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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

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>.

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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

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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

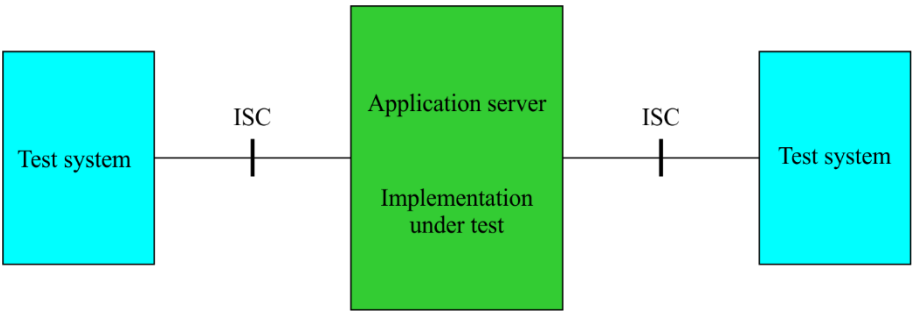
Figure 5-1 – Test suite structure

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.

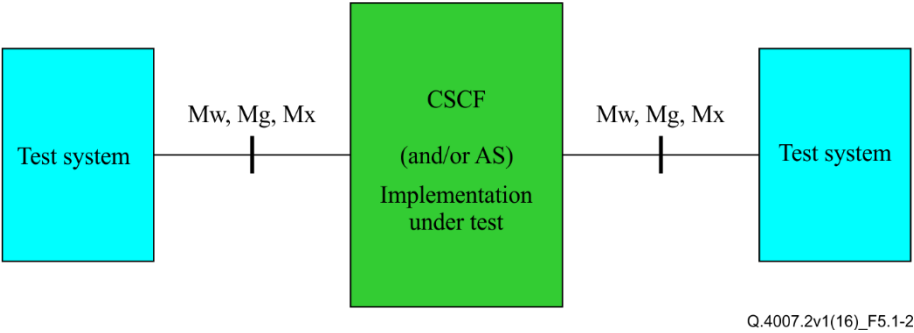


Figure 5.1-2 –Interfaces applicable to testing using the (generic) NNI

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:	<ss>_<iut><group>_<nnn>		
<ss>	= supplementary service:	e.g. "ECT"	
<iut>	= type of IUT:	U	User
		N	Network
<group>	= group	2 digit field representing group reference according to TSS	
<nnn>	= 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:			
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		
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)	
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 Communication transfer: Blind transfer. Transferee was originator of the originating call. 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:			
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	← 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_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%3Bfrom-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:			
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 (recvnly)	⬅	⬅ 200 OK (recvnly)	
ACK	➔	➔ ACK	
INVITE 2	➔		➔ INVITE
180 Ringing	⬅		⬅ 180 Ringing
200 OK (INVITE)	⬅		⬅ 200 OK (INVITE)
ACK	➔		➔ ACK
INVITE (sendonly)	➔		➔ INVITE (sendonly)
200 OK (recvnly)	⬅		⬅ 200 OK (recvnly)
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	TP	Reference	Selection expression
Netw/TransferorAS	ECT_N01_005	Clause 4.5.2.4 of [ITU-T Q.3623 v.1]	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]
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)		
BYE →	→ BYE		
200 OK (BYE) ←	← 200 OK (BYE)		
Communication ISC#2 with ISC#3			
Apply post test routine			

TSS Netw/TransferorAS	TP ECT_N01_006	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 Communication transfer: Consultative transfer . Transferee was originator of the originating call. 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. The transferor refers the transferee to establish a session to the transfer target. After the successful session between transferee and transfer target set on hold, the sessions of the transferor are released by the transferor. The transferee was the initiator of the originating communication.																																			
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Comments: <table> <thead> <tr> <th>ISC#1</th><th>AS Transferor</th><th>ISC#2</th><th>ISC#3</th></tr> </thead> <tbody> <tr> <td>INVITE</td><td>←</td><td>← INVITE 1</td><td></td></tr> <tr> <td>180 Ringing</td><td>→</td><td>→ 180 Ringing</td><td></td></tr> <tr> <td>200 OK (INVITE)</td><td>→</td><td>→ 200 OK (INVITE)</td><td></td></tr> <tr> <td>ACK</td><td>←</td><td>← ACK</td><td></td></tr> <tr> <td>INVITE (sendonly)</td><td>→</td><td>→ INVITE (sendonly)</td><td></td></tr> <tr> <td>200 OK (recvonly)</td><td>←</td><td>← 200 OK (recvonly)</td><td></td></tr> <tr> <td>ACK</td><td>→</td><td>→ ACK</td><td></td></tr> </tbody> </table>				ISC#1	AS Transferor	ISC#2	ISC#3	INVITE	←	← INVITE 1		180 Ringing	→	→ 180 Ringing		200 OK (INVITE)	→	→ 200 OK (INVITE)		ACK	←	← ACK		INVITE (sendonly)	→	→ INVITE (sendonly)		200 OK (recvonly)	←	← 200 OK (recvonly)		ACK	→	→ ACK	
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INVITE	←	← INVITE 1																																	
180 Ringing	→	→ 180 Ringing																																	
200 OK (INVITE)	→	→ 200 OK (INVITE)																																	
ACK	←	← ACK																																	
INVITE (sendonly)	→	→ INVITE (sendonly)																																	
200 OK (recvonly)	←	← 200 OK (recvonly)																																	
ACK	→	→ ACK																																	

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	→			→ 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	
		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)
BYE	→		→BYE	
200 OK (BYE)	←		←200 OK (BYE)	
Communication ISC#2 with ISC#3				
Apply post test routine				

TSS Netw/TransferorAS	TP ECT_N01_007	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 method in the Refer-To header is not the 'INVITE' method.</i> Ensure that the REFER request is rejected if the method in the Refer-To header used in this dialogue is not the INVITE method e.g. BYE.			
SIP header values: REFER: Refer-To			

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			