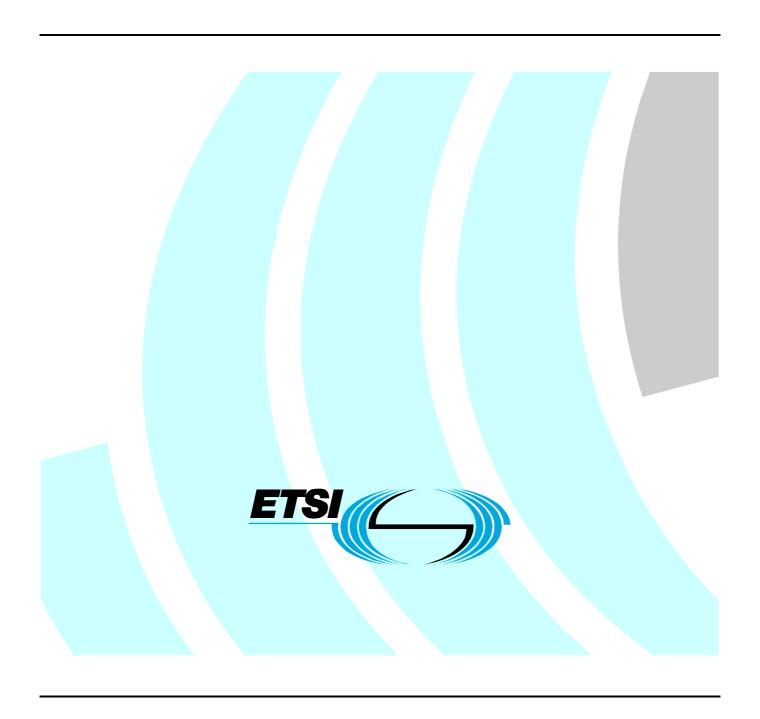
ETSITS 186 001-3 V2.1.1 (2009-10)

Technical Specification

Technical Committee for IMS Network Testing (INT);
Network Integration Testing;
Part 3: Test Suite Structure and
Test Purposes (TSS&TP) for SIP-SIP



Reference
RTS/INT-00010-3

Keywords
SIP, IP, TSS&TP

ETSI

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

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

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

Important notice

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

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

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

http://portal.etsi.org/tb/status/status.asp

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

Copyright Notification

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

© European Telecommunications Standards Institute 2009.
All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM, **TIPHON**TM, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPP[™] is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **LTE**[™] is a Trade Mark of ETSI currently being registered

for the benefit of its Members and of the 3GPP Organizational Partners. **GSM**® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intelle	ectual Property Rights	5
Forew	vord	5
1	Scope	6
2	References	6
2.1	Normative references	
2.2	Informative references.	
3	Definitions and abbreviations	
3.1	Definitions	
3.2	Conventions for representation of SIP/SDP information	
3.3	Abbreviations	9
4	Test Suite Structure (TSS)	10
4.1	SIP-SIP	
5	Numbering Scheme	10
5 5.1		
5.1	General description	
5.3	Supplementary Services	
5.5	**	
6	Test purposes	
6.1	Test purposes for Basic Call	
6.1.1	Test purposes for SIP-SIP, Basic call, Successful	
6.1.1.1		
6.1.1.2		
6.1.1.3	· · · · · · · · · · · · · · · · · · ·	
6.1.2	Test purposes for SIP-SIP, Basic call, Unsuccessful	
6.2	Test purposes for SIP-SIP, Supplementary services	
6.2.1	Test purposes for OIP	
6.2.2	Test purposes for OIR	
6.2.3	Test purposes for TIP	
6.2.4 6.2.5	Test purposes for TIR	
6.2.5.1	* *	
6.2.5.1	11	
6.2.5.3		
6.2.5.3		
6.2.5.3	11	
6.2.6	Test purposes for Communication Diversion	
6.2.6.1	1 1	
6.2.6.2		
6.2.6.2		
6.2.6.2		
6.2.6.3	3 CFNR	80
6.2.6.4	4 CFNRc	85
6.2.6.5	5 CFNL	87
6.2.6.6	5 CD	90
6.2.6.6	5.1 CD Immediate	90
6.2.6.6		
6.2.7	Test purposes for CONF	
6.2.7.1		
6.2.7.2		
6.2.7.3	e	
6.2.7.4		
6.2.8	Test purposes for Call Waiting	
6.2.9	Test purposes for Completion of Communications to Busy Subscriber	
6.2.10	Test purposes for Completion of Communications by No Reply	134

6.2.11 Test purposes for	Explicit Communication Transfer	134
Annex A (informative):	Bibliography	140
History		141

Intellectual Property Rights

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

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

Foreword

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

The present document is part 3 of a multi-part deliverable covering Network Integration Testing, as identified below:

- Part 1: "Test Suite Structure and Test Purposes (TSS&TP) for SIP-ISDN";
- Part 2: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for SIP-SIP";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) for SIP-SIP".

1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for Network Integration Testing (NIT) to verify the overall compatibility of IMS networks. For IMS, SIP and SDP specific terminology, reference shall be made to ES 283 003 [1] and RFC 3261 [3] respectively".

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

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

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

2.1 Normative references

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

[1]	ETSI ES 283 003 (V2.6.1): "Telecommunications and Internet converged Services and Protocols
	for Advanced Networking (TISPAN); IP Multimedia Call Control Protocol based on Session
	Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 [3GPP TS 24.229
	[Release 7], modified]".
503	THEY HE 404 500 (IVO 5 0) HP1 1 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1

- [2] ETSI TS 124 503 (V8.5.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 [3GPP TS 24.229 (Release 7), modified] (3GPP TS 24.503 version 8.5.0 Release 8)".
- [3] IETF RFC 3261 (2002): "SIP: Session Initiation Protocol".
- [4] ISO/IEC 9646-1 (1994): "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 1: General concepts".
- [5] ISO/IEC 9646-2 (1994): "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 2: Abstract Test Suite specification".
- [6] ISO/IEC 9646-3 (1998): "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [7] Void.
- [8] ISO/IEC 9646-5 (1994): "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 5: Requirements on test laboratories and clients for the conformance assessment process".

- [9] ISO/IEC 9646-7 (1995): "Information technology Open Systems Interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
- [10] ETSI TS 124 229 (V7.15.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229 version 7.15.0 Release 7)".
- [11] Void.
- [12] ETSI TS 124 504 (V8.5.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services: Communication Diversion (CDIV); Protocol specification (3GPP TS 24.504 version 8.5.0 Release 8)".
- [13] Void.
- [14] ETSI TS 124 407 (V7.0.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; PSTN/ISDN simulation services; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR); Protocol specification (3GPP TS 24.407 version 7.0.0 Release 7)".
- [15] ETSI TS 124 410 (V7.0.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; NGN Signalling Control Protocol; Communication HOLD (HOLD) PSTN/ISDN simulation services; Protocol specification (3GPP TS 24.410 version 7.0.0 Release 7)".
- [16] IETF RFC 2327 (1998): "SDP: Session Description Protocol".
- [17] IETF RFC 3312 (2002): "Integration of Resource Management and Session Initiation Protocol (SIP)".
- [18] IETF RFC 3311 (2002): "The Session Initiation Protocol UPDATE Method".
- [19] ETSI TS 124 147 (V8.2.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3 (3GPP TS 24.147 version 8.2.0 Release 8)".
- [20] Void.
- [21] ETSI TS 124 615 (V8.2.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Communication Waiting (CW) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol Specification (3GPP TS 24.615 version 8.2.0 Release 8)".
- [22] ETSI TS 124 642 (V8.2.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Completion of Communications to Busy Subscriber (CCBS) and Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol Specification (3GPP TS 24.642 version 8.2.0 Release 8)".
- [23] ETSI TS 124 529 (V8.1.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Protocol specification (3GPP TS 24.529 version 8.1.0 Release 8)".
- [24] ETSI TS 124 508 (V8.1.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); PSTN/ISDN simulation services Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR); Protocol specification (3GPP TS 24.508 version 8.1.0 Release 8)".
- [25] IETF RFC 5366: "Conference Establishment Using Request-Contained Lists in the Session Initiation Protocol (SIP)".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Not applicable.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

For SIP and SDP specific terminology, reference shall be made to RFC 3261 [3] and RFC 2327 [16] respectively.

SIP precondition: Indicates the support of the SIP "precondition procedure" as defined in RFC 3312 [17].

test purpose: non-formal test description, mainly using text

NOTE: TSIs test description can be used as the basis for a formal test specification (e.g. Abstract Test Suite in TTCN). See ISO 9646 (all parts) [4] to [9].

The test purposes have been defined from the user's viewpoint and the abbreviation "UE" is used in the description. However, the detailed comments section uses the abbreviation "UA" for test system instances of the users.

3.2 Conventions for representation of SIP/SDP information

1) All letters of SIP method names are capitalised.

EXAMPLE 1: INVITE, INFO.

2) SIP header fields are identified by the unabbreviated header field name as defined in the relevant RFC, including capitalization and enclosed hyphens but excluding the following colon.

EXAMPLE 2: To, From, Call-ID.

3) Where it is necessary to refer with finer granularity to components of a SIP message, the component concerned is identified by the ABNF rule name used to designate it in the defining RFC (generally 25/RFC 3261 [3]), in plain text without surrounding angle brackets.

EXAMPLE 3: Request-URI, the userinfo portion of a sip: URI.

4) URI types are represented by the lower-case type identifier followed by a colon and the abbreviation "URI".

EXAMPLE 4: sip: URI, tel: URI.

5) SIP provisional responses and final responses other than 2XX are represented by the status code followed by the normal reason phrase for that status code, with initial letters capitalized.

EXAMPLE 5: 100 Trying, 484 Address Incomplete.

6) Because of potential ambiguity within a call flow about which request a 200 OK final response answers, 200 OK is always followed by the method name of the request.

EXAMPLE 6: 200 OK INVITE, 200 OK PRACK.

7) A particular line of an SDP session description is identified by the two initial characters of the line -- that is, the line type character followed by "=".

EXAMPLE 7: m=line, a=line.

8) Where it is necessary to refer with finer granularity to components of a session description, the component concerned is identified by its rule name in the ABNF description of the SDP line concerned, delimited with angle brackets.

EXAMPLE 8: The <media> and <fmt> components of the m= line.

3.3 Abbreviations

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

ABNF Augmented Backus-Naur Form

ATS Abstract Test Suite

CCBS Completion of Communications to Busy Subscriber CCNR Completion of Communications by No Reply

CD Communication Deflection
CDIV Communication DIVersion

CDIVN Communication DIVersion Notification
CFB Communication Forwarding Busy

CFNL Communication Forwarding on Not Logged-in CFNR Communication Forwarding No Replay

CFNRc Communication Forwarding on subscriber Not Reachable

CFU Communication Forwarding Unconditional

CONF CONFerence CW Call Waiting

ECT Explicit Communication Transfer

HOLD communication HOLD
IUT Implementation Under Test
NDUB Network Determined User Busy
OIP Originating Identification Presentation
OIR Originating Identification Restriction

PIXIT Protocol Implementation eXtra Information for Testing

SDP Session Description Protocol SIP Session Initiation Protocol SUT System Under Test

TIP Terminating Identification Presentation
TIR Terminating Identification Restriction

TP Test Purpose

TSI Test System Interface
TSS Test Suite Structure

TTCN Test and Test Control Notation

UA User Agent

UDUB User Determined User Busy

UE User Equipment

4 Test Suite Structure (TSS)

4.1 SIP-SIP

C - Plane / U - Plane Basic_Call

	Successful		
		Normal call establishment	SSXXxx
		Codec negotiation	SSCNxx
		UPDATE	SSXX_UP_xx
	Unsuccessful		SSXX_Uxx
Supplementary_Services			
	OIP		SSXXSS_OIPxx
	OIR		SSXXSS_OIRxx
	TIP		SSXXSS_TIPxx
	TIR		SSXXSS_TIRxx
	HOLD		SSXXSS_CHxx
	CDIV		
		CFU	SSXXSS_CFUxx
		CFB	SSXXSS_CFBxx
		CFNR	SSXXSS_CFNRxx
		CFNRc	SSXXSS_CFNRcxx
		CFNL	SSXXSS_CFNLxx
		CD	SSXXSS_CDxx
	CONF		
		CONF_CRE	SSXXSS_CONF_CRExx
		CONF_IN	SSXXSS_CONF_INVxx
		CONF_LEAV	SSXXSS_CONF_LEAVxx
		CONF_REMOV	SSXXSS_CONF_REMOVxx
	CW		SSXXSS_CWxx
	CCBS		SSXXSS_CCBSxx
	CCNR		SSXXSS_CCNRxx
	ECT		SSXXSS_ECT

5 Numbering Scheme

5.1 General description

Pos. 1: Network of the A-Subscriber

Pos. 2: Network of the B-Subscriber

Pos. 3: Network of the C-Subscriber

Pos. 4: Network of the D-Subscriber

Pos. 5: Network of the E-Subscriber

The following Network Codes apply:

_: No such network used (used e.g. for C-Subscriber in successful A to B Calls)

(underscore makes it easier to read the name)

P: PSTN

I: ISDN

S: SIP

(Extensions will be added when needed)

Pos. 6 and 7: Bearer- or Teleservice involved

XX: Defined per PIXIT value

NOTE: TSIs may be appropriate for Test Purposes (provided the Test Purpose states for which Bearer- and/or

Tele Services it should be tested). It is however NOT appropriate for Test Cases since it would be

detrimental to Test Automation.

SP: Speech

AU: 3,1 kHz Audio

UD: UDI

UT: UDI/TA

CN: Codec negotiation

DT: DTMF

UP: UPDATE Method

Pos. 8 and 9:

__: No Supplementary Services Involved / Successful

_U: No Supplementary Services Involved / Unsuccessful

SS: Supplementary Services Involved

5.2 Basic Call

Speech			IS_	ISXX_XX						
	2	3	4	5	6	7	8	9	10	11
	S	_	_		S	Р		_	Х	Х

5.3 Supplementary Services

CLIP

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	S				Χ	Χ	S	S	С	L		Р	Х	Χ

XXSSCLIP XX

6 Test purposes

The registration and application usage procedures in the ATS shall be compliant to RFC 3261 [3] and ES 283 003 [1] (modified TS 124 229 [10] and TS 124 503 [2]). The validation of the registration procedure is out of scope of the present document and will be part of the preambles used in the abstract test cases.

6.1 Test purposes for Basic Call

6.1.1 Test purposes for SIP-SIP, Basic call, Successful

6.1.1.1 Normal call establishment

SSXX01	NGN reference to: RFC 3261 [3]						
	TS 124 229 [10], clauses 5.1.3, 5.1	.4					
TSS reference:	SIP-SIP/Basic_call/Successful.	l .					
Selection criteria:							
Test purpose:	Ensure that call establishment between UE A and UE B is handled correctly when reliable provisional responses and the precondition framework are not used. Ensure that the handling and mapping of the SDP parameters of the INVITE message performed correctly. The call is released by the called user. Ensure that in the active call state the voice/data transfer on the media channels is performed correctly (e.g. testing QoS parameters).						
SIP Parameter values:	INVITE: Require header without 100rel and precondition option tags sdp: PIXIT (Value should be taken from tables 1 and 2) 180 Ringing:						
	Require header without 100rel SIP UA A	SUT	SIP UA B				
	INVITE → 180 Ringing ← 200 OK INVITE ← ACK →	→ ← ← → Check media	INVITE 180 Ringing 200 OK INVITE ACK				
	BYE	← →	BYE 200 OK BYE				

SSXX_02	NGN reference to:				
	RFC 3261 [3], RFC 3312 [17]				
	TS 124 229 [10], clauses 5.1.3, 5.1.4				
TSS reference:	SIP-SIP/Basic_call/Successful.				
Selection criteria:					
Test purpose:	Ensure that call establishment between UE A and UE B is handled correctly when reliable provisional responses and the precondition framework are used. Ensure that the messages for the resource negotiation and reservation are delivered correctly. The call is released by the called user.				
	Ensure that in the active call state the voice/data transfer on the media channels is performed correctly (e.g. testing QoS parameters).				
SIP Parameter values:	INVITE: Supported header with 100rel and precondition option tags sdp: PIXIT (Value should be taken from tables 1 and 2) a=curr and a=des lines present				
	183 Session Progress: Require header with 100rel sdp: a=curr and a=des lines present				
	UPDATE1				
	sdp: a=curr and a=des lines present				

Comments:	SIP UA A	SUT		SIP UA B
	INVITE	→	→	INVITE
		Start resource negotiation	n/reserv	vation
	183 Session Progress	←	←	183 Session Progress
	PRACK	→	→	PRACK
	200 OK PRACK	←	←	200 OK PRACK
	UPDATE	→	→	UPDATE1
	200 OK UPDATE1	←	←	200 OK UPDATE
		End resource negotiation	n/reserv	ration
	180 Ringing	←	←	180 Ringing
	PRACK	→	→	PRACK
	200 OK PRACK	←	←	200 OK PRACK
	200 OK INVITE	←	←	200 OK INVITE
	ACK	→	→	ACK
		Check medi	a	
	BYE	←	←	BYE
	200 OK BYE	→	→	200 OK BYE

SSXX03	NGN reference to: RFC 3261 [3]							
	TS 124 229 [10], clauses 5.	1.3, 5.1.4						
TSS reference:	SIP-SIP/Basic_call/Successfu	ıl.						
Selection criteria:								
Test purpose:	Ensure that call establishment between UE A and UE B is handled correctly when reliable provisional responses and the precondition framework are not used. Ensure that the handling and mapping of the SDP parameters of the INVITE message is performed correctly. The call is released by the calling user. Ensure that in the active call state the voice/data transfer on the media channels is performed correctly (e.g. testing QoS parameters).							
SIP Parameter values:		INVITE: Require header without 100rel and precondition option tags sdp: PIXIT (Value should be taken from tables 1 and 2) 180 Ringing:						
	SIP UA A		SUT	SIP UA B				
	INVITE 180 Ringing 200 OK INVITE ACK	→ ← ← → Che	→ ← ← → eck media	INVITE 180 Ringing 200 OK INVITE ACK BYE				
	200 OK BYE	(-	200 OK BYE				

SSXX_04	NGN referen							
	RFC 3261 [3], RFC							
	TS 124 229 [10], claus							
TSS reference:	SIP-SIP/Basic_call/Succ	cessful.						
Selection criteria:								
Test purpose:	Ensure that call establis	hment between U	IE A and UE B is	s handled correctly when				
	reliable provisional resp							
		Ensure that the messages for the resource negotiation and reservation are delivered						
	correctly. The call is rele							
				on the media channels is				
	performed correctly (e.g	j. testing QoS par	ameters).					
SIP Parameter values:	INVITE:							
	Supported header with			gs				
	sdp: PIXIT (Value show		tables 1 and 2)					
	a=curr and a=des	lines present						
	100 Oi D							
	183 Session Progress:	01						
	Require header with 10							
	sdp: a=curr and a=des	lines present						
	UPDATE1							
	sdp: a=curr and a=des	lines present						
Comments:	SIP UA A	inico present	SUT	SIP UA B				
Comments.	INVITE	-	→	INVITE				
		Start resource r	negotiation/reser					
	183 Session Progress	←	+	183 Session Progress				
	PRACK	→	→	PRACK				
	200 OK PRACK	←	+	200 OK PRACK				
	UPDATE	→	→	UPDATE1				
	200 OK UPDATE1	←	+	200 OK UPDATE				
		End resource n	egotiation/reserv	vation value of the state of th				
	180 Ringing	←	+	180 Ringing				
	PRACK	→	→	PRACK				
	200 OK PRACK ← 200 OK PRACK							
	200 OK INVITE	←	←	200 OK INVITE				
	ACK	→	→	ACK				
		Che	eck media					
	BYE	→	→	BYE				
1	200 OK BYE	←	←	200 OK BYE				

Table 1: Values for the test purpose SS__XX_01 to SS__XX_04

		m= line		b= line	a= line				
VA	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>:<bandwidth-value></bandwidth-value></modifier>	rtpmap: <dynamic-pt> <encoding name="">/<clock rate="">[/encoding parameters></clock></encoding></dynamic-pt>				
				See note					
VA_01	Audio	RTP/AVP	0	N/A or up to 64 kbit/s	N/A				
VA_02	Audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMU/8000</dynamic-pt>				
VA_03	Audio	RTP/AVP	8	N/A or up to 64 kbit/s	N/A				
VA_04	Audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>				
VA_05	Image	Udptl	t38	N/A or up to 64 kbit/s	Based on T.38				
VA_06	Image	Tcptl	t38	N/A or up to 64 kbit/s	Based on T.38				
NOTE:									

Table 2: Values for test purposes SS___XX__01 and SS___XX__04

VARIABLE	PT	Encoding	media type	clock rate	channels
VA_01	0	PCMU	Α	8,000	1
VA_02	3	GSM	Α	8,000	1
VA_03	4	G723	Α	8,000	1
VA_04	5	DVI4	Α	8,000	1
VA_05	6	DVI4	Α	16,000	1
VA_06	7	LPC	Α	8,000	1
VA_07	8	PCMA	Α	8,000	1
VA_08	9	G722	Α	8,000	1
VA_09	10	L16	Α	44,100	2
VA_10	11	L16	Α	44,100	1
VA_13	12	QCELP	Α	8,000	1
VA_12	13	CN	Α	8,000	1
VA_13	14	MPA	Α	90,000	
VA_14	15	G728	Α	18,000	1
VA_15	16	DVI4	Α	11,025	1
VA_16	17	DVI4	Α	22,050	1
VA_17	18	G729	Α	8,000	1
VA_18	Dyn	G726-40	Α	8,000	1
VA_19	Dyn	G726-32	Α	8,000	1
VA_20	Dyn	G726-24	Α	8,000	1
VA_21	Dyn	G726-16	Α	8,000	1
VA_22	Dyn	G729D	Α	8,000	1
VA_23	Dyn	G729E	Α	8,000	1
VA_24	Dyn	GSM-EFR	Α	8,000	1
VA_25	25	CelB	V	90,000	
VA_26	26	JPEG	V	90,000	
VA_27	28	Nv	V	90,000	
VA_28	31	H261	V	90,000	
VA_29	32	MPV	V	90,000	
VA_30	33	MP2T	V	90,000	
VA_31	34	H263	V	90,000	
VA_32	Dyn	H263-1998	V	90,000	

