC#1 URI</p> <p>INVITE 3: Request URI = ISC#3 URI Referred-By ISC#1 URI</p>																																																							
<p>Comments:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 25%;">ISC#1</th> <th style="text-align: center; width: 25%;">AS Transferor</th> <th style="text-align: center; width: 25%;">ISC#2</th> <th style="text-align: right; width: 25%;">ISC#3</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">A transferred communication already exists</td> </tr> <tr> <td colspan="4" style="text-align: center;">Session #1 on hold</td> </tr> <tr> <td>REFER 1</td> <td style="text-align: center;">→</td> <td>REFER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">REFER 2 →</td> <td>REFER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">202 Accepted ←</td> <td>202 Accepted</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE ←</td> <td>INVITE 2 (S2)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">INVITE 3 →</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing ←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">180 Ringing →</td> <td>180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK ←</td> <td>← 200 OK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">200 OK →</td> <td>200 OK</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">ACK → ACK</td> </tr> </tbody> </table> <p style="text-align: center;">Apply post test routine</p>				ISC#1	AS Transferor	ISC#2	ISC#3	A transferred communication already exists				Session #1 on hold				REFER 1	→	REFER				REFER 2 →	REFER			202 Accepted ←	202 Accepted			INVITE ←	INVITE 2 (S2)			INVITE 3 →	→ INVITE			180 Ringing ←	← 180 Ringing			180 Ringing →	180 Ringing			200 OK ←	← 200 OK			200 OK →	200 OK				ACK → ACK
ISC#1	AS Transferor	ISC#2	ISC#3																																																				
A transferred communication already exists																																																							
Session #1 on hold																																																							
REFER 1	→	REFER																																																					
		REFER 2 →	REFER																																																				
		202 Accepted ←	202 Accepted																																																				
		INVITE ←	INVITE 2 (S2)																																																				
		INVITE 3 →	→ INVITE																																																				
		180 Ringing ←	← 180 Ringing																																																				
		180 Ringing →	180 Ringing																																																				
		200 OK ←	← 200 OK																																																				
		200 OK →	200 OK																																																				
			ACK → ACK																																																				

TSS Interaction/ECT	TP ECT_N06_003	Reference Clauses 4.6.10.2, 4.6.10.3 of [ITU-T Q.3623 v.1]	Selection expression PICS 5.5.1/2 AND PICS 5.7.1/3 [ITU-T Q.4007.1 v.1]
180 Ringing → 180 Ringing			
	200 OK ←		← 200 OK
	200 OK →	200 OK	
			ACK → ACK
NOTIFY(200)	←	←NOTIFY(200)	
200 OK NOTIFY	→	→200 OK NOTIFY	
BYE	←		← BYE (S2)
200 OK (BYE)	→		→ 200 OK (BYE)
BYE (S1)	→	→BYE	
200 OK (BYE)	←	←200 OK (BYE)	
Apply post test routine			

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Environment and ICTs, climate change, e-waste, energy efficiency; construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks, Internet of Things and smart cities
Series Z	Languages and general software aspects for telecommunication systems