6.1.1.2 Codec negotiation

SSCN01	NGN referer RFC 3261						
	TS 124 229 [10], clau	ses 5.1.3, 5.1.4					
TSS reference:	SIP-SIP/Basic_call/Cod	dec negotiation					
Selection criteria:							
Test purpose:	Ensure that the SUT, w	Ensure that the SUT, when the calling user decides during a session which was set-up					
	without using the precondition mechanism to change the characteristics of the media						
	session by sending a re-INVITE request,						
	transports the re-INVIT	E request and the	e related 200 OK ar	nd ACK messages correctly.			
	Ensure that the voice/d	lata transfer on th	e media channels v	vith the re-negotiated media			
	is performed correctly (e.g. testing QoS	oarameters).				
SIP Parameter values:	re-INVITE:						
	sdp: PIXIT (Value shou	ıld be taken from t	tables 1 and 2)				
Comments:	SIP UA A		SUT	SIP UA B			
	INVITE	→	→	INVITE			
	180 Ringing	←	←	180 Ringing			
	200 OK INVITE	←	←	200 OK INVITE			
	ACK	→	→	ACK			
	re-INVITE	→	→	re-INVITE			
	200 OK re-INVITE	←	←	200 OK re-INVITE			
	ACK	→	→	ACK			
	, , , , ,	=	eck media	,			
	BYE	←	teck media	BYE			
	200 OK BYE	À	→	200 OK BYE			

SSCN02	NGN refere RFC 3261 [3], RF TS 124 229 [10], clau	C 3312 [17]					
TSS reference:	SIP-SIP/Basic_call/Cod	•					
Selection criteria:	SIF-SIF/Basic_call/Cod	lec negotiation					
	Engure that the ILIT wh	on the calling use	r docidos durina s	accesion which was not up			
Test purpose:	with using the precondi session by sending a re transports the re-INVITI	Ensure that the IUT, when the calling user decides during a session which was set-up with using the precondition mechanism to change the characteristics of the media session by sending a re-INVITE request, transports the re-INVITE request and the related 200 OK and ACK messages correctly. Ensure that the voice/data transfer on the media channels with the re-negotiated media					
SIP Parameter values:	re-INVITE:	o.g. testing &oo pe	irameters).				
On Tarameter values.	sdp: PIXIT (Value should	ld be taken from ta	bles 1 and 2)				
Comments:	SIP UA A		SUT	SIP UA B			
	INVITE	→	→	INVITE			
		Start resource negotiation/reservation					
			+	183 Session Progress SDP			
	183 Session Progress SDP	←					
	PRACK	→	→	PRACK			
	200 OK PRACK	←	←	200 OK PRACK			
	UPDATE	→	→	UPDATE			
	200 OK UPDATE	←	←	200 OK UPDATE			
	End resource negotiation/reservation						
	180 Ringing	←	(180 Ringing			
	PRACK	→	→	PRACK			
	200 OK PRACK	+	←	200 OK PRACK			
	200 OK INVITE	←	←	200 OK INVITE			
	ACK	→	→	ACK			
	re-INVITE	→	→	re-INVITE			
	200 OK re-INVITE	←	←	200 OK re-INVITE			
	ACK	→	→	ACK			
			ck media				
	BYE	←	←	BYE			
	200 OK BYE	→	→	200 OK BYE			
NOTE: Re-Invite may	y need precondition, too	(but is out of scope	of this test case).				

SSCN03	NGN referenc RFC 3261 [[3]			
	TS 124 229 [10], clause	es 5.1.3, 5.1.4			
TSS reference:	SIP-SIP/Basic_call/Code	c negotiation			
Selection criteria:					
Test purpose:	Ensure that the SUT, when the called user decides during a session which was set-up without using the precondition mechanism to change the characteristics of the media session by sending a re-INVITE, transports the re-INVITE request and the related 200 OK and ACK messages correctly. Ensure that the voice/data transfer on the media channels with the re-negotiated media				
SIP Parameter values:	is performed correctly (e. re-INVITE:	.g. lesting Quo p	arameters).		
on raiameter values.	sdp: PIXIT (Value should	I be taken from to	ables 1 and 2)		
Comments:	SIP UA A		SUT	SIP UA B	
	INVITE	→	→	INVITE	
	180 Ringing	←	+	180 Ringing	
	200 OK INVITE	←	(200 OK INVITE	
	ACK	→	→	ACK	
	re-INVITE	←	←	re-INVITE	
	200 OK re-INVITE	→	→	200 OK re-INVITE	
	ACK	-	-	ACK	
		Cho	eck media		
	BYE	←	+	BYE	
	200 OK BYE	→	→	200 OK BYE	

SSCN04	NGN referen RFC 3261	[3]			
	TS 124 229 [10], clau				
TSS reference:	SIP-SIP/Basic_call/Cod	lec negotiation			
Selection criteria:					
Test purpose:	Ensure that the IUT, when the called user decides during a session which was set-up with using the precondition mechanism to change the characteristics of the media session by sending a re-INVITE, transports the re-INVITE request and the related 200 OK and ACK messages correctly. Ensure that the voice/data transfer on the media channels with the re-negotiated media is performed correctly (e.g. testing QoS parameters).				
SIP Parameter values:	re-INVITE:				
	sdp: PIXIT (Value shou	ld be taken from ta			
Comments:	SIP UA A		SUT	SIP UA B	
	INVITE	→	→	INVITE	
		Start resource r	egotiation/reservat		
			←	183 Session Progress SDP	
	183 Session Progress SDP	←			
	PRACK	→	→	PRACK	
	200 OK PRACK	←	+	200 OK PRACK	
	UPDATE	→	→	UPDATE	
	200 OK UPDATE	←	←	200 OK UPDATE	
I	End resource negotiation/reservation				
	180 Ringing	←	(180 Ringing	
	PRACK	→	→	PRACK	
	200 OK PRACK	←	+	200 OK PRACK	
	200 OK INVITE	←	+	200 OK INVITE	
	ACK	→	→	ACK	
	re-INVITE re-INVITE	←	←	re-INVITE re-INVITE	
	200 OK	→	→	200 OK	
	ACK	←	←	ACK	
			eck media		
	BYE	((BYE	
	200 OK BYE	→	→	200 OK BYE	
NOTE: Re-Invite may	y need precondition, too	(but is out of scop	e of this test case).		

SSCN05	NGN reference to: RFC 3261 [3]							
	TS 124 229 [10], clauses 5.1.	3, 5.1.4						
TSS reference:	SIP-SIP/Basic_call/Codec negotia	ation						
Selection criteria:								
Test purpose:	INVITE request in the 180 Ringing Ensure that the voice/data transfe	Ensure that the SUT can correctly transport an SDP answer related to the SDP offer in the INVITE request in the 180 Ringing message, which is sent reliably. Ensure that the voice/data transfer on the media channels with the re-negotiated media is performed correctly (e.g. testing QoS parameters).						
SIP Parameter values:	INVITE: sdp: PIXIT (Value should be taken from tables 1 and 2) Supported header with 100rel option tag 180 Ringing: sdp: PIXIT (Value should be taken from tables 1 and 2) Require header with 100rel option tag							
Comments:	SIP UA A	;	SUT	SIP UA B				
	INVITE	→	→	INVITE				
	180 Ringing with SDP answer	←	←	180 Ringing with SDP answer				
	PRACK	→	→	PRACK				
	200 OK PRACK	←	←	200 OK PRACK				
	200 OK INVITE	←	←	200 OK INVITE				
	ACK → ACK							
		Check	media					
	BYE	←	←	BYE				
	200 OK BYE	→	→	200 OK BYE				

SSCN06	NGN reference to: RFC 3261 [3]						
	TS 124 229 [10], clauses 5.1.3, 5.						
TSS reference:	SIP-SIP/Basic_call/Codec negotiation						
Selection criteria:							
Test purpose:	Ensure that the SUT can correctly the INVITE request in the 183 Sess Ensure that the voice/data transfer performed correctly (e.g. testing Qo	sion Pro	gress message media channels	e, which is sent reliably.			
SIP Parameter	INVITE:						
values:	sdp: PIXIT (Value should be taken from tables 1 and 2) Supported header with 100rel option tag						
	183 Session Progress:	£ 4	hlas 4 and 0\				
	sdp: PIXIT (Value should be taken Require header with 100rel option		oles i and 2)				
Comments:	SIP UA A	tug	SUT	SIP UA B			
	INVITE	→	→	INVITE			
	183 Session Progress with SDP answer	+	←	183 Session Progress with SDP answer			
	PRACK	→	→	PRACK			
	200 OK PRACK	←	←	200 OK PRACK			
	180 Ringing	←	←	180 Ringing			
	200 OK INVITE	←	←	200 OK INVITE			
	ACK → ACK						
Check media							
	BYE	←	←	BYE			
	200 OK BYE	→	→	200 OK BYE			

SSCN07	NGN reference to: RFC 3261 [3]					
	TS 124 229 [10], clauses 5.1.3, 5	5.1.4				
TSS reference:	SIP-SIP/Basic_call/Codec negotiati					
Selection criteria:						
Test purpose:	Ensure that the SUT can correctly transport an SDP answer related to the SDP offer in the INVITE request in the 200 OK message. Ensure that the voice/data transfer on the media channels with the re-negotiated media is performed correctly (e.g. testing QoS parameters).					
SIP Parameter	INVITE:	,				
values:	sdp: PIXIT (Value should be taken from tables 1 and 2) Supported header with 100rel option tag 200 OK:					
	sdp: PIXIT (Value should be taken t	rom tables 1 and 2	2)			
Comments:	SIP UA A	SUT		SIP UA B		
	INVITE	→	→	INVITE		
	180 Ringing	←	←	180 Ringing		
	200 OK INVITE with SDP answer	←	+	200 OK INVITE with SDP answer		
	ACK	→	→	ACK		
		Check media				
	BYE	←	←	BYE		
	200 OK BYE	→	→	200 OK BYE		

6.1.1.3 UPDATE method

SSUP01	NGN reference RFC 3261 [3], RFC TS 124 229 [10], claus	3311 [18]			
TSS reference:	SIP-SIP/Basic call/upda	•			
Selection criteria:	_				
Test purpose:	Ensure that the SUT, when the calling user decides during a session which was set-up without using the precondition mechanism to change the characteristics of the media session by sending an UPDATE request, transports the UPDATE request and the related 200 OK and ACK messages correctly. Ensure that the voice/data transfer on the media channels with the re-negotiated media is performed correctly (e.g. testing QoS parameters).				
SIP Parameter values:	UPDATE:	ng. tosting Qoo p	arameters).		
on random values.	sdp: PIXIT (Value should	d be taken from t	ables 1 and 2)		
Comments:	SIP UA A		SUT	SIP UA B	
	INVITE	→	→	INVITE	
	180 Ringing	←	←	180 Ringing	
	200 OK INVITE	←	+	200 OK INVITE	
	ACK	→	→	ACK	
	UPDATE	→	→	UPDATE	
	200 OK UPDATE	←	←	200 OK UPDATE	
		Ch	eck media		
	BYE	←	←	BYE	
	200 OK BYE	→	→	200 OK BYE	

SSUP02	NGN referer				
	RFC 3261 [3], RF				
	RFC 3311 TS 124 229 [10], clau				
TSS reference:	SIP-SIP/Basic_call/upda				
Selection criteria:	OII -OII /Dasic_caii/upuc				
Test purpose:	Ensure that the IUT, when the calling user decides during a session which was set-up				
rost purpose.	with using the precondition mechanism to change the characteristics of the media				
	session by sending an U		onango ano onara	istoriouse et ute media	
	transports the UPDATE		lated 200 OK mes	ssage correctly.	
				ith the re-negotiated media	
	is performed correctly (e			ű	
SIP Parameter values:	UPDATE:		,		
	sdp: PIXIT (Value shoul	d be taken from tab	oles 1 and 2)		
Comments:	SIP UA A		SUT	SIP UA B	
	INVITE	→	→	INVITE	
	Start resource negotiation/reservation				
			+	183 Session Progress SDP	
	183 Session Progress SDP	←			
	PRACK	→	→	PRACK	
	200 OK PRACK	←	←	200 OK PRACK	
	UPDATE	→	→	UPDATE	
	200 OK UPDATE	←	←	200 OK UPDATE	
			gotiation/reservat		
	180 Ringing	←	←	180 Ringing	
	PRACK	→	→	PRACK	
	200 OK PRACK	←	←	200 OK PRACK	
	200 OK INVITE	(+	200 OK INVITE	
	ACK	→	→	ACK	
	UPDATE	→	→	UPDATE	
	200 OK UPDATE	←	← ck media	200 OK UPDATE	
	BYE	€ Cned	ck media	BYE	
	200 OK BYE	→	→	200 OK BYE	
NOTE: UPDATE afte				ut of scope of this test case).	

SSUP03	NGN reference	e to:					
	RFC 3261 [3], RFC						
	TS 124 229 [10], claus	es 5.1.3, 5.1.4					
TSS reference:	SIP-SIP/Basic_call/update	Э					
Selection criteria:							
Test purpose:	Ensure that the SUT, whe	Ensure that the SUT, when the called user decides during a session which was set-up					
	without using the precondition mechanism to change the characteristics of the media						
	session by sending an UPDATE request,						
	transports the UPDATE re						
				ith the re-negotiated media			
	is performed correctly (e.g	g. testing QoS par	ameters).				
SIP Parameter values:	UPDATE:						
	sdp: PIXIT (Value should						
Comments:	SIP UA A	S	SUT	SIP UA B			
	INVITE	→	→	INVITE			
	180 Ringing	←	←	180 Ringing			
	200 OK INVITE	←	←	200 OK INVITE			
	ACK	→	→	ACK			
	UPDATE	←	←	UPDATE			
	200 OK UPDATE	→	→	200 OK UPDATE			
	Check med			c media			
	BYE	←	←	BYE			
	200 OK BYE	→	→	200 OK BYE			

SSUP04	NGN refere						
	RFC 3261 [3], RF RFC 331						
		TS 124 229 [10], clauses 5.1.3, 5.1.4					
TSS reference:	SIP-SIP/Basic_call/upda		<u> </u>				
Selection criteria:							
Test purpose:	Ensure that the IUT, when the called user decides during a session which was set-up						
	with using the precondi-			charac	cteristics of the media		
	session by sending an U						
	transports the UPDATE						
				els wi	th the re-negotiated media		
OID D	is performed correctly (e	e.g. testing Qo	S parameters).				
SIP Parameter values:	UPDATE:	-					
Commonto	sdp: PIXIT (Value shoul	a be taken froi	n tables 1 and 2) SUT		SIP UA B		
Comments:	INVITE	→	301	→	INVITE		
	INVITE	-	o posstistion/ros	-			
		Start resourc	e negotiation/res	ervan	183 Session Progress		
				•	SDP		
	183 Session Progress	←			001		
	SDP	-					
	PRACK	→		→	PRACK		
	200 OK PRACK	←		←	200 OK PRACK		
	UPDATE	→		→	UPDATE		
	200 OK UPDATE	←		←	200 OK UPDATE		
			e negotiation/res				
	180 Ringing	(←	180 Ringing		
	PRACK	→		→	PRACK		
	200 OK PRACK	(←	200 OK PRACK		
	200 OK INVITE	((200 OK INVITE		
	ACK	→		→	ACK		
	UPDATE	← →		←	UPDATE		
	200 OK UPDATE	-	Check media	7	200 OK UPDATE		
	BYE	←	Sheck illedia	←	BYE		
	200 OK BYE	→		→	200 OK BYE		
NOTE: UPDATE afte			condition, too (bu		it of scope of this test case).		

SSUP05	NGN reference	to:		
	RFC 3261 [3], RFC 3			
	RFC 3311 [18			
	TS 124 229 [10], clauses	5.1.3, 5.1.4		
TSS reference:	SIP-SIP/Basic_call/update			
Selection criteria:				
Test purpose:	Ensure that the IUT, after a			
	been answered in a reliable			
	calling user decides befor			
	characteristics of the medi-			
	transports the UPDATE re-			
				ith the re-negotiated media
	is performed correctly (e.g.	. testing QoS p	arameters).	
SIP Parameter values:	INVITE:			
	Allow including UPDATE	400 1		
	Supported header include	100rel		
	sdp offer1			
	400 Dinaina			
	180 Ringing: Allow including UPDATE			
	Require header include 10	ıOrol		
	sdp answer1	olei		
	sup answer i			
	UPDATE:			
	sdp offer2			
	5dp 511612			
	200 OK UPDATE:			
	sdp answer2			
Comments:	SIP UA A		SUT	SIP UA B
	INVITE (sdp offer1)	→	→	INVITE (sdp offer1)
	180 Ringing	←	←	180 Ringing
	(sdp answer1)			(sdp answer1)
	PRACK	→	→	PRACK
	200 OK PRACK	←	←	200 OK PRACK
	UPDATE (sdp offer2)	→	→	UPDATE (sdp offer2)
	200 OK UPDATE	←	←	200 OK UPDATE
	(sdp answer2)	_		(sdp answer2)
	200 OK INVITE	((200 OK INVITE
	ACK	→	→	ACK
	5.45	_	eck media	D) (E
	BYE	((BYE
	200 OK BYE	→	→	200 OK BYE

SSUP06	NGN reference	to:		
	RFC 3261 [3], RFC 33	312 [17],		
	RFC 3311 [18			
	TS 124 229 [10], clauses	5.1.3, 5.1.4		
TSS reference:	SIP-SIP/Basic_call/update			
Selection criteria:				
Test purpose:	Ensure that the IUT, after a			
	been answered in a reliably			
	called user decides before			
	characteristics of the media			
	transports the UPDATE red			
				ith the re-negotiated media
	is performed correctly (e.g.	. testing QoS p	arameters).	
SIP Parameter values:	INVITE:			
	Allow including UPDATE			
	Supported header include	100rel		
	sdp offer1			
	400 Dinging			
	180 Ringing: Allow including UPDATE			
	Require header include 10	ıOrol		
	sdp answer1	orei		
	sup answer i			
	UPDATE:			
	sdp offer2			
	5dp 5ii.5.2			
	200 OK UPDATE:			
	sdp answer2			
Comments:	SIP UA A		SUT	SIP UA B
	INVITE (sdp offer1)	→	→	INVITE (sdp offer1)
	180 Ringing	←	←	180 Ringing
	(sdp answer1)			(sdp answer1)
	PRACK	→	→	PRACK
	200 OK PRACK	←	←	200 OK PRACK
	UPDATE (sdp offer2)	←	←	UPDATE (sdp offer2)
	200 OK UPDATE	→	→	200 OK UPDATE
	(sdp answer2)	-	-	(sdp answer2)
	200 OK INVITE	÷	(200 OK INVITE
	ACK	→	→	ACK
	DVE	_	eck media	DVE
	BYE	(+	BYE
	200 OK BYE	→	→	200 OK BYE

SSUP07	NGN reference to:		
	RFC 3261 [3], RFC 3312 [17],		
	RFC 3311 [18]		
	TS 124 229 [10], clauses 5.1.3, 5.	1.4	
TSS reference:	SIP-SIP/Basic_call/update		
Selection criteria:			
Test purpose:	Ensure that the IUT, after an INVITE		
	calling user and an SDP offer from th		
	message has been answered by the		
	calling user decides before the end of		
	characteristics of the media session b		
	transports the UPDATE request and		
	Ensure that the voice/data transfer or		ith the re-negotiated media
	is performed correctly (e.g. testing Qo	oS parameters).	
SIP Parameter values:	INVITE:		
	Allow including UPDATE		
	Supported header include 100rel sdp not present1		
	Sup not present i		
	180 Ringing:		
	Allow including UPDATE		
	Require header include 100rel		
	sdp offer1		
	Sup		
	PRACK:		
	sdp answer1		
	•		
	UPDATE:		
	sdp offer2		
	200 OK UPDATE:		
	sdp answer2		
Comments:	SIP UA A	SUT	SIP UA B
	INVITE (no sdp)	→	INVITE (no sdp)
	180 Ringing (sdp offer1)	(180 Ringing (sdp offer1)
	PRACK(sdp answer1)	→	PRACK(sdp answer1)
	200 OK PRACK	+	200 OK PRACK
	UPDATE (sdp offer2) → 200 OK UPDATE ←	→	UPDATE (sdp offer2) 200 OK UPDATE
	(sdp answer2)	~	(sdp answer2)
	200 OK INVITE	←	200 OK INVITE
	ACK →	→	ACK
		Check media	7.01.
	BYE ←	←	BYE
	200 OK BYE →	→	200 OK BYE
L	ı	-	

SSUP08	NGN reference to:				
	RFC 3261 [3], RFC 3312 [17],				
	RFC 3311 [18]				
	TS 124 229 [10], clauses 5.1.3, 5.1.4				
TSS reference:	SIP-SIP/Basic_call/update				
Selection criteria:					
Test purpose:		est without SDP offer has been sent by the			
	calling user and an SDP offer from the cal				
	message has been answered by the callin				
	called user decides before the end of sess				
	characteristics of the media session by se				
	transports the UPDATE request and the re				
		media channels with the re-negotiated media			
OID D	is performed correctly (e.g. testing QoS pa	rameters).			
SIP Parameter values:	INVITE:				
	Allow including UPDATE				
	Supported header:100rel sdp not present1				
	Sup not present i				
	180 Ringing:				
	Allow including UPDATE				
	Require header include 100rel				
	sdp offer1				
	Suppose the suppos				
	PRACK:				
	sdp answer1				
	·				
	UPDATE:				
	sdp offer2				
	200 OK UPDATE:				
	sdp answer2				
Comments:		SUT SIP UA B			
	INVITE (no sdp) →	→ INVITE (no sdp)			
	180 Ringing (sdp offer1) ←	← 180 Ringing (sdp offer1)			
	PRACK(sdp answer1)	→ PRACK(sdp answer1)			
	200 OK PRACK ←	€ 200 OK PRACK			
	UPDATE (sdp offer2) ←	← UPDATE (sdp offer2)			
	200 OK UPDATE →	→ 200 OK UPDATE			
	(sdp answer2)	(sdp answer2)			
	200 OK INVITE ← ACK →	€ 200 OK INVITE→ ACK			
	-	ck media			
	BYE ←	CK Media ← BYE			
	200 OK BYE →	→ 200 OK BYE			
L	ZOO ON DIE	2 ZOU ON DIL			

6.1.2 Test purposes for SIP-SIP, Basic call, Unsuccessful

SSXX_U01	NGN reference to: RFC 3261 [3] TS 124 229 [10], clause 5.2.6.3		
TSS reference:	SIP-SIP/Basic_call/Unsuccessful.		
Selection criteria:			
Test purpose:	Ensure that the SUT delivers a 50 calling user.	3 Service Unavailable	message from the called to the
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT	KIT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE 503 Service Unavailable ACK	-	INVITE 503 Service Unavailable ACK

SSXX_U02	NGN reference to: RFC 3261 [3] TS 124 229 [10], clause 5.2.6.3		
TSS reference:	SIP-SIP/Basic_call/Unsuccessful		
Selection criteria:			
Test purpose:	Ensure that the SUT delivers a 486 user.	Busy Here mess	age from the called to the calling
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT	IT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE →		→ INVITE
	486 Busy Here ←		← 486 Busy Here
	ACK →		→ ACK

SSXX_U03	NGN reference to: RFC 3261 [3]		
TSS reference:	SIP-SIP/Basic call/Unsuccessful.		
Selection criteria:	J., 7240.0_04.1, 0.1.04.00000.4.1.		
Test purpose:	Ensure that when there is no answ INVITE messages), the SUT initia Temporarily Unavailable or 408 R	tes call clearing to the	calling user with a 480
SIP Parameter values:	Dial string parameters options=PI TYPE_SDP= PIXIT	XIT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE -	→	INVITE
	100 Trying	•	
		→	INVITE
		→	INVITE
		→	INVITE
		→	INVITE
		→	INVITE
		→	INVITE
		- →	INVITE
	480 Temporarily Unavailable or 408 Request Timeout €	-	
	ACK -	•	
NOTE: No 100 Trying	g response by UA-B.		

SSXX_U04	NGN reference to: RFC 3261 [3] TS 124 229 [10], clause 5.2.6	5.3	
TSS reference:	SIP-SIP/Basic_call/Unsuccess	ful.	
Selection criteria:			
Test purpose:	Ensure that the SUT delivers a called user to the calling user (navailable message from the alerting ce).
SIP Parameter values:	Dial string parameters options: TYPE_SDP= PIXIT	=PIXIT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE 180 Ringing 480 Temporary unavaible ACK	→ ← ← →	 → INVITE ← 180 Ringing ← 480 Temporary unavaible → ACK

SSXX_U05	NGN reference to: RFC 3261 [3]			
	TS 124 229 [10]			
TSS reference:	SIP-SIP/Basic_call/Unsucces	sful.		
Selection criteria:				
Test purpose:	Ensure that when the calling receiving an answer to the pr delivers the CANCEL message	eviously s	ent INVITE reques	ANCEL message before st from the called user, the SUT
SIP Parameter values:	Dial string parameters option: TYPE_SDP= PIXIT	s=PIXIT		
Comments:	SIP UA A		SUT	SIP UA B
	INVITE CANCEL 200 OK CANCEL	→ → ←	→ → → ←	INVITE INVITE (may be repeated) CANCEL 200 OK CANCEL
	487 Request Terminated ACK	← →	=	487 Request Terminated ACK
NOTE: No 100 Trying	g response by UA-B.		·	

SSXX_U06	NGN reference to: RFC 3261 [3] TS 124 229 [10]				
TSS reference:	SIP-SIP/Basic_call/Unsucces	ssful.			
Selection criteria:					
Test purpose:	Ensure that the IUT, when the calling user decides during a session to change the characteristics of the media session by sending a re-INVITE request and the Re-INVITE is rejected by the called user with a 488 Not Acceptable Here, delivers the 488 Not Acceptable Here to the calling user. Ensure that the voice/data transfer on the media channels with the original media is still performed correctly (e.g. testing QoS parameters).				
SIP Parameter values:	Dial string parameters option TYPE_SDP= PIXIT		,		
Comments:	SIP	Ç	SUP	SIP	
	INVITE 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ + + →	INVITE 180 Ringing 200 OK INVITE ACK	
	Re-INVITE 488 Not Acceptable Here	→ ← Comm	→ ← nunication	Re-INVITE offer 488 Not Acceptable Here	
	BYE 200 OK BYE	←	←	BYE 200 OK BYE	

SSXX_U07	NGN reference to: RFC 3261 [3]				
	TS 124 229 [10]				
TSS reference:	SIP-SIP/Basic_call/Unsuccessful.				
Selection criteria:					
Test purpose:	Ensure that the IUT, when the call				
	characteristics of the media session				
	is rejected by the calling user with				
	delivers the 488 Not Acceptable H				
	Ensure that the voice/data transfer		Is with the original media is still		
OID D	performed correctly (e.g. testing Q				
SIP Parameter values:	Dial string parameters options=PI				
	TYPE_SDP= PIXIT;				
	PIXIT for supported header: Case a) No 100 rel;				
	Case b) Supported: 100 rel;				
	Case c) Supported: 100 rel a	nd precondition			
Comments:	SIP	SUT	SIP		
	INVITE -	→	INVITE		
	180 Ringing ←	←	180 Ringing		
	200 OK INVITE ←	←	200 OK INVITE		
	ACK →	→	ACK		
	Re-INVITE ←	←	Re-INVITE		
	488 Not Acceptable Here → 488 Not Acceptable Here				
		Communication			
	BYE ←	←	BYE		
	200 OK BYE		200 OK BYE		

SSXX_U08	NGN reference to:	1			
	RFC 3261 [3]				
	TS 124 229 [10]				
TSS reference:	SIP-SIP/Basic_call/Unsucc	cessful.			
Selection criteria:					
Test purpose:	Ensure that when there is SUT initiates call clearing t CANCEL.		•		
SIP Parameter values:	Dial string parameters opti TYPE_SDP= PIXIT	ons=PIXIT			
Comments:	SIP	SUT		SIP	
	INVITE	→	→ INVITE		
	180 Ringing	(← 180 Rin	nging	
	Timeout timer C				
	408/480	←	→ CANCE	L	
	ACK	→	← 200 OK	CANCEL	
			← 487 Re	quest Terminated	
			→ ACK		

6.2 Test purposes for SIP-SIP, Supplementary services

6.2.1 Test purposes for OIP

SSXXSS_OIP01	OIP/OIR reference	to:	
	TS 124 407 [14], clauses 4.3.2,	4.5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP		
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "not restricted". The terminating user subscribes to OIP.		
Test purpose:	Ensure that, when no P-Preferred in the INVITE request, the terminating user receives a P -identity associated with the original	Asserted-Identity b	ld is provided by the originating UE
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT	XIT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE -		→ INVITE

SSXXSS_OIP02	OIP/OIR reference to:		
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.	.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP.		
Selection criteria:	The originating user subscribes to OIR "tempo	rary mode" default "not restricted".	
	The terminating user subscribes to OIP service	e.	
Test purpose:	Ensure that, when the Privacy header field is s	et to "none" and no P-Preferred-Identity	
	header field is provided by the originating UE,		
	the terminating user receives a P-Asserted-Identity based on the default public user		
	identity associated with the originating UE.		
SIP Parameter values:	Dial string parameters options=PIXIT		
	TYPE_SDP= PIXIT;		
	Privacy header field is set to "none"		
Comments:	SIP UA A SUT	SIP UA B	
	INVITE ->	→ INVITE	

SSXXSS_OIP03	OIP/OIR reference to:	
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP.	
Selection criteria:	The originating user subscribes to OIR "temporary means to The terminating user subscribes to OIP service.	node" default "restricted".
Test purpose:	Ensure that, when the Privacy header field is set to "header field is provided by the originating UE, the terminating user receives a P-Asserted-Identity identity associated with the originating UE.	•
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "none"	
Comments:	SIP UA A SUT	SIP UA B
	INVITE →	→ INVITE

SSXXSS_OIP04	OIP/OIR reference to:			
	TS 124 407 [14], clauses 4.3.2, 4.5.2.	1, 4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices/OIP.			
Selection criteria:		The originating user subscribes to OIR "temporary mode" default "not restricted". The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when no Privacy header field is inserted and a P-Preferred-Identity header field is provided by the originating UE, but the identity information in the P-Preferred-Identity does not match with the set of registered public identities of the originating UE, the terminating user receives a P-Asserted-Identity based on the default public user identity associated with the originating UE.			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;			
Comments:	SIP UA A	SUT	SIP UA B	
	INVITE →	•	→ INVITE	

SSXXSS_OIP05	OIP/OIR reference	to:	
	TS 124 407 [14], clauses 4.3.2, 4	1.5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OI	P.	
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "not restricted". The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when the Privacy header field is set to "none" and a P-Preferred-Identity header field is provided by the originating UE, but the identity information in the P-Preferred-Identity does not match with the set of registered public identities of the originating UE, the terminating user receives a P-Asserted-Identity based on the default public user identity associated with the originating UE.		
SIP Parameter values:	Dial string parameters options=PIXI TYPE_SDP= PIXIT; Privacy header field is set to "none"		
Comments:	SIP UA A	SUT	SIP UA B
Commonto.	INVITE -		→ INVITE

SSXXSS_OIP06	OIP/OIR reference to):	
	TS 124 407 [14], clauses 4.3.2, 4.	5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIF		
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "restricted". The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when the Privacy header field is set to "none" and a P-Preferred-Identity header field is provided by the originating UE, but the identity information in the P-Preferred-Identity does not match with the set of registered public identities of the originating UE, the terminating user receives a P-Asserted-Identity based on the default public user identity associated with the originating UE.		
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "none"	•	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE ->		→ INVITE

SSXXSS_OIP07	OIP/OIR reference to:		
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5	5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP.		
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "not restricted". The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when no Privacy header field is in field is provided by the originating UE (the ide must be present in the set of registered public be different from the default public user identified the terminating UE receives a P-Asserted-Ide the originating UE.	ntity information in the P-Preferred-Identity identities of the originating UE and it shall ty),	
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:	SIP UA A SU	T SIP UA B	
	INVITE →	→ INVITE	

SSXXSS_OIP08	OIP/OIR reference to:		
	TS 124 407 [14], clauses 4.3.2, 4.5	.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP.		
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "not restricted". The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when the Privacy header field is set to "none" and a P-Preferred-Identity header field is provided by the originating UE (the identity information in the P-Preferred-Identity must be present in the set of registered public identities of the originating UE and it shall be different from the default public user identity), the terminating UE receives a P-Asserted-Identity based on the information provided by the originating UE.		
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
	Privacy header field is set to "none"		
Comments:	SIP UA A	SUT	SIP UA B
	INVITE →		→ INVITE

SSXXSS_OIP09	OIP/OIR reference to:	
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIP.	
Selection criteria:	The originating user subscribes to OIR "temporary mo	ode" default "restricted".
	The terminating user subscribes to OIP service.	
Test purpose:	Ensure that, when the Privacy header field is set to "r header field is provided by the originating UE (the ide Identity must be present in the set of registered public it shall be different from the default public user identit the terminating UE receives a P-Asserted-Identity be the originating UE.	entity information in the P-Preferred- c identities of the originating UE and y),
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;	
	Privacy header field is set to "none"	
Comments:	SIP UA A SUT	SIP UA B
	INVITE →	→ INVITE

SSXXSS_OIP10	OIP/OIR refere	nce to:	
	TS 124 407 [14], clauses 4.	3.2, 4.5.2.1, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServic	es/OIP.	
Selection criteria:	The terminating user is not sul	oscribed to OIP service.	
Test purpose:	Ensure that, for any INVITE request, the terminating user receives no P-Asserted-		
	Identity header field and no P	rivacy header field.	
SIP Parameter values:	Dial string parameters options	=PIXIT	
	TYPE_SDP= PIXIT;		
Comments:	SIP UA A	SUT	SIP UA B
	INVITE	→	→ INVITE

6.2.2 Test purposes for OIR

SSXXSS_OIR01	OIP/OIR reference	to:	
	TS 124 407 [14], clauses 4.3.1.2	2, 4.3.2, 4.5.2.1,	
	4.5.2.4, 4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices/O	IR.	
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "restricted". Also, the restricted type is set to "restrict the asserted identity" (see table 1, TS 124 407 [14], clause 4.3.1.2). The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when no Privacy header field is inserted by the originating UE in the INVITE request, the terminating UE receives an INVITE message where the From header field is set to "anonymous", the Privacy header field is set to "id" and no P-Asserted-Identity header is received.		
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	IT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE →		→ INVITE

SSXXSS_OIR02	OIP/OIR reference to: TS 124 407 [14], clauses 4.3.1.2, 4.3.2, 4.5.2. 4.5.2.4, 4.5.2.12	1,	
TSS reference:	SIP-SIP/SupplementaryServices/OIR.		
Selection criteria:	The originating user subscribes to OIR "temporary mode" default "restricted". Also, the restricted type is set to " <i>restrict all private information appearing in headers</i> " (see table 1, TS 124 407 [14], clause 4.3.1.2). The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when no Privacy header field is inserequest, the terminating UE receives an INVITE message "anonymous", the Privacy header field is set to "I header is received.	where the From header field is set to	
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:	SIP UA A SUT	SIP UA B	
	INVITE → INVITE		

SSXXSS_OIR03	OIP/OIR reference to:		
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2.4,		
	4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices/OIR.		
Selection criteria:	The originating user subscribes to OIR "temporary n	node" default "restricted".	
	The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when the Privacy header field is set to '	'id" by the originating UE in the	
	INVITE request,		
	the terminating UE receives an INVITE message where the From header field is set to		
	"anonymous", the Privacy header field is set to "id"	or "header" and no P-Asserted-	
	Identity header is received.		
SIP Parameter values:	Dial string parameters options=PIXIT		
	TYPE_SDP= PIXIT;		
	Privacy header field is set to "id"		
Comments:	SIP UA A SUT	SIP UA B	
	INVITE →	→ INVITE	

SSXXSS_OIR04	OIP/OIR reference to:			
	TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2	2.4,		
	4.5.2.12			
TSS reference:	SIP-SIP/SupplementaryServices/OIR.			
Selection criteria:	The originating user subscribes to OIR "tempora	ary mode" default "restricted".		
	The terminating user subscribes to OIP service.			
Test purpose:	Ensure that, when the Privacy header field is se	et to "header" by the originating UE in the		
	INVITE request,			
	the terminating UE receives an INVITE message where the From header field is set to			
	"anonymous", the Privacy header field is set to "id" or "header" and no P-Asserted-			
	Identity header is received.			
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT;			
	Privacy header field is set to "header"			
Comments:	SIP UA A SUT	SIP UA B		
	INVITE →	→ INVITE		

SSXXSS_OIR05	OIP/OIR reference to: TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2.4, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIR.	
Selection criteria:	The originating user subscribes to OIR "temporary mo The terminating user subscribes to OIP service.	ode" default "not restricted".
Test purpose:	Ensure that, when the Privacy header field is set to "ic to "anonymous" by the originating UE in the INVITE rethe terminating UE receives an INVITE message when "anonymous", the Privacy header field is set to "id" an received.	equest, re the From header field is set to
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "id" From header field is set to: From: "Anonymous" <sip:anonymous@anonymous.in< td=""><td>valid>;tag= xxxxxxx</td></sip:anonymous@anonymous.in<>	valid>;tag= xxxxxxx
Comments:	SIP UA A SUT	SIP UA B
	INVITE ->	→ INVITE

SSXXSS_OIR06	OIP/OIR reference to: TS 124 407 [14], clauses 4.3.2, 4.5.2.1, 4.5.2.4, 4.5.2.12	
TSS reference:	SIP-SIP/SupplementaryServices/OIR.	
Selection criteria:	The originating user subscribes to OIR "temporary not the terminating user subscribes to OIP service.	node" default "not restricted".
Test purpose:	Ensure that, when the Privacy header field is set to is set to "anonymous" by the originating UE in the IN the terminating UE receives an INVITE message wh "anonymous", the Privacy header field is set to "header is received.	IVITE request, nere the From header field is set to
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "header" From header field is set to: From: "Anonymous" <sip:anonymous@anonymous."< td=""><td>invalid>;tag= xxxxxxx</td></sip:anonymous@anonymous."<>	invalid>;tag= xxxxxxx
Comments:	SIP UA A SUT	SIP UA B
	INVITE →	→ INVITE

SSXXSS_OIR07	OIP/OIR reference to: TS 124 407 [14], clauses 4.3.2, 4.5.2. 4.5.2.12	1, 4.5.2.4,	
TSS reference:	SIP-SIP/SupplementaryServices/OIR.		
Selection criteria:	The originating user subscribes to OIR p to "restrict the asserted identity" (see tab The terminating user subscribes to OIP s	le 1, TS 124 407 [14], clause 4.	
Test purpose:	Ensure that, when no Privacy header fiel request, the terminating UE receives an INVITE n "anonymous", the Privacy header field is received.	nessage where the From heade	r field is set to
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:	SIP UA A	SUT SIP	UA B
	INVITE →	→ INVITE	

SSXXSS_OIR08	OIP/OIR reference to:		
	TS 124 407 [14], clauses 4.3.2, 4.5	.2.1, 4.5.2.4,	
	4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices/OIR.		
Selection criteria:	The originating user subscribes to OIR permanent mode. Also, the restricted type is set to "restrict all private information appearing in headers" (see table 1, TS 124 407 [14], clause 4.3.1.2). The terminating user subscribes to OIP service.		
Test purpose:	Ensure that, when no Privacy header request, the terminating UE receives an INVITI "anonymous", the Privacy header field header is received.	E message wher	re the From header field is set to
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:	SIP UA A	SUT	SIP UA B
	INVITE →		→ INVITE

SSXXSS_OIR09	OIP/OIR reference TS 124 407 [14], clauses 4.3.		
	4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices	OIR.	
Selection criteria:	The originating user subscribes the terminating user subscribes		de.
Test purpose:	Ensure that, when the Privacy he INVITE request, the terminating UE receives an II "anonymous", the Privacy heade Identity header is received.	NVITE message wher	e the From header field is set to
SIP Parameter values:	Dial string parameters options=P TYPE_SDP= PIXIT; Privacy header field is set to "id"	IXIT	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE -	>	→ INVITE

SSXXSS_OIR10	OIP/OIR reference to	:		
	TS 124 407 [14], clauses 4.3.2, 4.	5.2.1, 4.5.2.4,		
	4.5.2.12			
TSS reference:	SIP-SIP/SupplementaryServices/OIR			
Selection criteria:	The originating user subscribes to O	R permanent mo	de.	
	The terminating user subscribes to C	IP service.		
Test purpose:	Ensure that, when the Privacy heade	r field is set to "h	eader" by the originating UE in the	
	INVITE request,			
	the terminating UE receives an INVITE message where the From header field is set to			
	"anonymous", the Privacy header field is set to "id" or "header" and no P-Asserted-			
	Identity header is received.			
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT;			
	Privacy header field is set to "header	,11		
Comments:	SIP UA A	SUT	SIP UA B	
	INVITE →		→ INVITE	

SSXXSS_OIR11	OIP/OIR re	ference to:	
	TS 124 407 [14], clause	s 4.3.2, 4.5.2.1, 4.5.2.4,	
	4.5.	2.12	
TSS reference:	SIP-SIP/SupplementarySe	rvices/OIP	
Selection criteria:		ribes to OIR "permanent mo	ode".
	The terminating user subs	cribes to OIP service.	
Test purpose:	Ensure that, when the Privacy header field is set to "none" by the originating UE in the INVITE request, the terminating UE receives an INVITE message where the From header field is set to		
	"anonymous", the Privacy header field is set to "id" or "header" and no P-Asserted-		
	Identity header is received		
SIP Parameter values:	Dial string parameters opti	ons=PIXIT	
	TYPE_SDP= PIXIT;		
	Privacy header field is set	to " none "	
Comments:	SIP UA A	SUT	SIP UA B
	INVITE	→	→ INVITE

6.2.3 Test purposes for TIP

SSXXSS_TIP01	TIP/TIR reference to:		
	TS 124 508 [24], clauses 4.3.2, 4.5.2.1	l, 4.5.2.4 ,	
	4.5.2.12		
TSS reference:	SIP-SIP/SupplementaryServices/TIP.		
Selection criteria:	The originating user subscribes to TIP se	rvice.	
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request: the originating UE receives, in the 2xx SIP response, a P-Asserted-Identity header field with a valid public user identity of the terminating UE.		
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:	SIP UA A	S	UT SIP UA B
	INVITE 180 Ringing 200 OK INVITE (P-Asserted-Identity) ACK	→ ← →	→ INVITE ← 180 Ringing ← 200 OK INVITE → ACK

SSXXSS_TIP02	TIP/TIR reference to:				
	TS 124 508 [24], clauses 4.3.2, 4.5.2.	1, 4.5.2.4,			
	4.5.2.12				
TSS reference:	SIP-SIP/SupplementaryServices/TIP.				
Selection criteria:	The originating user subscribes to TIP se	rvice.			
	The terminating user subscribes to TIR "t	emporary mod	de" default "not restricted".		
Test purpose:	Ensure that, when the option tag "from-c	hange" in the	Supported header field is		
	provided by the originating UE in the INV	ITE request:			
	the originating UE receives, in the 2xx SI	P response, a	P-Asserted-Identity header field		
	with a valid public user identity of the terr	ninating UE.			
SIP Parameter values:	Dial string parameters options=PIXIT				
	TYPE_SDP= PIXIT;				
Comments:	SIP UA A	SU	JT SIP UA B		
	INVITE	→	→ INVITE		
	180 Ringing	←	← 180 Ringing		
	200 OK INVITE (P-Asserted-Identity)	←	← 200 OK INVITE		
	ACK	→	→ ACK		

SSXXSS_TIP03	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2.1	. 4.5.2.4.		
	4.5.2.12	, ,		
TSS reference:	SIP-SIP/SupplementaryServices/TIP.			
Selection criteria:	The originating user subscribes to TIP ser The terminating user subscribes TIR "tem		default	t "not restricted".
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and the Privacy header field is set to "none" by the terminating UE in the 2xx SIP response: the originating UE receives, in the 2xx SIP response, a P-Asserted-Identity header field with a valid public user identity of the terminating UE.			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "none"	J		
Comments:	SIP UA A	SUT	•	SIP UA B
	INVITE 180 Ringing 200 OK INVITE (P-Asserted-Identity) ACK	→ ← ← →	→ ← ← →	INVITE 180 Ringing 200 OK INVITE ACK

SSXXSS_TIP04	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2.	1 1521			
	4.5.2.12	1, 4.3.2.4,			
TSS reference:	SIP-SIP/SupplementaryServices/TIP.				
Selection criteria:	The originating user subscribes to TIP service. The terminating user subscribes to TIR "temporary mode" default "restricted".				
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and the Privacy header field is set to "none" by the terminating UE in the 2xx SIP response: the originating UE receives, in the 2xx SIP response, a P-Asserted-Identity header field with a valid public user identity of the terminating UE.				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "none"				
Comments:	SIP UA A	SI	UT	SIP UA B	
	INVITE 180 Ringing 200 OK INVITE (P-Asserted-Identity) ACK	→ ← ← →	+ + +	INVITE 180 Ringing 200 OK INVITE ACK	

6.2.4 Test purposes for TIR

SSXXSS_TIR01	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2 4.5.2.12	.1, 4.5.2.4,		
TSS reference:	SIP-SIP/SupplementaryServices/TIR.			
Selection criteria:	The originating user subscribes to TIP se The terminating user subscribes to TIR "t		ode" defa	ault "not restricted".
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and the Privacy header field is set to "id" by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): the originating UE receives, in any non-100 SIP response (e.g. 180, 183, 200), a Privacy header field is set to "id" and no P-Asserted-Identity header field.			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "id"			
Comments:	SIP UA A	S	UT	SIP UA B
	INVITE 180 Ringing 200 OK INVITE ACK	→ ← ← →	+	NVITE 180 Ringing 200 OK INVITE ACK

SSXXSS_TIR02	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2 4.5.2.12	2.1, 4.5.2.4,		
TSS reference:	SIP-SIP/SupplementaryServices/TIR.			
Selection criteria:	The originating user subscribes to TIP service. The terminating user subscribes to TIR "temporary mode" default "restricted".			
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and no Privacy header field is inserted by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): the originating UE receives, in any non-100 SIP response (e.g. 180, 183, 200), a Privacy header field is set to "id" and no P-Asserted-Identity header field.			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;			
Comments:	SIP UA A INVITE 180 Ringing 200 OK INVITE ACK	SUT → ← ← →	SIP UA B → INVITE ← 180 Ringing ← 200 OK INVITE → ACK	

SSXXSS_TIR03	TIP/TIR reference to:			
	TS 124 508 [24], clauses 4.3.2, 4.5.2.	1, 4.5.2.4,		
	4.5.2.12			
TSS reference:	SIP-SIP/SupplementaryServices/TIR.			
Selection criteria:	The originating user subscribes to TIP services	vice.		
	The terminating user subscribes to TIR "temporary mode" default "restricted".			
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is			
	provided by the originating UE in the INVITE request and the Privacy header field is set			
	to "id" by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): the originating UE receives, in any non-100 SIP response (e.g. 180, 183, 200), a Privacy header field is set to "id" and no P-Asserted-Identity header field.			
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT;			
	Privacy header field is set to "id"			
Comments:	SIP UA A	SI	JT	SIP UA B
	INVITE	→	-	INVITE
	180 Ringing	←	←	180 Ringing
	200 OK INVITE	←	+	200 OK INVITE
	ACK	→	→	ACK

SSXXSS_TIR04	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5 4.5.2.12				
TSS reference:	SIP-SIP/SupplementaryServices/TIR.				
Selection criteria:	The originating user subscribes to TIP the terminating user subscribes to TIR		e".		
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and no Privacy header field is inserted by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): the originating UE receives, in any non-100 SIP response (e.g. 180, 183, 200), a Privacy header field is set to "id" and no P-Asserted-Identity header field.				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;	•			
Comments:	SIP UA A	SUT	SIP UA B		
	INVITE 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ INVITE ← 180 Ringing ← 200 OK INVITE → ACK		

SSXXSS_TIR05	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2.	1, 4.5.2.4,		
	4.5.2.12	,		
TSS reference:	SIP-SIP/SupplementaryServices/TIR.			
Selection criteria:	The originating user subscribes to TIP ser The terminating user subscribes to TIR "p		ode".	
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and the Privacy header field is set to "id" by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): the originating UE receives, in any non-100 SIP response (e.g. 180, 183, 200), a Privacy header field is set to "id" and no P-Asserted-Identity header field.			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "id"			
Comments:	SIP UA A	SI	UT	SIP UA B
	INVITE 180 Ringing 200 OK INVITE ACK	→ ← ←	→ INVITE ← 180 Rin ← 200 OK → ACK	0 0

SSXXSS_TIR06	TIP/TIR reference to:				
	TS 124 508 [24], clauses 4.3.2, 4.5.2.	l, 4.5.2.4 ,			
	4.5.2.12				
TSS reference:	SIP-SIP/SupplementaryServices/TIP				
Selection criteria:	The originating user subscribes to TIP service. Additionally, the originating user has the "override category". The terminating user subscribes TIR "permanent mode".				
Test purpose:	Ensure that, when the option tag "from-change" in the Supported header field is provided by the originating UE in the INVITE request and no Privacy header field is inserted by the terminating UE in any non-100 SIP response (e.g. 180, 183, 200): The originating UE does not receive a Privacy set to "id" in any non-100 SIP response (e.g. 180, 183, 200) and receives, in the 2xx SIP response, a P-Asserted-Identity header field with a valid public user identity of the terminating UE.				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;				
Comments:	SIP UA A	SUT	SIP UA B		
	INVITE	→	→ INVITE		
	180 Ringing	←	← 180 Ringing		
	200 OK INVITE (P-Asserted-Identity)	←	← 200 OK INVITE		
	ACK	→	→ ACK		

SSXXSS_TIR07	TIP/TIR reference to: TS 124 508 [24], clauses 4.3.2, 4.5.2. 4.5.2.12	1, 4.5.2.4,		
TSS reference:	SIP-SIP/SupplementaryServices/TIP			
Selection criteria:	The originating user subscribes to TIP se The user subscribes to TIR "permanent n			
Test purpose:	Ensure that, when the option tag "from-c provided by the originating UE in the INV to "none" by the terminating UE in any not the originating UE receives, in any non-10 header field is set to "id" and no P-Assert	TE request on-100 SIP r 00 SIP respo	and the Fesponse onse (e.g.	Privacy header field is set (e.g. 180, 183, 200): 180, 183, 200), a Privacy
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; Privacy header field is set to "none"			
Comments:	SIP UA A INVITE 180 Ringing 200 OK INVITE ACK	→ ← ←	+	SIP UA B INVITE 180 Ringing 200 OK INVITE ACK

6.2.5 Test purposes for Hold

6.2.5.1 Communication Hold with support for UPDATE

SS_XXSSCH01	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/WithUPDATE			
Selection criteria:	Session hold. UPDATE method is u	ısed		
Test purpose:	Ensure that, when the originating UE (user A) sends an UPDATE request containing a SDP with the attribute "a=" sendonly to put the session on hold: • The terminating UE (user B) receives an UPDATE containing a SDP with the attribute "a=" sendonly. • The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. Then the originating UE (user A) hang up the session.			
Precondition: SIP Parameter values:	 A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The media stream was previously set to "sendrecv". 			
on rarameter values.	Dial string parameters options=PIXITYPE_SDP= PIXIT;	ı		
Comments:				
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv ACK	→ ← → →	→ ← →	INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	
UPDATE (sendonly) 200 OK UPDATE (recvonly) → UPDATE (sendonly) ← 200 OK UPDATE (recvonly)				
BYE 200 OK BYE	}	→	BYE 200 OK BYE	

SS_XXSSCH02	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/WithUPDATE			
Selection criteria:	Session hold. UPDATE method is a	used.		
Test purpose:	Ensure that, when the originating UE (user A) sends an UPDATE request containing a SDP with the attribute "a=" inactive to change the media stream status to inactive: • The terminating UE (user B) receives an UPDATE containing a SDP with the attribute "a=" inactive. • The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" inactive. • The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" inactive.			
Precondition:	Then the originating UE (user A) ha			
Precondition.	 A session was established (terminating UE) accordin 		en user A (originating UE) and user B	
	, , ,	•	n hold from user B (terminating UE).	
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;		THOIL HOLL USEL D (TEITHINAUNG OE).	
Comments:	,			
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv)	→	→	INVITE (sendrecv)	
180 Ringing	←	←	180 Ringing	
200 OK INVITE (sendrecv)	←	←	200 OK INVITE (sendrecv)	
ACK	→	→	ACK	
	condition: The session was previous	sly put o	n hold from user B	
UPDATE (sendonly)	←	←	UPDATE(sendonly)	
200 OK UPDATE (recvonly)	→	→	200 OK UPDATE (recvonly)	
UPDATE (inactive) 200 OK UPDATE (inactive)	→	→	UPDATE (inactive) 200 OK UPDATE (inactive)	
BYE	→	→	BYE	
200 OK BYE	←	+	200 OK BYE	

TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9 TSS reference: ServedUser/WithoutAnnounc/WithUPDATE Selection criteria: Session hold. UPDATE method is used. Test purpose: Ensure that, when the originating UE (user A) sends an UPDATE recommendation of the session: • The terminating UE (user B) receives an UPDATE containing UE (user B) receives an UPDATE conta				
TSS reference: ServedUser/WithoutAnnounc/WithUPDATE Selection criteria: Session hold. UPDATE method is used. Test purpose: Ensure that, when the originating UE (user A) sends an UPDATE recommendation of the session: • The terminating UE (user B) receives an UPDATE containing				
Selection criteria: Session hold. UPDATE method is used. Test purpose: Ensure that, when the originating UE (user A) sends an UPDATE red SDP with the attribute "a=" sendrecv to resume the session: • The terminating UE (user B) receives an UPDATE containing USER USER USER USER USER USER USER USER				
Test purpose: Ensure that, when the originating UE (user A) sends an UPDATE red SDP with the attribute "a=" sendrecv to resume the session: • The terminating UE (user B) receives an UPDATE containing UE (user B) receives an UPDATE receives and UPDATE receives and UPDATE receives an UPDATE receives an UPDATE receives and U				
SDP with the attribute "a=" sendrecv to resume the session: • The terminating UE (user B) receives an UPDATE containing.				
The terminating UE (user B) receives an UPDATE containing	ng a SDP with the			
	ng a SDP with the			
attribute "a=" sendrecv.				
 The terminating UE (user B) sends a 200 OK SIP response with the attribute "a=" sendrecv. 	containing a SDP			
The originating UE (user A) receives a 200 OK SIP response.	se containing a SDP			
with the attribute "a=" sendrecv.				
Then the originating LIE (upor A) being up the coorien				
Then the originating UE (user A) hang up the session.				
NOTE: The sendrecy SDP attribute can be omitted, since sendred	cv attribute is the			
default.				
Precondition: • A session was established between user A (originating UE)	and user B			
(terminating UE) according to the "basic Call" procedures.				
The session was previously put on hold from user A (original)	ating UE).			
SIP Parameter values: Dial string parameters options=PIXIT				
TYPE_SDP= PIXIT;				
Comments:	A D			
SIP UA A SUT SIP UA INVITE (sendrecv) → INVITE (sendrecv)	4 В			
180 Ringing 180 Ringing				
200 OK INVITE (sendrecv) Control of thinging and the sendre control of the sendre control of thinging and the sendre control of the sendr	cv)			
ACK → ACK				
UPDATE(sendonly) → UPDATE(sendonly)				
200 OK UPDATE (recvonly) ← 200 OK UPDATE (recvo	only) ← 200 OK UPDATE (recvonly)			
UPDATE (sendrecv) → UPDATE (sendrecv)				
200 OK UPDATE (sendrecv) ← ← 200 OK UPDATE (send	irecv)			
BYE → BYE				
200 OK BYE ← 200 OK BYE				

SS_XXSSCH04	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/WithUPDATE			
Selection criteria:	Session hold. UPDATE method is used.			
Test purpose:	 Ensure that, when the originating UE (user A) sends an UPDATE request containing a SDP with the attribute "a=" recvonly to resume the media stream status to recvonly: The terminating UE (user B) receives an UPDATE containing a SDP with the attribute "a=" recvonly. The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" sendonly. The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" sendonly. 			
	Then the originating UE (user A) ha	ına un tl	he session	
Precondition:	A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The media stream was previously set to "inactive" from user A (originating UE).			
SIP Parameter values:	Dial string parameters options=PIXITYPE_SDP= PIXIT;		, 0 ,	
Comments:				
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv)	→	→	INVITE (sendrecv)	
180 Ringing	←	←	180 Ringing	
200 OK INVITE (sendrecv) ACK	← →	←	200 OK INVITE (sendrecv) ACK	
UPDATE(sendonly) 200 OK UPDATE (recvonly)	← →	← →	UPDATE(sendonly) 200 OK UPDATE (recvonly)	
UPDATE (inactive)	→	→	UPDATE (inactive)	
200 OK UPDATE (inactive)				
UPDATE (recvonly) 200 OK UPDATE (sendonly	→ ←	→	UPDATE (recvonly) 200 OK UPDATE (sendonly)	
BYE 200 OK BYE	→ ←	→	BYE 200 OK BYE	

SS_XXSSCH05	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/Withl	JPDATE		
Selection criteria:	Session hold. UPDATE method is a	ısed.		
Test purpose:	Ensure that, when the terminating UE (user B) sends an UPDATE request containing a SDP with the attribute "a=" sendonly to put the session on hold: • The originating UE (user A) receives an UPDATE containing a SDP with the attribute "a=" sendonly. • The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly.			
	Then the originating UE (user A) ha			
Precondition:	 A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The media stream was previously set to "sendrecv". 			
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	IT		
Comments:				
SIP UA A INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	SUT → ← ← →	→ ← ← →	SIP UA B INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	
UPDATE (sendonly) 200 OK UPDATE (recvonly	← →	← →	UPDATE (sendonly) 200 OK UPDATE (recvonly) BYF	
200 OK BYE	*	,	200 OK BYE	

SS_XXSSCH06	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/WithUPDATE			
Selection criteria:	Session hold. UPDATE method is a	used.		
Test purpose:	 Ensure that, when the terminating UE (user B) sends an UPDATE request containing a SDP with the attribute "a=" inactive to change the media stream status to inactive: The originating UE (user A) receives an UPDATE containing a SDP with the attribute "a=" inactive. The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" inactive. The terminating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" inactive. 			
Precondition:	Then the originating UE (user A) hang up the session. • A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. • The session was previously put on hold from user A (originating UE).			
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Comments: SIP UA A	SUT		SIP UA B	
INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	→ ← ← →	→	INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	
UPDATE (sendonly) 200 OK UPDATE (recvonly)	→ ←	→	UPDATE (sendonly) 200 OK UPDATE (recvonly)	
UPDATE (inactive) 200 OK UPDATE (inactive)	← →	← →	UPDATE (inactive) 200 OK UPDATE (inactive)	
BYE 200 OK BYE	→	→	BYE 200 OK BYE	

SS_XXSSCH07	HOLD reference to TS 124 410 [15], clauses 4.5.2.4, 4.5.2.9			
TCC references		IDDATI	_	
TSS reference: Selection criteria:	ServedUser/WithoutAnnounc/WithUPDATE			
	Session hold. UPDATE method is used.			
Test purpose:	Ensure that, when the terminating UE (user B) sends an UPDATE request containing a SDP with the attribute "a=" sendrecv to resume the session:			
	 The originating U attribute "a=" sen 		ves an UPDATE containing a SDP with the	
			a a 200 OK SID reasones containing a SDD	
	I he originating U with the attribute		s a 200 OK SIP response containing a SDP	
	The terminating to SDP with the attr		ives a 200 OK SIP response containing a ecv.	
	Then the originating UE (u	ser A) hang up t	he session.	
	NOTE: The sendrecv S default.	DP attribute can	be omitted, since sendrecv attribute is the	
Precondition:	 A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The session was previously put on hold from user B (terminating UE). 			
SIP Parameter values:	Dial string parameters opti		it floid from user B (terminating OE).	
SIF Farameter values.	TYPE_SDP= PIXIT;	10115=F1X11		
Comments: SIP UA A		SUT	SIP UA B	
INVITE (sendrecv))	→	INVITE (sendrecv)	
180 Ringing	÷	÷	180 Ringing	
200 OK INVITE (sendrecv)	-	+	200 OK INVITE (sendrecv)	
ACK	→	→	ACK	
UPDATE (sendonly)	←	←	UPDATE(sendonly)	
200 OK UPDATE (recvonly	★ UPDATE (recvonly) → 200 OK UPDATE (recvonly)			
UPDATE (sendrecv) ← UPDATE (sendrecv)				
200 OK UPDATE (sendrec	v) →	→	200 OK UPDATE (sendrecv)	
BYE	→	→	BYE	
200 OK BYE	+	+	200 OK BYE	

SS XXSSCH08	HOLD reference to:			
	TS 124 410 [15], clauses 4.5.2.1,			
	4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/WithUPDATE			
Selection criteria:	Session hold. UPDATE method is used.			
Test purpose:	Ensure that, when the terminating UE (user B) sends an UPDATE request containing a SDP with the attribute "a=" recvonly to resume the media stream status to recvonly:			
			ime the media stream status to recvonly: /es an UPDATE containing a SDP with the	
	attribute "a=" recvonly.	A) receiv	ves an OPDATE containing a SDP with the	
	1	A) sends	s a 200 OK SIP response containing a SDP	
	with the attribute "a=" sen		a 200 Cit Cii Toopeniee containing a C2.	
			ves a 200 OK SIP response containing a	
	SDP with the attribute "a=	" sendo	nly.	
	T			
Precondition:	Then the originating UE (user A) ha			
Precondition.	 A session was established (terminating UE) accordin 		en user A (originating UE) and user B	
	I	-	set to "inactive" from user B (terminating	
	UE).	eviousiy	Set to inactive nom user b (terminating	
SIP Parameter values:	Dial string parameters options=PIX	IT		
	TYPE_SDP= PIXIT;			
Comments:				
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv)	→	→	INVITE (sendrecv)	
180 Ringing	((180 Ringing	
200 OK INVITE (sendrecv) ACK	← →	←	200 OK INVITE (sendrecv) ACK	
ACK	7	7	ACK	
UPDATE (sendonly)	→	→	UPDATE (sendonly)	
200 OK UPDATE (recvonly)	←	-	200 OK UPDATE (recvonly)	
, , , , , ,			` ,	
UPDATE (inactive)	←	(UPDATE (inactive)	
200 OK UPDATE (inactive)	→	→	200 OK UPDATE (inactive)	
UPDATE(recvonly)	←	+	UPDATE(recvonly)	
200 OK UPDATE (sendonly	-	÷	200 OK UPDATE (sendonly)	
	,,	-	(someony)	
BYE	→	→	BYE	
200 OK BYE	+	<u>←</u>	200 OK BYE	

6.2.5.2 Communication Hold without support for UPDATE

SS_XXSSCH09	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithoutAnnounc/Without	utUPD/	ATE	
Selection criteria:	Session hold. INVITE method is us	ed.		
Test purpose:	 Ensure that, when the originating UE (user A) sends an INVITE request containing a SDP with the attribute "a=" sendonly to put the session on hold: The terminating UE (user B) receives an INVITE containing a SDP with the attribute "a=" sendonly. The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. 			
Precondition:	Then the originating UE (user A) ha		en user A (originating UE) and user B	
1 recondition.	(terminating UE) according			
	The media stream was pro	•	· · · · · · · · · · · · · · · · · · ·	
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;		301.0	
Comments:	· · · · · · · · · · · · · · · · · · ·			
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv)	→	→	INVITE (sendrecv)	
180 Ringing	←	←	180 Ringing	
200 OK INVITE (sendrecv)	←	←	200 OK INVITE (sendrecv)	
ACK	→ ACK			
INVITE (sendonly)	→ INVITE (sendonly)			
200 OK INVITE (recvonly)	← 200 OK INVITE(recvonly)			
ACK	→ ACK			
BYE	→	→	BYE	
200 OK BYE	+	+	200 OK BYE	

SS_XXSSCH 10	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithoutAnnounc/Without	outUPD/	ATE
Selection criteria:	Session hold. INVITE method is us	ed.	
Test purpose:	 Ensure that, when the originating UE (user A) sends an INVITE request containing a SDP with the attribute "a=" inactive to change the media stream status to inactive: The terminating UE (user B) receives an INVITE containing a SDP with the attribute "a=" inactive. The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" inactive. The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" inactive. 		
Precondition:	Then the originating UE (user A) ha		
Precondition:	(terminating UE) according	g to the	en user A (originating UE) and user B "basic Call" procedures. n hold from user B (terminating UE).
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	IT	
Comments: SIP UA A INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	SUT → ← ←	+ + + +	SIP UA B INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK
INVITE (sendonly) 200 OK INVITE (recvonly) ACK	← → ←	← →	INVITE (sendonly) 200 OK INVITE (recvonly) ACK
INVITE (inactive) 200 OK INVITE (inactive) ACK	→ ← →	→ ← →	INVITE (inactive) 200 OK INVITE (inactive) ACK
BYE 200 OK BYE	→ ←	→	BYE 200 OK BYE

SS_XXSSCH 11	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithoutAnnounc/WithoutUPDATE		
Selection criteria:	Session hold. INVITE method is us	ed.	
Test purpose:	Ensure that, when the originating UE (user A) sends an INVITE request containing a SDP with the attribute "a=" sendrecv to resume the session: The terminating UE (user B) receives an INVITE containing a SDP with the attribute "a=" sendrecv. The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" sendrecv. The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" sendrecv.		
	default.	ute can	be omitted, since sendrecv attribute is the
Precondition:	(terminating UE) according	g to the	en user A (originating UE) and user B "basic Call" procedures. n hold from user A (originating UE).
SIP Parameter values:	Dial string parameters options=PIXITYPE_SDP= PIXIT;	İT	
Comments:			
SIP UA A	SUT	_	SIP
INVITE (sendrecv)	→	→	INVITE (sendrecv)
180 Ringing	←	(180 Ringing
200 OK INVITE (sendrecv) ACK	← →	←	200 OK INVITE (sendrecv) ACK
INVITE (sendonly) 200 OK INVITE (recvonly) ACK	→ ← →	→ ← →	INVITE (sendonly) 200 OK INVITE(recvonly) ACK
INVITE (sendrecv) 200 OK INVITE (sendrecv) ACK	→ ← →	→ ← →	INVITE (sendrecv) 200 OK INVITE (sendrecv) ACK
BYE 200 OK BYE	→ ←	→	BYE 200 OK BYE

SS_XXSSCH 12	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithoutAnnounc/WithoutUPDATE		
Selection criteria:	Session hold. INVITE method is us	ed.	
Test purpose:	Ensure that, when the originating UE (user A) sends an INVITE request containing a SDP with the attribute "a=" recvonly to resume the media stream status to recvonly: • The terminating UE (user B) receives an INVITE containing a SDP with the attribute "a=" recvonly. • The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" sendonly. • The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" sendonly.		
Precondition:	Then the originating UE (user A) ha		en user A (originating UE) and user B
Precondition.	(terminating UE) according	g to the	
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;		(, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
Comments:			
SIP UA A	SUT	_	SIP UA B
INVITE (sendrecv)	→	→	INVITE (sendrecv)
180 Ringing	←	-	180 Ringing
200 OK INVITE (sendrecv)	←	Ť	200 OK INVITE (sendrecv)
ACK	→	→	ACK
INVITE(sendonly) 200 OK INVITE (recvonly) ACK	← → ←	← →	INVITE(sendonly) 200 OK INVITE(recvonly) ACK
INVITE (inactive) 200 OK INVITE (inactive) ACK	→ ← →	→ ← →	INVITE (inactive) 200 OK INVITE (inactive) ACK
INVITE (recvonly) 200 OK INVITE (sendonly) ACK	→ ← →	→ ← →	INVITE (recvonly) 200 OK INVITE (sendonly) ACK
BYE 200 OK BYE	→ ←	→	BYE 200 OK BYE

SS_XXSSCH 13	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithoutAnnounc/With	outUPDATE	
Selection criteria:	Session hold. INVITE method is us	sed.	
Test purpose:	Ensure that, when the terminating UE (user B) sends an INVITE request containing a SDP with the attribute "a=" sendonly to put the session on hold: • The originating UE (user A) receives an INVITE containing a SDP with the attribute "a=" sendonly. • The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly.		
Precondition:	Then the originating UE (user A) h A session was establishe	ang up the session. d between user A (originating UE) and user B	
recondition.	(terminating UE) according	ig to the "basic Call" procedures.	
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT;		
Comments:			
SIP UA A INVITE (sendrecv) 180 Ringing 200 OK INVITE (sendrecv) ACK	SUT → ← ← →	SIP UA B → INVITE (sendrecv) ← 180 Ringing ← 200 OK INVITE (sendrecv) → ACK	
INVITE (sendonly) 200 OK INVITE (recvonly) ACK	← → ←	 ← INVITE (sendonly) → 200 OK INVITE (recvonly) ← ACK 	
BYE 200 OK BYE	→	→ BYE← 200 OK BYE	

SS_XXSSCH 14	HOLD refere		
	TS 124 410 [15], cla 4.5.2.4, 4.9		
TSS reference:		tAnnounc/WithoutUPDATE	
Selection criteria:	Session hold. INVIT	E method is used.	
Test purpose:	Ensure that, when the	he terminating UE (user B) sends an INVITE request	
	containing a SDP wi status to inactive:	ith the attribute "a=" inactive to change the media stream	
		ating UE (user A) receives an INVITE containing a SDP were "a=" inactive.	/ith
		ating UE (user A) sends a 200 OK SIP response containing the attribute "a=" inactive.	ng
		ating UE (user A) receives a 200 OK SIP response a SDP with the attribute "a=" inactive.	
	Then the originating	UE (user A) hang up the session.	
Precondition:	A session v	was established between user A (originating UE) and use g UE) according to the "basic Call" procedures.	r B
	The session	on was previously put on hold from user A (originating UE)).
SIP Parameter values:	Dial string paramete	ers options=PIXIT	,
	TYPE_SDP= PIXIT;		
Comments: SIP UA A	SU	IT SIP UA B	
INVITE (sendrecv)	→	→ INVITE (sendrecv)	
180 Ringing	É	← 180 Ringing	
200 OK INVITE (sendrecv)	÷	€ 200 OK INVITE (sendrecv)	
ACK	→	→ ACK	
INVITE (sendonly)	→	→ INVITE (sendonly)	
200 OK INVITE (recvonly)	←	← 200 OK INVITE (recvonly)	
ACK	→	→ ACK	
INVITE(inactive)	←	← INVITE (inactive)	
200 OK INVITE (inactive)	→	→ 200 OK INVITE (inactive)	
ACK	←	← ACK	
BYE	→	→ BYE	
200 OK BYE	(← 200 OK BYE	

SS_XXSSCH 15	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithoutAnnounc/With	outUPD	ATE
Selection criteria:	Session hold. INVITE method is us	sed.	
Test purpose:	Ensure that, when the terminating UE (user B) sends an INVITE request containing a SDP with the attribute "a=" sendrecv to resume the session: The originating UE (user A) receives an INVITE containing a SDP with the attribute "a=" sendrecv. The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" sendrecv. The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" sendrecv.		
	Then the originating UE (user A) h NOTE: The sendrecv SDP attril default.		he session. be omitted, since sendrecv attribute is the
Precondition:	A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The session was previously put on hold from user B (terminating UE).		
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT;		(
Comments:	,		
SIP UA A	SUT		SIP UA B
INVITE (sendrecv)	→	→	INVITE (sendrecv)
180 Ringing	←	←	180 Ringing
200 OK INVITE (sendrecv) ACK	← →	←	200 OK INVITE (sendrecv) ACK
INVITE (sendonly) 200 OK INVITE (recvonly) ACK	← → ←	← →	INVITE(sendonly) 200 OK INVITE(recvonly) ACK
INVITE (sendrecv) 200 OK INVITE (sendrecv) ACK	← → ←	← →	INVITE (sendrecv) 200 OK INVITE (sendrecv) ACK
BYE 200 OK BYE	→	→	BYE 200 OK BYE

SS_XXSSCH 16	HOLD reference to:	
	TS 124 410 [15], clauses 4.5.2.1,	
	4.5.2.4, 4.5.2.9	
TSS reference:	ServedUser/WithoutAnnounc/With	
Selection criteria:	Session hold. INVITE method is us	
Test purpose:		UE (user B) sends an INVITE request containing a
		ly to resume the media stream status to recvonly:
	attribute "a=" recvonly.	A) receives an INVITE containing a SDP with the
	with the attribute "a=" ser	
	The terminating UE (user SDP with the attribute "as	B) receives a 200 OK SIP response containing a =" sendonly.
	Then the originating UE (user A) h	
Precondition:		d between user A (originating UE) and user B
	 The media stream was pour UE). 	reviously set to "inactive" from user B (terminating
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT;	KIT
Comments:		
SIP UA A	SUT	SIP UA B
INVITE (sendrecv)	→	→ INVITE (sendrecv)
180 Ringing 200 OK INVITE (sendrecv)	←	← 180 Ringing← 200 OK INVITE (sendrecv)
ACK (Sendrecv)	`	→ ACK
INVITE(sendonly)	>	→ INVITE(sendonly)
200 OK INVITE (recvonly) ACK	← →	← 200 OK INVITE(recvonly)→ ACK
INVITE (inactive)	←	← INVITE (inactive)
200 OK INVITE (inactive) ACK	→	→ 200 OK INVITE(inactive)← ACK
INVITE (recvonly)	←	← INVITE (recvonly)
200 OK INVITE (sendonly) ACK	→ ←	→ 200 OK INVITE (sendonly)← ACK
BYE 200 OK BYE	→	→ BYE ← 200 OK BYE

6.2.5.3 Communication with announcements

6.2.5.3.1 Communication Hold with support for UPDATE

SS_XXSSCH17	HOLD reference to:			
	TS 124 410 [15], clauses 4.5.2.1,	,		
	4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithAnnounc/WithUPDATE			
Selection criteria:	The remote user is put on hold, an announcement starts to the held user. The UPDATE			
	method is used.			
Test purpose:	Ensure that, when the originating UE (user A) sends an UPDATE request containing a			
	SDP with the attribute "a=" sendon			
	 The terminating UE (user attribute "a=" sendonly. 	r B) receives an UPDATE containing a SDP with the		
	 The terminating UE (user with the attribute "a=" rec 	r B) sends a 200 OK SIP response containing a SDP cyonly.		
		A) receives a 200 OK SIP response containing a SDP		
		yed to the terminating UE (user B).		
	- 7th dimodricoment is play	you to the terminating of (door b).		
	Then the originating UE (user A) ha	nang up the session.		
Precondition:	 A session was establishe 	ed between user A (originating UE) and user B ng to the "basic Call" procedures.		
	The media stream was previously set to "sendrecv".			
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	•		
Comments:				
SIP UA A	SUT	SIP UA B		
INVITE (sendrecv)	→	→ INVITE (sendrecv)		
180 Ringing	_	← 180 Ringing		
200 OK INVITE (sendrecv)	_	← 200 OK INVITE (sendrecv)		
ACK	→ ACK			
UPDATE (sendonly)	→ UPDATE (sendonly)			
200 OK UPDATE (recvonly)				
(: : : : : : : : : : : : : : : : : : :	Announcement to UE B			
BYE	→	→ BYE		
200 OK BYE	+	← 200 OK BYE		

SS_XXSSCH18	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1,			
	4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithAnnounc/WithUPDATE			
Selection criteria:	The announcement is stopped after the held user puts the media stream on hold. The			
	UPDATE method is used.			
Test purpose:	 Ensure that, when the originating UE (user A) sends an UPDATE request containing a SDP with the attribute "a=" inactive to change the media stream status to inactive: The terminating UE (user B) receives an UPDATE containing a SDP with the attribute "a=" inactive. The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" inactive. The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" inactive. The announcement to the originating UE (user A) is stopped. 			
Precondition:	Then the originating UE (user A) hang up the session. A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The session was previously put on hold from user B (terminating UE). An announcement is played to the originating UE (user A).			
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	IT		
Comments:				
SIP UA A	SUT	_	SIP UA B	
INVITE (sendrecv)	}	→	INVITE (sendrecv)	
180 Ringing	-	+	180 Ringing	
200 OK INVITE (sendrecv) ACK	← →	→	200 OK INVITE (sendrecv) ACK	
AOR	7	7	ACK	
UPDATE (sendonly)	←	←	UPDATE (sendonly)	
200 OK UPDATE (recvonly)		→	200 OK UPDATE (recvonly)	
,	Announcement to UE A			
UPDATE (inactive)	→ UPDATE (inactive)			
200 OK UPDATE (inactive)				
Media stream is stopped				
BYE	→	→	BYE	
200 OK BYE	+	+	200 OK BYE	

SS_XXSSCH19	HOLD reference to:			
	TS 124 410 [15], clauses 4.5.2.1,			
	4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithAnnounc/WithUPDATE			
Selection criteria:	The announcement is stopped after retrieve.			
Test purpose:			A) sends an UPDATE request containing a	
	SDP with the attribute "a=" sendrecv to resume the session:			
	The terminating UE (user B) receives an UPDATE containing a SDP with the attribute "a=" sendrecv.			
	 The terminating UE (user with the attribute "a=" ser 		ds a 200 OK SIP response containing a SDP	
	The originating UE (user with the attribute "a=" ser		ves a 200 OK SIP response containing a SDP	
			ating UE (user B) is stopped.	
	Then the originating UE (user A) h	ang up t	he session.	
	NOTE: The sendrecv SDP attributes default.	bute can	be omitted, since sendrecv attribute is the	
Precondition:	 A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The session was previously put on hold from user A (originating UE). An announcement is played to the terminating UE (user B). 			
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT;		o terminating GE (abor B).	
Comments:				
SIP UA A	SUT		SIP UA B	
INVITE (sendrecv)	→	→	INVITE (sendrecv)	
180 Ringing	←	←	180 Ringing	
200 OK INVITE (sendrecv)	←	←	200 OK INVITE (sendrecv)	
ACK	→	→	ACK	
UPDATE (sendonly)	→	→	UPDATE (sendonly)	
200 OK UPDATE (recvonly)	← Announcement	← to UE B	200 OK UPDATE (recvonly)	
UPDATE (sendrecv)	→ ······•	→	UPDATE (sendrecv)	
200 OK UPDATE (sendrecv				
	Conversati	on	, ,	
BYE	→	→	BYE	
200 OK BYE	+	+	200 OK BYE	

SS_XXSSCH20	HOLD reference to:		
	TS 124 410 [15], clauses 4.5.2.1,		
	4.5.2.4, 4.5.2.9		
TSS reference:	ServedUser/WithAnnounc/WithUPD	ATE	
Selection criteria:	Announcement is started to user B when user B retrieves the connection.		
Test purpose:			A) sends an UPDATE request containing a
			ume the media stream status to recvonly:
	 The terminating UE (user I attribute "a=" recvonly. 	B) rece	ives an UPDATE containing a SDP with the
	The terminating UE (user I SDP with the attribute "a="		ds a 200 OK SIP response containing a
		() recei	ves a 200 OK SIP response containing a
	An announcement is player		•
	Then the originating UE (user A) ha		
Precondition:			en user A (originating UE) and user B
	(terminating UE) according		
		eviously	set to "inactive" from user A (originating
	UE).		tion LIE (com A) is atomical
SIP Parameter values:			ting UE (user A) is stopped.
SIP Parameter values.	Dial string parameters options=PIXI TYPE_SDP= PIXIT;	1	
Comments:			
SIP UA A	SUT	_	SIP UA B
INVITE (sendrecv)	→	→	INVITE (sendrecv)
180 Ringing	(+	180 Ringing
200 OK INVITE (sendrecv) ACK	← →	←	200 OK INVITE (sendrecv) ACK
ACK	Conversation	_	ACK
UPDATE (sendonly)	←	' ←	UPDATE (sendonly)
200 OK UPDATE (recvonly		À	200 OK UPDATE (recvonly)
200 011 01 27112 (10010111)	Announcement to	_	Los on or prinz (recverny)
UPDATE (inactive)	>	→	UPDATE (inactive)
200 OK UPDATE (inactive	(←	200 OK UPDATE (inactive)
Media stream is stopped			
UPDATE (recvonly)	→	→	UPDATE (recvonly)
200 OK UPDATE (sendon		←	200 OK UPDATE (sendonly)
	Announcement to	_	
BYE	→	→	BYE
200 OK BYE	←	←	200 OK BYE

SS_XXSSCH21	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9			
TSS reference:	ServedUser/WithAnnounc/WithUPDATE			
Selection criteria:	The remote user is put on hold, an announcement starts to the held user. The UPDATE method is used.			
Test purpose:	 Ensure that, when the terminating UE (user B) sends an UPDATE request containing a SDP with the attribute "a=" sendonly to put the session on hold: The originating UE (user A) receives an UPDATE containing a SDP with the attribute "a=" sendonly. The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. An announcement is played to the terminating UE (user B). 			
Precondition:	Then the originating UE (user A) hang up the session. • A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. • The media stream was previously set to "sendrecv".			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;			
Comments:				
SIP UA A	SUT SIP UA B			
INVITE (sendrecv)	→ INVITE (sendrecv)			
180 Ringing	← 180 Ringing			
200 OK INVITE (sendrecv)	← 200 OK INVITE (sendrecv)			
ACK	→ ACK Conversation			
UPDATE (sendonly) 200 OK UPDATE (recvonly)	← ← UPDATE (sendonly) → → 200 OK UPDATE (recvonly) Announcement to UE A			
BYE	→ → BYE			
200 OK BYE	← 200 OK BYE			

SS_XXSSCH22	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1,				
	4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithUPDATE				
Selection criteria:	The announcement is stopped after the held user puts the media stream on hold. The				
	UPDATE method is used.				
Test purpose:	SDP with the attribute "a=" inactive	to cha	er B) sends an UPDATE request containing a nge the media stream status to inactive:		
	 The originating UE (user attribute "a=" inactive. 	A) recei	ves an UPDATE containing a SDP with the		
	 The originating UE (user with the attribute "a=" ina 		s a 200 OK SIP response containing a SDP		
	The terminating UE (user with the attribute "a=" ina		vives a 200 OK SIP response containing a SDP		
	The announcement to the	etermin	ating UE (user B) is stopped.		
	Then the originating UE (user A) h	ang up	the session.		
Precondition:			en user A (originating UE) and user B		
	(terminating UE) accordir				
			on hold from user A (originating UE).		
			e terminating UE (user B).		
SIP Parameter values:	Dial string parameters options=PIXTYPE_SDP= PIXIT;	ΚΙΤ			
Comments:					
SIP UA A	SUT		SIP UA B		
INVITE (sendrecv)	→	→	INVITE (sendrecv)		
180 Ringing	((180 Ringing		
200 OK INVITE (sendrecv)	((200 OK INVITE (sendrecv)		
ACK	→ → ACK Conversation				
UPDATE (sendonly)	→	"' →	UPDATE(sendonly)		
200 OK UPDATE (recvonly)					
, (Announcement to UE B				
UPDATE (inactive)	← UPDATE (inactive)				
200 OK UPDATE (inactive)	` ,				
Media stream is stopped					
BYE	→	→	BYE		
200 OK BYE	←	+	200 OK BYE		

SS_XXSSCH23	HOLD reference to:				
	TS 124 410 [15], clauses 4.5.2.1	١,			
	4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithUl				
Selection criteria:	Announcement is stopped after re				
Test purpose:			er B) sends an UPDATE request containing a		
	SDP with the attribute "a=" sendrecv to resume the session:				
	 The originating UE (use attribute "a=" sendrecv. 	r A) recei	ves an UPDATE containing a SDP with the		
	The originating UE (use with the attribute "a=" set in the content or the co		s a 200 OK SIP response containing a SDP		
			eives a 200 OK SIP response containing a SDP		
	with the attribute "a=" se				
	The announcement to the second control of the second control	ne origina	ating UE (user A) is stopped.		
	Then the originating UE (user A)	hang up	the session.		
	NOTE: The sendrecv SDP att default.	ribute car	n be omitted, since sendrecv attribute is the		
Precondition:	 A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The session was previously put on hold from user B (terminating UE). An announcement is played to the originating UE (user A). 				
SIP Parameter values:	Dial string parameters options=P TYPE_SDP= PIXIT;				
Comments:					
SIP UA A	SUT		SIP UA B		
INVITE (sendrecv)	→	→	INVITE (sendrecv)		
180 Ringing	<	(180 Ringing		
200 OK INVITE (sendrecv)	<	(200 OK INVITE (sendrecv)		
ACK	→	. →	ACK		
LIDDATE (Conversat		LIDDATE (d b-)		
UPDATE (sendonly)	← →	←	UPDATE (sendonly)		
200 OK UPDATE (recvonly)	only) → 200 OK UPDATE (recvonly) Announcement to UE A				
UPDATE (sendrecv)	←	. 10 0E A	UPDATE (sendrecv)		
200 OK UPDATE (sendrecv	_	÷	200 OK UPDATE (sendrecv)		
	Conversat				
BYE	→	→	BYE		
200 OK BYE	+	-	200 OK BYE		

SS_XXSSCH24	HOLD reference to:				
	TS 124 410 [15], clauses 4.5.2.1,				
	4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithUPDATE				
Selection criteria:	Announcement is started to user B when user B retrieves the connection.				
Test purpose:	Ensure that, when the terminating UE (user B) sends an UPDATE request containing a				
			ume the media stream status to recvonly:		
	 The originating UE (user a attribute "a=" recvonly. 	A) recei	ves an UPDATE containing a SDP with the		
	 The originating UE (user and the attribute "a=" sendon!" 		s a 200 OK SIP response containing a SDP with		
		B) rece	vives a 200 OK SIP response containing a SDP		
		•	e terminating UE (user B).		
	Then the originating UE (user A) ha	ang up t	the session.		
Precondition:			en user A (originating UE) and user B		
	(terminating UE) according				
	 The media stream was pr 	eviously	y set to "inactive" from user B (terminating UE).		
	 The announcement to the 	e termina	ating UE (user B) is stopped.		
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT;	ΊΤ			
Comments:					
SIP UA A	SUT		SIP UA B		
INVITE (sendrecv)	→	→	INVITE (sendrecv)		
180 Ringing	←	←	180 Ringing		
200 OK INVITE (sendrecv)	←	←	200 OK INVITE (sendrecv)		
ACK	→	→	ACK		
LIDDATE (Conversati		LIDDATE (
UPDATE (sendonly)	→	→	UPDATE (sendonly)		
200 OK UPDATE (recvonly)	← ← 200 OK UPDATE (recvonly) Announcement to UE B				
UPDATE (inactive)	← ← UPDATE (inactive)				
200 OK UPDATE (inactive)					
Media stream is stopped					
UPDATE (recvonly)	← ← UPDATE (recvonly)				
200 OK UPDATE (sendonly)					
	Announcement to	to UE B	3		
BYE	→	→	BYE		
200 OK BYE	+	-	200 OK BYE		

6.2.5.3.2 Communication Hold without support for UPDATE

SS_XXSSCH25	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9					
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE					
Selection criteria:	method is used.		ement starts to the held user. The INVITE			
Test purpose:	Ensure that, when the originating UE (user A) sends an INVITE request containing a SDP with the attribute "a=" sendonly to put the session on hold: • The terminating UE (user B) receives an INVITE containing a SDP with the attribute "a=" sendonly. • The terminating UE (user B) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • The originating UE (user A) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • An announcement is played to the terminating UE (user B).					
Precondition:	Then the originating UE (user A) hang up the session. • A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. • The media stream was previously set to "sendrecv".					
SIP Parameter values:	Dial string parameters options=PIXITTYPE_SDP= PIXIT;					
Comments:						
SIP UA A	SUT		SIP UA B			
INVITE (sendrecv)	→	→	()			
180 Ringing	←	←	180 Ringing			
200 OK INVITE (sendrecv)	←	←	200 OK INVITE (sendrecv)			
ACK	→ ACK					
	Conversation					
INVITE (sendonly)	→ INVITE (sendonly)					
200 OK INVITE (recvonly)	← 200 OK INVITE (recvonly)					
ACK	→ ACK					
	Announcement to UE B					
BYE)	→	BYE			
200 OK BYE	+	+	200 OK BYE			

SS_XXSSCH26	HOLD reference to:				
	TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE				
Selection criteria:	The announcement is stopped after INVITE method is used.	the held	user puts the media stream on hold. The		
Test purpose:	with the attribute "a=" inactive to cha	ange the			
	attribute "a=" inactive.	•	es an INVITE containing a SDP with the		
	with the attribute "a=" inact	ive.	a 200 OK SIP response containing a SDP		
	with the attribute "a=" inact	ive.	s a 200 OK SIP response containing a SDP		
	The announcement to the contract to the c	Ü	. ,		
	Then the originating UE (user A) har				
Precondition:			user A (originating UE) and user B		
	(terminating UE) according				
	<u> </u>		hold from user B (terminating UE).		
OLD D	An announcement is played		originating UE (user A).		
SIP Parameter values:	Dial string parameters options=PIXITTYPE_SDP= PIXIT;	l			
Comments:					
SIP UA A	SUT	_	SIP UA B		
INVITE (sendrecv)	→	→	INVITE (sendrecv)		
180 Ringing	((180 Ringing		
200 OK INVITE (sendrecv)	← →	←	200 OK INVITE (sendrecv)		
ACK	Conversation	-	ACK		
INVITE (sendonly)	← Conversation	" ←	INVITE (sendonly)		
200 OK INVITE (recvonly)	→	→	200 OK INVITE (recvonly)		
ACK	-	-	ACK		
AOR	Announcement to UE A				
INVITE (inactive)	→ INVITE (inactive)				
200 OK INVITE (inactive)	`	É	200 OK INVITE (inactive)		
ACK	→	→	ACK		
Media stream is stopped					
BYE	→	→	BYE		
200 OK BYE	←	+	200 OK BYE		

SS XXSSCH27	HOLD reference to:				
	TS 124 410 [15], clauses 4.5.2.1				
	4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/Withou	tUPDATE			
Selection criteria:	Announcement is stopped after retrieve. The INVITE method is used.				
Test purpose:	Ensure that, when the originating	UE (user A	A) sends an INVITE request containing a SDP		
	with the attribute "a=" sendrecv to	resume th	ne session:		
		r B) receiv	es an INVITE containing a SDP with the		
	attribute "a=" sendrecv.				
			a 200 OK SIP response containing a SDP		
	with the attribute "a=" se				
			es a 200 OK SIP response containing a SDP		
	with the attribute "a=" se				
	The announcement to th	e terminat	ing UE (user B) is stopped.		
	Then the originating UE (user A) h	aana un th	o sossion		
	Then the originating OE (user A) i	iang up in	e session.		
	NOTE: The sendrecy SDP attr	ibute can l	be omitted, since sendrecy attribute is the		
	default.				
Precondition:	A session was established.	ed betwee	n user A (originating UE) and user B		
	(terminating UE) accordi				
	 The session was previou 	ısly put on	hold from user A (originating UE).		
	An announcement is pla	yed to the	terminating UE (user B).		
SIP Parameter values:	Dial string parameters options=PI		-		
	TYPE_SDP= PIXIT;				
Comments:					
SIP UA A	SUT		SIP UA B		
INVITE (sendrecv) 180 Ringing	→	→ ←	INVITE (sendrecv) 180 Ringing		
200 OK INVITE (sendrecv)	-	-	200 OK INVITE (sendrecv)		
ACK	,	÷	ACK		
, tort	Conversat	-	/ tort		
INVITE (sendonly)	→	→	INVITE (sendonly)		
200 OK INVITE (recvonly)	← 200 OK INVITE (recvonly)				
ACK	→	→	ACK		
	Announcement				
INVITE (sendrecv)	→ INVITE (sendrecv) ← 200 OK INVITE (sendrecv)				
200 OK INVITE (sendrecv) ACK	→ ACK				
ACK	Conversat	-	AUN		
BYE	Conversal →	.ioii ->	BYE		
200 OK BYE	É	÷	200 OK BYE		
	•				

SS_XXSSCH28	HOLD reference to:					
	TS 124 410 [15], clauses 4.5.2.1,					
	4.5.2.4, 4.5.2.9					
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE					
Selection criteria:	Announcement is started to user B when user B retrieves the connection. The INVITE					
	method is used.					
Test purpose:			A) sends an INVITE request containing a SDP			
			ne media stream status to recvonly:			
		B) receive	ves an INVITE containing a SDP with the			
	attribute "a=" recvonly.					
			s a 200 OK SIP response containing a SDP			
	with the attribute "a=" sen					
			res a 200 OK SIP response containing a SDP			
	with the attribute "a=" sen	•				
	An announcement is play	ed to the	e originating UE (user A).			
	Then the originating UE (user A) ha					
Precondition:			en user A (originating UE) and user B			
	(terminating UE) accordin					
	•	,	set to "inactive" from user A (originating UE).			
			ing UE (user A) is stopped.			
SIP Parameter values:	Dial string parameters options=PIX	ΊΤ				
	TYPE_SDP= PIXIT;					
Comments:			OID IIA D			
SIP UA A	SUT		SIP UA B			
INVITE (sendrecv)	→ ←	→	INVITE (sendrecv)			
180 Ringing 200 OK INVITE (sendrecv)	`	-	180 Ringing 200 OK INVITE (sendrecv)			
ACK	→	→	ACK			
ACK	Conversation	-	ACK			
INVITE(sendonly)	←	- ←	INVITE(sendonly)			
200 OK INVITE (recvonly)	→	À	200 OK INVITE(recvonly)			
ACK	<u>-</u>	÷	ACK			
	Announcement t	o UE A	7.6.1			
INVITE (inactive)	→	→	INVITE(inactive)			
200 OK INVITE (inactive)	← 200 OK INVITE(inactive)					
ACK `	→ ACK					
	Media stream is s	stopped				
INVITE (recvonly)	→ INVITE (recvonly)					
200 OK INVITE (sendonly)	←	←	200 OK INVITE (sendonly)			
ACK	→	→	ACK			
	Announcement t	_				
BYE	→	→	BYE			
200 OK BYE	+	-	200 OK BYE			

SS_XXSSCH29	HOLD reference to: TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE	ServedUser/WithAnnounc/WithoutUPDATE			
Selection criteria:	The remote user is put on hold, an announcement method is used.	ent starts to the held user. The INVITE			
Test purpose:	Ensure that, when the terminating UE (user B) sends an INVITE request containing a SDP with the attribute "a=" sendonly to put the session on hold: • The originating UE (user A) receives an INVITE containing a SDP with the attribute "a=" sendonly. • The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" recvonly. • An announcement is played to the terminating UE (user B).				
Precondition:	Then the originating UE (user A) hang up the session. A session was established between user A (originating UE) and user B (terminating UE) according to the "basic Call" procedures. The media stream was previously set to "sendrecv".				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;				
Comments: SIP UA A	SUT	SIP UA B			
INVITE (sendrecv)		/ITE (sendrecv)			
180 Ringing 200 OK INVITE (sendrecv)	. •	0 Ringing			
ACK	←				
ACK	Conversation				
INVITE (sendonly)	← ← INVITE (sendonly)				
200 OK INVITE (recvonly)	→ 200 OK INVITE (recvonly)				
ACK `	→ ACK				
	Announcement to UE A				
BYE	→ BY	E			
200 OK BYE	← ← 200	0 OK BYE			

SS_XXSSCH30	HOLD reference to:				
	TS 124 410 [15], clauses 4.5.2.1,				
	4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE				
Selection criteria:	The announcement is stopped after the held user puts the media stream on hold. The				
	INVITE method is used.				
Test purpose:			B) sends an INVITE request containing a SDP		
	with the attribute "a=" inactive to cl				
	The originating UE (user attribute "a=" inactive.	A) receiv	es an INVITE containing a SDP with the		
	The originating UE (user)	A) sends	a 200 OK SIP response containing a SDP		
	with the attribute "a=" ina	ctive.			
	 The terminating UE (user with the attribute "a=" ina 		ves a 200 OK SIP response containing a SDP		
			ting UE (user B) is stopped.		
	The announcement to the	t Cillina	ting OL (user b) is stopped.		
	Then the originating UE (user A) h	ang up th	ne session.		
Precondition:			n user A (originating UE) and user B		
	(terminating UE) according				
	The session was previous	sly put or	hold from user A (originating UE).		
	 An announcement is play 		terminating UE (user B).		
SIP Parameter values:	Dial string parameters options=PI>	(IT			
	TYPE_SDP= PIXIT;				
Comments:					
SIP UA A	SUT	_	SIP UA B		
INVITE (sendrecv))	→	INVITE (sendrecv)		
180 Ringing	←	+	180 Ringing		
200 OK INVITE (sendrecv) ACK	5	→	200 OK INVITE (sendrecv) ACK		
ACK	Conversat	_	ACK		
INVITE (sendonly)	→ • • • • • • • • • • • • • • • • • • •	→	INVITE (sendonly)		
200 OK INVITE (recvonly)	É	É	200 OK INVITE (recvonly)		
ACK	→	→	ACK		
	Announcement	to UE B			
INVITE (inactive)	← INVITE (inactive)				
200 OK INVITE (inactive)	→ 200 OK INVITE (inactive)				
ACK	→ ACK				
DVE	Media stream is				
BYE	→	→	BYE		
200 OK BYE			200 OK BYE		

SS_XXSSCH31	Н	IOLD referen	ce to:		
	TS 124	410 [15], clau			
		4.5.2.4, 4.5.			
TSS reference:		Jser/WithAnno			
Selection criteria:	Announcement is stopped after retrieve. The INVITE method id used.				
Test purpose:					r B) sends an INVITE request containing a SDP
		attribute "a="			
	•	The originati attribute "a=		A) receiv	es an INVITE containing a SDP with the
	•		ing UE (user abute "a=" sen		s a 200 OK SIP response containing a SDP
	•		ting UE (user bute "a=" sen		ves a 200 OK SIP response containing a SDP
	•	The announ	cement to the	originat	ing UE (user A) is stopped.
	Then the	e originating U	JE (user A) ha	ang up th	ne session.
	NOTE:	The sendre	ecv SDP attrib	oute can	be omitted, since sendrecv attribute is the
Precondition:	•	A session wa	as establishe	d betwee	en user A (originating UE) and user B
					"basic Call" procedures.
	•	The session	was previous	sly put or	n hold from user B (terminating UE).
	•	An announce	ement is play	ed to the	e originating UE (user A).
SIP Parameter values:		ng parameters SDP= PIXIT;	s options=PIX	(IT	
Comments:					
SIP UA A			SUT		SIP UA B
INVITE (sendrecv)		→		→	INVITE (sendrecv)
180 Ringing		((180 Ringing
200 OK INVITE (sendrecv)		(←	200 OK INVITE (sendrecv)
ACK		→	Conversati	-	ACK
INVITE (sendonly)		←	Conversati	on ←	INVITE (sendonly)
200 OK INVITE (recvonly)		→		→	200 OK INVITE (recvonly)
ACK	← ← ACK				
		_	ouncement	_	
INVITE (sendrecv)	← ← INVITE (sendrecv)				
200 OK INVITE (sendrecv)					
ACK		←		←	ACK
			Conversati	on	
BYE		→		→	BYE
200 OK BYE		-		+	200 OK BYE

SS XXSSCH32	HOLD reference to:				
_	TS 124 410 [15], clauses 4.5.2.1, 4.5.2.4, 4.5.2.9				
TSS reference:	ServedUser/WithAnnounc/WithoutUPDATE				
Selection criteria:		3 when us	ser B retrieves the connection. The INVITE		
	method id used.				
Test purpose:	 Ensure that, when the terminating UE (user B) sends an INVITE request containing a SDP with the attribute "a=" recvonly to resume the media stream status to recvonly: The originating UE (user A) receives an INVITE containing a SDP with the attribute "a=" recvonly. The originating UE (user A) sends a 200 OK SIP response containing a SDP with the attribute "a=" sendonly. The terminating UE (user B) receives a 200 OK SIP response containing a SDP with the attribute "a=" sendonly. An announcement is played to the terminating UE (user B). 				
Precondition:	Then the originating UE (user A) have A session was established		en user A (originating UE) and user B (terminating		
recondition.	UE) according to the "bas				
			set to "inactive" from user B (terminating UE).		
			ting UE (user B) is stopped.		
SIP Parameter values:	Dial string parameters options=PIX		ing or (door b) to etoppod.		
	TYPE_SDP= PIXIT;				
Comments:					
SIP UA A	SUT		SIP UA B		
INVITE (sendrecv)	→	→	INVITE		
180 Ringing	←	←	180 Ringing		
200 OK INVITE	←	←	200 OK INVITE		
ACK	→	→	ACK		
	Convers				
INVITE(sendonly)	→	→	INVITE(sendonly)		
200 OK INVITE (recvonly)		(200 OK INVITE(recvonly)		
ACK	→ .	→	ACK		
INDUTE (C. C.)	Announceme				
INVITE (inactive)	((INVITE(inactive)		
200 OK INVITE (inactive)	→ ←	→	200 OK INVITE(inactive)		
ACK ← ← ACK Media stream is stopped					
INVITE (recvonly)	Media stream is stopped ← INVITE (recvonly)				
200 OK INVITE (sendonly		→	200 OK INVITE (sendonly)		
ACK) ~	-	ACK		
/ Cort	Announcement to UE B				
BYE	→ Amiounceme	to o∟ →	BYE		
200 OK BYE	←	-	200 OK BYE		

6.2.6 Test purposes for Communication Diversion

The configuration lines in this clause contain only the subscription options to the communication diversion service that are relevant for the test purpose. Subscription options not mentioned can take any value.

6.2.6.1 CFU

SSS_XXSSCFU01	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.	.5			
TSS reference:	SIP-SIP/Supplementary_Services/CFU				
Configuration:	The user B has subscribed to CFU, CDIVN is not activated				
	Subscription options:				
	Served user receives indication the	nat a communication has been f	orwarded = Yes		
Selection criteria:	CFU supported.				
Test purpose:	Ensure that when user A calls use	er B, the call is forwarded to use	er C. Ensure that in the		
	active call state the voice transfer	on the media channels is perfo	rmed correctly (e.g.		
	testing QoS parameters).				
	Ensure that User B receives a ME		call diversion.		
SIP Parameter values:	Dial string parameters options=PI	XIT			
	TYPE_SDP= PIXIT				
Comments:					
SIP UA A	SUT	SIP UA B	SIP UA C		
INVITE	→				
404 Call la Bain a Famora	Communication diver	-	IND/ITE		
181 Call Is Being Forward	aea 🗲	→	INVITE		
(optional)	→	MESSAGE			
	-	200 OK MESSAGE			
180 Ringing	←		180 Ringing		
200 OK INVITE	÷	÷	200 OK INVITE		
ACK	→	→	ACK		
Communication					
BYE	→	→	BYE		
200 OK BYE	←	←	200 OK BYE		

SSS XXSSCFU02	CDIV	reference to:				
335XX3301 302			651			
TSS reference:	TS 124 504 [12], clause 4.5.2.6.5.1 SIP-SIP-SIP/Supplementary_Services/CFU					
Configuration:		The user B has subscribed to CFU and CDIVN				
Selection criteria:			O and v	CDIVIN		
	CFU and CDIVI		or D. the	a call in famuordad	to use	or C. Engure that in the
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g.					
	testing QoS par		on the	media chamileis is	s peno	imed correctly (e.g.
			atad tha	CDIV/N convice r	acaiya	s a NOTIFY request
	indicating the ca		ateu trie	CDIVIN SEIVICE, I	eceive:	s a NOTIFT Tequest
SIP Parameter values:		meters options=P	IYIT			
Sii i arameter values.	TYPE SDP= PI		IXII			
Comments:		17(1)				
SIP UA A		SUT		SIP UA B		SIP UA C
		Start Activation	on CDI\			
		←	SUBS	CRIBE		
		→	200 O	K SUBSCRIBE		
		→	NOTIF	-γ		
		←	200 O	K NOTIFY		
		End Activation	n CDIV	/N		
INVITE	→					
		munication diver	sion is	performed		
181 Call Is Being Forward (optional)	ded ←				→	INVITE
(optional)		→	NOTIF	-v		
		ŕ		K NOTIFY		
180 Ringing	←	•	200 0	KNOTILI	+	180 Ringing
200 OK INVITE	÷				÷	200 OK INVITE
ACK	÷				_	ACK
	Communication					
BYE	→				→	BYE
200 OK BYE	←				←	200 OK BYE

SSS_XXSSCFU03	CDIV reference to:			
	TS 124 504 [12], clause 4.5.2.6.4			
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFL	J	
Configuration:	The user B has subscribed to CFU			
	Subscription options:			
	Originating user receives notificatio	n that h	is communication	has been diverted = No
Selection criteria:	CFU supported.			
Test purpose:	Ensure that when user A calls user	B, the c	all is forwarded to	user C.
	Ensure that User A does not receive	e a 181	Call Is Being Forv	varded message.
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A	SUT			SIP UA C
INVITE	→	→	INVITE	
180 Ringing	←	←	180 Ringing	
200 OK INVITE	←	←	200 OK INVITE	
ACK	→	→	ACK	
BYE	→	→	BYE	
200 OK BYE	←	←	200 OK BYE	

SSS_XXSSCFU04	CDIV reference to:				
TSS reference:	TS 124 504 [12], clause 4.5.2.6.4				
	SIP-SIP/Supplementary_Services/CFU				
Configuration:	The user B has subscribed to CFU and has not activated TIR Subscription options: Originating user receives notification that his communication has been diverted = Yes				
			erted to URI to originating user in diversion		
	notification = No	i oi uive	erted to ORI to originating user in diversion		
		of hic/	her URI to originating user in diversion		
	notification = No	1 01 1113/1	The Ortho Originating user in diversion		
Selection criteria:	CFU supported.	CFU supported.			
Test purpose:	Ensure that when user A calls user	B, the c	call is forwarded to user C.		
	Ensure that User A receives a 181	Call Is E	Being Forwarded message		
	containing a Privacy header with value "id" and not containing a P-Asserted-Identity indicating the URI of user B and				
	not containing a History-Info header (with CDIV related cause value) indicating the URI of user B or user A.				
SIP Parameter values:	Dial string parameters options=PIX	Т			
	TYPE_SDP= PIXIT				
Comments:					
SIP UA A	SUT		SIP UA C		
INVITE	→	→	INVITE		
181 Call Is Being Forwarded ←					
180 Ringing	←	-	180 Ringing		
200 OK INVITE	((200 OK INVITE		
ACK	→	→	ACK		
BYE	→	→	BYE		
200 OK BYE	←	←	200 OK BYE		

SSS XXSSCFU05	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.4				
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CFU				
Configuration:	The user B has subscribed to CFU and has not activated TIR				
	Subscription options:				
	Originating user receives notification	n that hi	nis communication has been diverted = Yes		
		ı of dive	erted to URI to originating user in diversion		
	notification = Yes				
	Served user allows the presentation	ı of his/l	her URI to originating user in diversion		
	notification = Yes				
Selection criteria:	CFU supported.	CFU supported.			
Test purpose:	Ensure that when user A calls user				
	Ensure that User A receives a 181 (
	containing a P-Asserted-Identity ind	licating	the URI of user B and		
	containing a History-Info header				
	including a first entry with the hi-targeted-to-URI of user B, index = 1,				
	cause param = 302 and				
			geted-to-URI of user C, index = 1.1		
SIP Parameter values:	Dial string parameters options=PIXI	Т			
	TYPE_SDP= PIXIT				
Comments:					
SIP UA A		_	SIP UA C		
····-	INVITE → INVITE				
181 Call Is Being Forwarded					
180 Ringing	<	(180 Ringing		
200 OK INVITE	←	(200 OK INVITE		
ACK	→	→	ACK		
BYE	→	→	BYE		
200 OK BYE	← 200 OK BYE				

SSS XXSSCFU06	CDIV reference to:			
_	TS 124 504 [12], clause 4.5.2.6.2.2			
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CFU			
Configuration:	The user B has subscribed to CFU and	has	s not activated OIR	
	Subscription options:			
	Served user allows the presentation of h	is/he	ner URI to diverted-to user = Yes	
Selection criteria:	CFU supported.			
Test purpose:	Ensure that when user A calls user B, th	е са	all is forwarded to user C.	
	Ensure that User C receives an INVITE			
	including an entry (with CDIV related car	use v	value) with the hi-targeted-to-URI of user B.	
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A	-	_	SIP UA C	
INVITE	<u>=</u>	→	INVITE	
181 Call Is Being Forwa	arded ←			
(optional)	_	_		
180 Ringing		-	180 Ringing	
200 OK INVITE	-		200 OK INVITE	
ACK	→	→	ACK	
BYE	→	→	BYE	
200 OK BYE	(F	200 OK BYE	

6.2.6.2 CFB

6.2.6.2.1 NDUB

SSS_XXSSCFB01	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.	.5			
TSS reference:	SIP-SIP-SIP/Supplementary_Ser	vices/CFB			
Configuration:	The user B has subscribed to CF	B, CDIVN is not activated			
	Subscription options:				
	Served user receives indication the		forwarded = Yes		
	The user B has not subscribed to	o CW			
Selection criteria:	CFB supported, NDUB status car				
Test purpose:	Ensure that when user A calls use				
	call is forwarded to user C. Ensur				
	media channels is performed corr				
	Ensure that User B receives a ME		call diversion.		
SIP Parameter values:	Dial string parameters options=PI	XIT			
	TYPE_SDP= PIXIT				
Comments:	OUT	OID IIA D	015.114.0		
SIP UA A	SUT	SIP UA B	SIP UA C		
INVITE	B enters NDUB condition (e.g. by →	establishing a communicati	Oll)		
INVITE	Communication diver	sion is performed			
181 Call Is Being Forward			INVITE		
(optional)	ou 1	-			
(0)	→	MESSAGE			
	←	200 OK MESSAGE			
180 Ringing	←	(180 Ringing		
200 OK INVITE	← 200 OK ÎNVÎTE				
ACK	→ ACK				
	Communic	cation			
BYE	→		BYE		
200 OK BYE	←	+	200 OK BYE		

SSS_XXSSCFB02	CDIV reference to:						
	TS 124 504 [12], clause 4.5.2.6.						
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CFB						
Configuration:	The user B has subscribed to CF						
	The user B has not subscribed to						
Selection criteria:	CFB and CDIVN supported, NDU						
Test purpose:	Ensure that when user A calls use		3 ().				
	call is forwarded to user C. Ensur						
	media channels is performed corr						
	Ensure that User B, having activa	ted the CDIVN service, red	eives a NOTIFY request				
SIP Parameter values:	indicating the call diversion.	VIT					
SIP Parameter values.	Dial string parameters options=PI TYPE_SDP= PIXIT	ΛΠ					
Comments:							
SIP UA A	SUT	SIP UA B	SIP UA C				
	Activation	CDIVN					
	←	SUBSCRIBE					
	→	200 OK SUBSCRIBE					
	→	NOTIFY					
	←	200 OK NOTIFY					
IIA	B enters NDUB condition (e.g. b	v establishing a commun	vication)				
INVITE	→ Condition (e.g. b	y establishing a commu	lication)				
	Communication dive	rsion is performed					
181 Call Is Being Forwa			→ INVITE				
(optional)							
	→	NOTIFY					
	←	200 OK NOTIFY					
180 Ringing	← 180 Ringing						
200 OK INVITE	←		← 200 OK INVITE				
ACK	→ ACK Communication						
BYE	Commun →	ication	→ BYE				
200 OK BYE	₹		→ BYE ← 200 OK BYE				
ZOO ON DIE			200 ON BTE				

SSS_XXSSCFB03	CDIV reference to:					
	TS 124 504 [12], clause 4.5.2.6.4					
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFB	3			
Configuration:	The user B has subscribed to CFB					
	Subscription options:					
	Originating user receives notificatio	n that hi	is communication has been diverted = No			
	The user B has not subscribed to 0	CW				
Selection criteria:	CFB supported, NDUB status can b	e achie	ved for user B.			
Test purpose:	Ensure that when user A calls user	B which	n is network determined user busy (NDUB), the	е		
	call is forwarded to user C.					
	Ensure that User A does not receive	e a 181	Call Is Being Forwarded message.			
SIP Parameter	Dial string parameters options=PIXI	T				
values:	TYPE_SDP= PIXIT					
Comments:						
SIP UA A			SIP UA C			
	A B enters NDUB condition (e.g. b	y estab	<u> </u>			
INVITE	→	→	INVITE			
180 Ringing	←	←	180 Ringing			
200 OK INVITE	← 200 OK INVITE					
ACK	→ ACK					
BYE	→	→	BYE			
200 OK BYE		-	200 OK BYE			

SSS_XXSSCFB04	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.4				
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFB			
Configuration:	The user B has subscribed to CFB	and has	s not activated TIR		
	Subscription options:				
	Originating user receives notification	n that hi	s communication has been diverted = Yes		
		of dive	rted to URI to originating user in diversion		
	notification = No				
	•	of his/h	ner URI to originating user in diversion		
	notification = No				
	The user B has not subscribed to C				
Selection criteria:	CFB supported, NDUB status can b				
Test purpose:		B which	is network determined user busy (NDUB), the		
	call is forwarded to user C.				
	Ensure that User A receives a 181 (
	containing a Privacy header with va				
	not containing a P-Asserted-Identity				
	luser B or user A.	(with C	DIV related cause value) indicating the URI of		
SIP Parameter values:		-			
SIF Farameter values.	Dial string parameters options=PIXI TYPE SDP= PIXIT	'			
Comments:					
SIP UA A	SUT		SIP UA C		
UA	B enters NDUB condition (e.g. by	establi	shing a communication)		
INVITE	→	→	INVITE		
181 Call Is Being Forwa	Forwarded				
180 Ringing	← ← 180 Ringing				
200 OK INVITE	← 200 OK INVITE				
ACK	→ ACK				
D)/E	•		DV5		
BYE	→	→	BYE		
200 OK BYE	←	+	200 OK BYE		

SSS XXSSCFB05	CDIV reference to:					
333XX33CFB03	TS 124 504 [12], clause 4.5.2.6.4					
TSS reference:	SIP-SIP/Supplementary Service		1			
Configuration:	The user B has subscribed to CFB					
Corniguration.	Subscription options:	anu nas	S HOL activated TIN			
		n that hi	is communication has been diverted = Yes			
			erted to URI to originating user in diversion			
	notification = Yes	i oi aivo	Atout to Otti to originating door in divorsion			
		of his/h	ner URI to originating user in diversion			
	notification = Yes		in an area and an area area.			
	The user B has not subscribed to 0	CW				
Selection criteria:	CFB supported, NDUB status can be	e achie	ved for user B.			
Test purpose:	Ensure that when user A calls user	B which	is network determined user busy (NDUB), the			
	call is forwarded to user C.					
	Ensure that User A receives a 181					
	containing a P-Asserted-Identity inc	licating t	the URI of user B and			
	containing a History-Info header					
	including a first entry with the hi	-targete	d-to-URI of user B, index = 1,			
	cause param = 486 and	- h: 4	nated to LIDL of year Clinday 4.4			
OID Developed			geted-to-URI of user C, index = 1.1.			
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT	I				
Comments:	TTPE_SDP= PIXIT					
SIP UA A	SUT		SIP UA C			
0 0	B enters NDUB condition (e.g. by	establi	0.1 07.1 0			
INVITE	→ ····································	→	INVITE			
181 Call Is Being Forwa	rded 🗲					
180 Ringing	← ← 180 Ringing					
200 OK INVITE	← 200 OK INVITE					
ACK	→ ACK					
BYE	→					
200 OK BYE	+	+	200 OK BYE			

SSS_XXSSCFB06	CDIV reference to:	T				
	TS 124 504 [12], clause 4.5.2.6.2.2					
TSS reference:	SIP-SIP-SIP/Supplementary_Services/0	CFE	В			
Configuration:	The user B has subscribed to CFB and	ha	is not activated OIR			
	Subscription options:					
	Served user allows the presentation of h	nis/	her URI to diverted-to user = Yes			
	The user B has not subscribed to CW					
Selection criteria:	CFB supported, NDUB status can be ac	chie	eved for user B.			
Test purpose:	Ensure that when user A calls user B wl	hic	h is network determined user busy (NDUB), the			
	call is forwarded to user C.					
			essage containing a History-Info header			
	including an entry (with CDIV related ca	use	e value) with the hi-targeted-to-URI of user B.			
SIP Parameter values:	Dial string parameters options=PIXIT					
	TYPE_SDP= PIXIT					
Comments:						
SIP UA A			SIP UA C			
	B enters NDUB condition (e.g. by esta		· · · · · · · · · · · · · · · · · · ·			
INVITE	•	→	INVITE			
181 Call Is Being Forwa	rded					
(optional)	•	_	400 B: -:			
180 Ringing	← 180 Ringing					
200 OK INVITE	← 200 OK INVITE					
ACK	→ ACK					
DVE	<u>.</u>	_	DVE			
BYE		→	BYE			
200 OK BYE	←	(200 OK BYE			

6.2.6.2.2 UDUB

SSS_XXSSCFB07	CDIV reference to:					
	TS 124 504 [12], clause 4.5.2.6	5.5				
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CFB					
Configuration:	The user B has subscribed to CI	FB, CDIVN is not activate	d			
	Subscription options:					
	Served user receives indication t	hat a communication has	been forwarded = Yes			
Selection criteria:	CFB supported.					
Test purpose:	Ensure that when user A calls us					
	call is forwarded to user C. Ensu					
	media channels is performed cor					
OID D	Ensure that User B receives a M		ng the call diversion.			
SIP Parameter values:	Dial string parameters options=P	IXII				
	TYPE_SDP= PIXIT					
Comments: SIP UA A	SUT	SIP UA B	SIP UA C			
INVITE	→ → →	INVITE	SIP UA C			
IIIVIIE	*	486 Busy Here				
	•	ACK				
	Communication dive					
181 Call Is Being Forward		portoniou	→ INVITE			
(optional)						
,	→	MESSAGE				
	←	200 OK MESSAGE				
180 Ringing	← 180 Ringing					
200 OK INVITE	←		← 200 OK INVITE			
ACK	→ ACK					
	Communi	ication				
BYE	→		→ BYE			
200 OK BYE	+		← 200 OK BYE			

SSS_XXSSCFB08	CDIV referen			
TSS reference:	TS 124 504 [12], clau)	
	SIP-SIP-SIP/Supplement The user B has subscribe			
			JIVIN	
	CFB and CDIVN supporte			(1515)
	Ensure that when user A call is forwarded to user C media channels is perforr Ensure that User B, havin ndicating the call diversic	C. Ensure that in to med correctly (e.g. ag activated the C	he active call state the . testing QoS parame	e voice transfer on the ters).
SIP Parameter values:	Dial string parameters op TYPE_SDP= PIXIT			
Comments:				
SIP UA A	SUT	;	SIP UA B	SIP UA C
	Start A	Activation CDIVN		
		→ NOTIFY← 200 OK	SUBSCRIBE NOTIFY	
		ctivation CDIVN		
INVITE	→	→ INVITE← 486 Bus→ ACK	y Here	
	Communication	n diversion is pe	erformed	
181 Call Is Being Forwarde (optional)	ed ←	·	→	INVITE
,		→ NOTIFY		
		← 200 OK	NOTIFY	
180 Ringing	←			180 Ringing
200 OK INVITE	(200 OK INVITE
ACK	→		→	ACK
		mmunication		
BYE	→		→	BYE
200 OK BYE	←		-	200 OK BYE

SSS XXSSCFB09	CDIV reference to:		
7000XX00001 B03	TS 124 504 [12], clause 4.5.2.6.4	L	
TSS reference:	SIP-SIP-SIP/Supplementary_Serv	•	
Configuration:	The user B has subscribed to CFB		
gg	Subscription options:		
	Originating user receives notification	on that his communication	n has been diverted = No
Selection criteria:	CFB supported.		
Test purpose:	Ensure that when user A calls use	r B which is user determi	ned user busy (UDUB), the call
	is forwarded to user C.		
	Ensure that User A does not recei	ve a 181 Call Is Being Fo	rwarded message.
SIP Parameter values:	3	(IT	
	TYPE_SDP= PIXIT		
Comments:			
SIP UA A	SUT	SIP UA B	SIP UA C
INVITE	→	INVITE	
	-	486 Busy Here	
	→	ACK	
	Communication dive	rsion is performed	- INIV/ITE
100 Dinging	←		→ INVITE← 180 Ringing
180 Ringing 200 OK INVITE	-		€ 200 OK INVITE
ACK	→		→ ACK
AOR			2 AON
BYE	→		→ BYE
200 OK BYE	-		€ 200 OK BYE

SSS XXSSCFB10	CDIV refer	ence to:						
	TS 124 504 [12], o	clause 4.5.2.6.4						
TSS reference:		SIP-SIP/Supplementary_Services/CFB						
Configuration:	The user B has su	The user B has subscribed to CFB and has not activated TIR						
	Subscription opti	ons:						
	Originating user re	ceives notificatio	n that his communica	ation has been diverted = Yes				
		s the presentation	n of diverted to URI to	o originating user in diversion				
	notification = No							
		s the presentation	n of his/her URI to ori	ginating user in diversion				
	notification = No							
Selection criteria:	CFB supported.							
Test purpose:			B which is user deter	rmined user busy (UDUB), the call				
	is forwarded to use		O-11 I- D-1 F	da d				
			Call Is Being Forward	ded message				
	containing a Privac		ilue id and / indicating the URI o	fusor P and				
				cause value) indicating the URI of				
	user B or user A.	Story-Inito neade	(with ODIV related t	cause value, indicating the ONI of				
SIP Parameter values:	Dial string paramet	ters options=PIX	T					
on raidinotor values.	TYPE_SDP= PIXIT		•					
Comments:								
SIP UA A		SUT	SIP UA B	SIP UA C				
INVITE	→	→	INVITE					
		(486 Busy Here					
	_		ACK					
404 O-II I- D-in - F		unication divers	sion is performed	> IND//TE				
181 Call Is Being Forwa	araea 🗲			→ INVITE				
180 Ringing 200 OK INVITE	-			← 180 Ringing← 200 OK INVITE				
ACK	→			→ ACK				
AON	•			ZAON				
BYE	→			→ BYE				
200 OK BYE	-			← 200 OK BYE				

SSS_XXSSCFB11	CDIV reference to:						
	TS 124 504 [12], clause 4.5	5.2.6.4					
TSS reference:	SIP-SIP/Supplementary_Services/CFB						
Configuration:	The user B has subscribed to	to CFB and has not activate	ed TIR				
	Subscription options:						
			ation has been diverted = Yes				
		entation of diverted to URI t	o originating user in diversion				
	notification = Yes						
	Served user allows the prese	entation of his/her URI to or	iginating user in diversion				
	notification = Yes						
Selection criteria:	CFB supported.						
Test purpose:	lis forwarded to user C.	Is user B which is user dete	ermined user busy (UDUB), the call				
	Ensure that User A receives	a 191 Call la Baing Farwar	dod moosogo				
	containing a P-Asserted-Ider						
	containing a History-Info hea		Sel Dalid				
		h the hi-targeted-to-URI of ι	user B index = 1				
	cause param = 486 and	targetoa te et ti et	.,				
		with the hi-targeted-to-URI	of user C, index = 1.1				
SIP Parameter values:	Dial string parameters option						
	TYPE_SDP= PIXIT						
Comments:							
SIP UA A	SUT	SIP UA B	SIP UA C				
INVITE	→	→ INVITE					
		← 486 Busy Here → ACK					
	Communication	2 /1011					
181 Call Is Being Forwa	Communication diversion is performed Being Forwarded ← → INVITE						
180 Ringing	varded ← INVITE ← 180 Ringing						
200 OK INVITE	← 200 OK INVITE						
ACK	→ ACK						
			-				
BYE	→		→ BYE				
200 OK BYE	+		← 200 OK BYE				

CCC VVCCCED42	CDIV			1		
SSS_XXSSCFB12		reference to:				
		2], clause 4.5.2.				
TSS reference:		upplementary_S				
Configuration:			CFB	and has not activated	OIR	
	Subscription					
	Served user a	llows the present	atior	of his/her URI to dive	ted-to ι	ıser = Yes
Selection criteria:	CFB supported	d.				
Test purpose:	Ensure that wh	nen user A calls	user	B which is user determ	ined us	er busy (UDUB), the call
	is forwarded to					• • • • • • • • • • • • • • • • • • • •
	Ensure that Us	ser C receives ar	١N٧	ITE message containii	ng a His	tory-Info header (with
				an entry with the hi-ta		
SIP Parameter values:						
	TYPE_SĎP= F					
Comments:	<u> </u>					
SIP UA A		SUT		SIP UA B		SIP UA C
INVITE	→		→	INVITE		
			←	486 Busy Here		
			→	ACK		
	Co	mmunication d	ivers	sion is performed		
181 Call Is Being Forwa	arded ←			•	→	INVITE
180 Ringing	←				←	180 Ringing
200 OK INVITE	(←	5 5
ACK	→				→	ACK
BYE	→				→	BYE
200 OK BYE	←				←	200 OK BYE

6.2.6.3 CFNR

The user B has subscribed to CFNR, CDIVN is not activated Subscription options: Served user receives indication that a communication has been forwarded = Yes Selection criteria: CFNR supported. Test purpose: Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) CONCEL (Note) No reply timer expires - Communication diversion is performed ACK MESSAGE 200 OK CANCEL 487 Request Terminated ACK MESSAGE 200 OK INVITE COMMUNITE COMMUNICATION COMMUNICATION ACK PACK COMMUNICATION BYE COMMUNICATION PACK	SSS_XXSSCFNR01	CDIV reference to:					
The user B has subscribed to CFNR, CDIVN is not activated Subscription options: Served user receives indication that a communication has been forwarded = Yes Selection criteria: CFNR supported. Test purpose: Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) CONCEL (Note) No reply timer expires - Communication diversion is performed ACK MESSAGE 200 OK CANCEL 487 Request Terminated ACK MESSAGE 200 OK INVITE COMMUNITE COMMUNICATION COMMUNICATION ACK PACK COMMUNICATION BYE COMMUNICATION PACK		TS 124 504 [12], clause 4.5.2.6.	5				
Subscription options: Served user receives indication that a communication has been forwarded = Yes CFNR supported. Test purpose: Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) INVITE 487 Request Terminated ACK MESSAGE 400 OK INVITE ACK MESSAGE Communication Communication BYE COMMUNICATION COMMUNICATION ACK BYE COMMUNICATION BYE COMMUNICA	TSS reference:	SIP-SIP/Supplementary_Services/CFNR					
Served user receives indication that a communication has been forwarded = Yes Selection criteria: CFNR supported. Test purpose: Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded 181 Call Is Being Forwarded Coptional) COMMENSAGE 487 Request Terminated ACK MESSAGE 180 Ringing COMMENSAGE 180 Ringing COMMENSAGE 180 Ringing COMMENSAGE 180 Ringing COMMENSAGE 180 Ringing COMMINUITE ACK ACK BYE COMMUnication BYE COMMUnication BYE COMMUnication BYE COMMUnication BYE COMMUnication	Configuration:		NR, CDIVN is not activated				
Selection criteria: CFNR supported. Fest purpose: Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) INVITE 487 Request Terminated ACK MESSAGE 200 OK INVITE Communication **Communication** **Communication** **Communication** **Communication** **DESCAGE**							
Ensure that when user A calls user B which does not answer, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT TYPE_SDP= PIXIT Comments: SIP UA B SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) 1NVITE 200 OK CANCEL 487 Request Terminated ACK MESSAGE 200 OK INVITE Communication Communication Communication SIP UA B SIP UA C NVITE 180 Ringing COO OK INVITE ACK COMMUNICATION ACK PACK COMMUNICATION BYE 200 OK BYE COO OK BYE			at a communication has be	en forwarded = Yes			
user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded Optional) CANCEL (Note) 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Second Communication CANCEL (Note) 180 Ringing CANCEL 487 Request Terminated ACK MESSAGE 200 OK MESSAGE COMMUNITE ACK COMMUNICATION BYE COMMUNICATION COMMUN							
performed correctly (e.g. testing QoS parameters). Ensure that User B receives a MESSAGE request indicating the call diversion. Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded CANCEL (Note) 181 Call Is Being Forwarded ACK MESSAGE 200 OK CANCEL 487 Request Terminated ACK MESSAGE 200 OK INVITE Communication Communication SIP UA B SIP UA C SIP UA C NVITE 180 Ringing 487 Request Terminated ACK ACK ACK MESSAGE Communication BYE 200 OK BYE ACK Communication BYE 400 OK BYE	Test purpose:						
Ensure that User B receives a MESSAGE request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded Optional) CANCEL (Note) INVITE 487 Request Terminated ACK MESSAGE 487 Request Terminated ACK MESSAGE 200 OK MESSAGE 480 Ringing Communication Fig. 180 Ringing Communication SIP UA C NVITE 180 Ringing Communication Fig. 200 OK INVITE ACK ACK Communication BYE 200 OK BYE				on the media channels is			
Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C NVITE H80 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded Optional) CANCEL (Note) INVITE 487 Request Terminated ACK MESSAGE 400 OK INVITE ACK Communication SYE COMMUNICATION BYE COMMUNICATION BYE COMMUNICATION BYE COMMUNICATION SIP UA B SIP UA C ACK ASIP UA C NIVITE 480 Ringing COMMUNITE COMMUNICATION BYE COMMUNICATION COMMUNICATION BYE COMMUN							
TYPE_SDP= PIXIT	OID D			the call diversion.			
SIP UA A SUT SIP UA B SIP UA C NVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded (optional) 200 OK CANCEL 487 Request Terminated ACK MESSAGE 200 OK MESSAGE 200 OK INVITE ACK Communication SYE 200 OK BYE BYE 200 OK BYE ACK SIP UA C NVITE 480 Ringing 200 OK INVITE 4200 OK INVITE ACK ACK BYE 200 OK BYE	SIP Parameter values:		XII				
SIP UA A SUT SIP UA B NVITE → INVITE 180 Ringing No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded ← CANCEL (Note) → INVITE (optional) ← 200 OK CANCEL ← 487 Request Terminated → ACK → MESSAGE ← 200 OK MESSAGE ← 200 OK INVITE ACK Communication SYE → BYE ← 200 OK BYE	Commonto	TYPE_SDP= PIXIT					
NVITE		CIIT	SID IIA D	SIDIIAC			
180 Ringing				SIF UA C			
No reply timer expires - Communication diversion is performed 181 Call Is Being Forwarded ← → CANCEL (Note) → INVITE (optional) ← 200 OK CANCEL ← 487 Request Terminated → ACK → MESSAGE ← 200 OK MESSAGE ← 200 OK MESSAGE ← 180 Ringing ← 200 OK INVITE → ACK Communication BYE ← 200 OK BYE	····-						
## CANCEL (Note) → INVITE ## Coptional) ## CANCEL (Note) → INVITE ## 200 OK CANCEL		-		med			
(optional)							
## 200 OK CANCEL ## 487 Request Terminated ## ACK ## MESSAGE ## 200 OK MESSAGE ## 180 Ringing ## 200 OK INVITE ## COMMUNICATION ## ACK Communication ## BYE ## 200 OK BYE ## 200 OK BYE	(optional)		,				
→ ACK → MESSAGE ← 200 OK MESSAGE ← 180 Ringing ← 200 OK INVITE ← 200 OK INVITE → ACK Communication → BYE ← 200 OK BYE	. ,	←	200 OK CANCEL				
→ MESSAGE ← 200 OK MESSAGE ← 200 OK MESSAGE ← 180 Ringing ← 200 OK INVITE ← 200 OK INVITE → ACK Communication ⇒ BYE ← 200 OK BYE		←	487 Request Terminated				
# 200 OK MESSAGE # 180 Ringing # 200 OK INVITE # 200 OK INVITE # ACK Communication # BYE # 200 OK BYE # 200 OK BYE		→	ACK				
Communication		_					
# 180 Ringing # 200 OK INVITE # 200 OK INVITE # ACK # Communication BYE # 200 OK BYE # 200 OK BYE		_					
200 OK INVITE		+	200 OK MESSAGE	5 400 D: :			
ACK → ACK Communication BYE → BYE 200 OK BYE ← 200 OK BYE	000 01/ 151) //TE						
Communication BYE → BYE 200 OK BYE ← 200 OK BYE							
BYE → BYE 200 OK BYE ← 200 OK BYE	ACK	- /:•::					
200 OK BYE ← 200 OK BYE	RVE		CallOll	→ RVF			
		_					
NOTE: The communication to user B may be retained until the 180 Ringing from user C has been received.			intil the 180 Ringing from us				

SSS_XXSSCFNR02	CDIV reference to:						
	TS 124 504 [12], clause 4.5.2.6.5.	1					
TSS reference:	SIP-SIP-SIP/Supplementary_Service	SIP-SIP-SIP/Supplementary_Services/CFNR					
Configuration:	The user B has subscribed to CFN	R and CDIVN					
Selection criteria:	CFNR and CDIVN supported.						
Test purpose:	Ensure that when user A calls user						
	user C. Ensure that in the active cal		on the media channels is				
	performed correctly (e.g. testing Qo						
	Ensure that User B, having activate	d the CDIVN service, red	ceives a NOTIFY request				
OID Danamatan	indicating the call diversion.						
SIP Parameter values:	Dial string parameters options=PIXI TYPE_SDP= PIXIT	ı					
Comments:	OUT	CID LIA D	OID HA O				
SIP UA A	SUT Start Activatio	SIP UA B	SIP UA C				
		SUBSCRIBE					
	-	00 OK SUBSCRIBE					
		IOTIFY					
	← 2	00 OK NOTIFY					
	End Activation	n CDIVN					
INVITE	→ →	NVITE					
180 Ringing		80 Ringing	-				
	No reply timer expires - Communic						
181 Call Is Being Forwa (optional)	rded ← → C	CANCEL (Note)	→ INVITE				
,	← 2	00 OK CANCEL					
		87 Request Terminated					
	→ A	CK					
		IOTIFY					
	← 2	00 OK NOTIFY					
	_		← 180 Ringing				
200 OK INVITE	(€ 200 OK INVITE				
ACK	→ Communio	otion	→ ACK				
BYE	Communic →	ation	→ BYE				
200 OK BYE	7		→ BYE ← 200 OK BYE				
	ication to user B may be retained un	til the 180 Ringing from I					
INOTE. THE COMMINUM	ication to user is may be retained un	in the 100 Kinging Hom t	iser o has been received.				

SSS_XXSSCFNR03	CDIV reference to:							
	TS 124 504 [12], clause 4.5.2.6.	4						
TSS reference:	SIP-SIP-SIP/Supplementary_Ser	SIP-SIP/Supplementary_Services/CFNR						
Configuration:	The user B has subscribed to CF	NR						
	Subscription options:							
	Originating user receives notificat	ion that his communication h	nas been diverted = No					
Selection criteria:	CFNR supported.							
Test purpose:	Ensure that when user A calls use	er B which does not answer,	the call is forwarded to					
	user C.							
	Ensure that User A does not rece	ive a 181 Call Is Being Forw	arded message.					
SIP Parameter values:	Dial string parameters options=PI	XIT						
	TYPE_SDP= PIXIT							
Comments:								
SIP UA A	SUT	SIP UA B	SIP UA C					
INVITE	→ →	INVITE						
180 Ringing	+ +	180 Ringing						
	No reply timer expires - Commu							
	→	CANCEL (Note)	→ INVITE					
	-	200 OK CANCEL						
	←	487 Request Terminated						
	→	ACK	A 400 Discoins					
200 OK INIVITE	←		← 180 Ringing← 200 OK INVITE					
200 OK INVITE ACK	~		→ ACK					
ACK	7		7 AUN					
BYE	→		→ BYE					
200 OK BYE	-		€ 200 OK BYE					
NOTE: The commun	ication to user B may be retained	until the 180 Ringing from us	ser C has been received.					

SSS_XXSSCFNR04	CDIV reference to:							
	TS 124 504 [12], clause 4.5.2.6.4							
TSS reference:		SIP-SIP/Supplementary_Services/CFNR						
Configuration:	The user B has subscribed to CFNR and has not activated TIR							
	Subscription options:							
	Originating user receives notification							
	Served user allows the presentation	of diverted to URI to origina	ting user in diversion					
	notification = No	of hig/hor LIPI to originating	usor in diversion					
	Served user allows the presentation notification = No	of his/her ORI to originating	user in diversion					
Selection criteria:	CFNR supported.							
Test purpose:	Ensure that when user A calls user	B which does not answer the	e call is forwarded to					
root purpood.	user C.	b which does not answer, and	o dan lo forwardod to					
	Ensure that User A receives a 181 (Call Is Being Forwarded mes	sage					
	containing a Privacy header with val	lue "id" and						
	not containing a P-Asserted-Identity							
	not containing a History-Info header		or user A.					
SIP Parameter values:	Dial string parameters options=PIXI	Т						
	TYPE_SDP= PIXIT							
Comments: SIP UA A	SUT	SIP UA B	SIP UA C					
INVITE		INVITE	SIF UA C					
180 Ringing		180 Ringing						
	No reply timer expires - Communic		ed					
181 Call Is Being Forwa	rded ← →	CANCEL (Note)	INVITE					
		200 OK CANCEL						
		487 Request Terminated						
	→ ,	ACK						
200 OK INVITE	_		180 Ringing 200 OK INVITE					
ACK	← →		ACK					
AUN	7	-	TON					
BYE	→	-	BYE					
200 OK BYE	É		200 OK BYE					
NOTE: The communi	ication to user B may be retained unt	til the 180 Ringing from user	C has been received.					

SSS_XXSSCFNR05							
	TS 124 504 [12], clause 4.5.2.6.4						
TSS reference:		SIP-SIP/Supplementary_Services/CFNR					
Configuration:	The user B has subscribed to CFNR and has not activated TIR						
	Subscription options:						
	Originating user receives notificatio						
	Served user allows the presentation	n of diverted to URI to originat	ing user in diversion				
	notification = Yes	(1.1/1 1151					
	Served user allows the presentation	n of his/her URI to originating	user in diversion				
0 1 2 2 2	notification = Yes						
Selection criteria:	CFNR supported.						
Test purpose:	Ensure that when user A calls user	B which does not answer, the	e call is forwarded to				
	user C.	0 1 5 5 1 1					
	Ensure that User A receives a 181						
	containing a P-Asserted-Identity inc	dicating the URI of user B and					
	containing a History-Info header including a first entry with the hi	targeted to LIPI of upor P. in	dov – 1				
	cause param = 408 and	-targeteu-to-ORI of user B, III	uex = 1,				
	including a second entry with th	e hi-targeted-to-LIRI of user (` index - 1 1				
SIP Parameter values:	Dial string parameters options=PIX), IIIGEX = 1.1				
On Talameter values.	TYPE_SDP= PIXIT						
Comments:	1						
SIP UA A	SUT	SIP UA B	SIP UA C				
INVITE	→ →	INVITE					
180 Ringing	+ +	180 Ringing	ļ				
	No reply timer expires - Communication	cation diversion is performe	ed				
181 Call Is Being Forwa	arded ← →	CANCEL (Note)	INVITE				
		200 OK CANCEL					
		487 Request Terminated					
	→	ACK					
	_		180 Ringing				
200 OK INVITE	(200 OK INVITE				
ACK	→	-	• ACK				
DVE	→	_3	DVE				
BYE	7 ←	-	BYE 200 OK BYE				
200 OK BYE	<u> </u>						
NOTE: The commun	nication to user B may be retained un	iui uie 160 Kinging irom user	c has been received.				

SSS_XXSSCFNR06	CDIV re	ference to:				
	TS 124 504 [12]	, clause 4.5.2.6.2.2				
ΓSS reference:	SIP-SIP-SIP/Supplementary_Services/CFNR					
Configuration:	The user B has s	subscribed to CFNR	and has not activated	IOIR		
	Subscription op					
	Served user allow	vs the presentation o	of his/her URI to divert	ted-to user = Yes		
Selection criteria:	CFNR supported					
Test purpose:		user A calls user B	which does not answ	er, the call is forwarded to		
	user C.	0 : 15.17.47	- -			
				g a History-Info header (with		
ND Daramatar valuasi			in entry with the hi-tar	geted-to-URI of user B.		
SIP Parameter values:	TYPE_SDP= PIX	eters options=PIXIT				
Comments:	TITE_SUF= FIX	.1.1				
SIP UA A		SUT	SIP UA B	SIP UA C		
NVITE	→	→	INVITE	511 57t 5		
80 Ringing	←	←	180 Ringing			
	_	_	180 Ringing tion diversion is per	formed		
ľ	No reply timer ex	_	180 Ringing tion diversion is per CANCEL (Note)	formed → INVITE		
ľ	No reply timer ex	pires - Communica	tion diversion is per			
ľ	No reply timer ex	pires - Communica →	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request			
ľ	No reply timer ex	pires - Communica → ← ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request Terminated			
ľ	No reply timer ex	pires - Communica → ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request	→ INVITE		
81 Call Is Being Forwa	No reply timer ex rded ←	pires - Communica → ← ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request Terminated	→ INVITE 180 Ringing		
81 Call Is Being Forwa	No reply timer ex rded ← ←	pires - Communica → ← ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request Terminated	→ INVITE ← 180 Ringing ← 200 OK INVITE		
180 Ringing 181 Call Is Being Forwa 200 OK INVITE ACK	No reply timer ex rded ←	pires - Communica → ← ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request Terminated	→ INVITE 180 Ringing		
81 Call Is Being Forwa	No reply timer ex rded ← ←	pires - Communica → ← ←	tion diversion is per CANCEL (Note) 200 OK CANCEL 487 Request Terminated	→ INVITE ← 180 Ringing ← 200 OK INVITE		

SSS XXSSCFNR07	CDIV reference to:						
	TS 124 504 [12], clause 4.5.2.6.3 3)						
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CFNR						
Configuration:	The user B has subscribed to C	FNR					
	Subscription options:						
	Served user communication rete						
	communication to the served	user until alerting begin	s at the diverted-to user				
Selection criteria:	CFNR supported.						
Test purpose:	Ensure that when user A calls user B which has not answered before the expiry of the No reply timer, and when the communication has been forwarded to user C and when user B answers the communication before user C starts alerting, the communication is established between user A and user B and the communication is cancelled towards user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters).						
SIP Parameter values:	Dial string parameters options=I						
Comments:							
SIP UA A	SUT	SIP UA B	SIP UA C				
INVITE	→ →						
180 Ringing	+ +		_				
	o reply timer expires - Commu	nication diversion is perf					
181 Call Is Being Forwar (optional)	rded C		→ INVITE				
200 OK ÍNVITE		200 OK INVITE					
ACK	→ ACK → CANCEL ← 200 OK CANCEL						
	Commun	nication					
BYE	→ →	BYE					
200 OK BYE	+ +	200 OK BYE					

6.2.6.4 CFNRc

TS 124 504 [12], clause 4.5.2.6.5.1 TSS reference: SIP-SIP-SIP/Supplementary_Services/CFNRc Configuration: The user B has subscribed to CFNRc and CDIVN Selection criteria: CFNRC and CDIVN supported Test purpose: Ensure that when user A calls user B which is unreachable, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed (optional) 180 Ringing 4 180 Ringing 4 200 OK INVITE	SSS XXSSCFNRc01	CDIV reference to:	-			
TSS reference: SIP-SIP/Supplementary_Services/CFNRc Configuration: The user B has subscribed to CFNRc and CDIVN Selection criteria: CFNRC and CDIVN supported Test purpose: Ensure that when user A calls user B which is unreachable, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA B Activation CDIVN ← SUBSCRIBE → 200 OK SUBSCRIBE → 200 OK SUBSCRIBE → NOTIFY ← 200 OK NOTIFY Loser B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed ← 180 Ringing ← 180 Ringing ← 200 OK INVITE	OOO_XXOOOI NIKCOI					
Configuration: The user B has subscribed to CFNRc and CDIVN Selection criteria: CFNRC and CDIVN supported Test purpose: Ensure that when user A calls user B which is unreachable, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters).	TSS reference:					
Selection criteria: CFNRC and CDIVN supported Ensure that when user A calls user B which is unreachable, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B Activation CDIVN ← SUBSCRIBE → 200 OK SUBSCRIBE → NOTIFY ← 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded ← → INVITE 180 Ringing ← 180 Ringing ← 200 OK INVITE						
Test purpose: Ensure that when user A calls user B which is unreachable, the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY 200 OK NOTIFY Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing Communication GIVITE 180 Ringing Communication CDIVN 180 Ringing Communication CDIVN 180 Ringing COMMINVITE			c and OBIVIV			
user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing Communication Guilly (indication for specified) 180 Ringing Communication Guilly (indication for specified) 180 Ringing Communication Guilly (indication for specified) SIP UA B SIP UA C Activation CDIVN (indication for specified) INVITE Communication diversion is performed			S which is unreachable, the c	all is forwarded to		
performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B SIP UA C Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE ** 480 Ringing 200 OK INVITE	rest purpose.	user C. Ensure that in the active call	state the voice transfer on the	ne media channels is		
Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT SIP UA B Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE Figure 180 Ringing 180 Ringing 180 Ringing 200 OK INVITE						
indicating the call diversion. SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT Comments: SIP UA A SUT Activation CDIVN SUBSCRIBE SUBSCRIBE NOTIFY 200 OK SUBSCRIBE NOTIFY Loser B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE TYPE_SDP= PIXIT SIP UA B SIP UA C Activation CDIVN (indication CDIVN (indication not specified) NOTIFY (indication not specified) NIVITE TRUE 180 Ringing 200 OK INVITE				s a NOTIFY request		
TYPE_SDP= PIXIT Comments: SIP UA A SUT SUBSCRIBE SUBSCRIBE NOTIFY 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE Type_SDP= PIXIT SIP UA B SIP UA C Activation CDIVN (indication not specified) NOTIFY Communication diversion is performed 181 Call Is Being Forwarded (optional)			,	•		
Comments: SIP UA A SUT SIP UA B Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE ** H80 Ringing 200 OK INVITE	SIP Parameter values:	Dial string parameters options=PIXI7	-			
SIP UA A SUT Activation CDIVN SUBSCRIBE → 200 OK SUBSCRIBE → NOTIFY ← 200 OK NOTIFY INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE **The subscribed is performed to the subs		TYPE_SDP= PIXIT				
Activation CDIVN SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE 180 Ringing 200 OK INVITE		-				
← SUBSCRIBE → 200 OK SUBSCRIBE → NOTIFY ← 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE ← 180 Ringing 200 OK INVITE	SIP UA A			SIP UA C		
→ 200 OK SUBSCRIBE → NOTIFY ← 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded ← → INVITE 180 Ringing 200 OK INVITE + 180 Ringing 200 OK INVITE						
→ NOTIFY ← 200 OK NOTIFY User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded ← → INVITE (optional) 180 Ringing 200 OK INVITE + 180 Ringing 200 OK INVITE		_				
User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE 180 Ringing 200 OK INVITE		- - \				
User B becomes "Not reachable" (indication not specified) INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE User B becomes "Not reachable" (indication not specified) INVITE * INVITE * 180 Ringing 200 OK INVITE			_			
INVITE Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE Table 180 Ringing 200 OK INVITE						
Communication diversion is performed 181 Call Is Being Forwarded (optional) 180 Ringing 200 OK INVITE Communication diversion is performed INVITE 180 Ringing 200 OK INVITE			maication not specifica)			
181 Call Is Being Forwarded ← INVITE 180 Ringing ← 180 Ringing 200 OK INVITE ← 200 OK INVITE		Communication diversion	n is performed			
(optional) 180 Ringing ← 180 Ringing 200 OK INVITE ← 200 OK INVITE	181 Call Is Being Forward		-	INVITE		
180 Ringing ← 180 Ringing ← 200 OK INVITE ← 200 OK INVITE	_					
200 OK ĬNVITE ← 200 OK ĬNVITE	,					
200 OK ĬNVITE ← 200 OK ĬNVITE						
		_				
		-				
ACK → ACK	ACK	-		ACK		
Communication BYE → BYE	BVE			DVE		
BYE → BYE 200 OK BYE ← 200 OK BYE						
User B becomes "Reachable"	ZUU OK DIE					
→ NOTIFY						
€ 200 OK NOTIFY						

SSS XXSSCFNRc02	CDIV reference to:			
	TS 124 504 [12], clause 4.5.2.6.4			
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFN	Rc	
Configuration:	The user B has subscribed to CFNI	₹c		
	Subscription options:			
	Originating user receives notification	n that hi	s communication h	nas been diverted = No
Selection criteria:	CFNRC supported			
Test purpose:	Ensure that when user A calls user	B which	is unreachable, th	ne call is forwarded to
	user C.			
	Ensure that User A does not receive	e a 181	Call Is Being Forw	arded message.
SIP Parameter values:	Dial string parameters options=PIXI	T		
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A				SIP UA C
INVITE	→	→	INVITE	
180 Ringing	←	←	180 Ringing	
200 OK INVITE	_	_	200 OK INVITE	
ACK	→	→	ACK	
BYE	→	→	BYE	
200 OK BYE	←	←	200 OK BYE	

SSS XXSSCFNRc03	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.4				
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFN	IRc		
Configuration:	The user B has subscribed to CFNRc and has not activated TIR				
	Subscription options:				
			s communication has been diverted = Yes		
		of dive	rted to URI to originating user in diversion		
	notification = No		under the second second		
		of his/h	ner URI to originating user in diversion		
Colontina suitavia:	notification = No				
Selection criteria:	CFNRC supported	Dleiele	is consequently the sell is fewered at the		
Test purpose:	luser C.	B which	is unreachable, the call is forwarded to		
	Ensure that User A receives a 181 Call Is Being Forwarded message				
	containing a Privacy header with va				
	not containing a P-Asserted-Identity indicating the URI of user B and				
			DIV related cause value) indicating the URI of		
	user B or user A.	(
SIP Parameter values:	Dial string parameters options=PIXI	Т			
	TYPE_SDP= PIXIT				
Comments:					
SIP UA A	SUT		SIP UA C		
INVITE	→	→	INVITE		
181 Call Is Being Forward		_			
180 Ringing ←		(180 Ringing		
200 OK INVITE	€ 200 OK INVITE				
ACK	→	→	ACK		
BYE	→	→	BYF		
200 OK BYE	É	÷	200 OK BYE		

SSS_XXSSCFNRc04				
T00 (TS 124 504 [12], clause 4.5.2.6.4	/OFN	ID.	
TSS reference:	SIP-SIP-SIP/Supplementary_Service			
Configuration:	The user B has subscribed to CFN	Rc and I	has not activated TIR	
	Subscription options:			
			is communication has been diverted = Yes	
	notification = Yes	of dive	erted to URI to originating user in diversion	
		of his/h	her URI to originating user in diversion	
	notification = Yes	. 01 1110/1	nor ora to originating door in diversion	
Selection criteria:	CFNRC supported			
Test purpose:	Ensure that when user A calls user B which is unreachable, the call is forwarded to user C.			
	Ensure that User A receives a 181	Call Is B	Being Forwarded message	
	containing a P-Asserted-Identity inc			
	containing a History-Info header	_		
	including a first entry with the hi-targeted-to-URI of user B, index = 1,			
	cause param = 503 and			
			geted-to-URI of user C, index = 1.1	
SIP Parameter values:]	Т		
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A		_	SIP UA C	
INVITE	→	→	INVITE	
	Call Is Being Forwarded			
180 Ringing	<	-	180 Ringing	
200 OK INVITE	← →	← →	200 OK INVITE	
ACK	7	7	ACK	
BYE	→	→	BYE	
200 OK BYE	←	←	200 OK BYE	

SSS_XXSSCFNRc05	CDIV reference to:			
	TS 124 504 [12], clause 4.5.2.6.2.2			
TSS reference:	SIP-SIP-SIP/Supplementary_Services	/CFN	IRc	
Configuration:	The user B has subscribed to CFNRc	and l	has not activated (DIR
	Subscription options:			
	Served user allows the presentation of	f his/h	ner URI to diverted	-to user = Yes
Selection criteria:	CFNRC supported			
Test purpose:	Ensure that when user A calls user B	which	n is unreachable, th	ne call is forwarded to
	user C.			
	Ensure that User C receives an INVIT			
	including an entry (with CDIV related of	ause	value) with the hi-	targeted-to-URI of user B.
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A	SUT			SIP UA C
INVITE	→	→	INVITE	
181 Call Is Being Forwa	arded ←			
(optional)				
180 Ringing	←	←	180 Ringing	
200 OK INVITE	←	←	200 OK INVITE	
ACK	→	→	ACK	
BYE	→	→	BYE	
200 OK BYE	+	←	200 OK BYE	

6.2.6.5 CFNL

SSS_XXSSCFNL01	CDIV reference to:		
	TS 124 504 [12], clause 4.5.2.6.		
TSS reference:	SIP-SIP-SIP/Supplementary_Ser		
Configuration:	The user B has subscribed to CF	NL and CDIVN	
Selection criteria:	CFNL and CDIVN supported		
Test purpose:	Ensure that when user A calls ususer C. Ensure that in the active operformed correctly (e.g. testing Censure that User B, having activatindicating the call diversion.	call state the voice transfe QoS parameters). ated the CDIVN service, r	er on the media channels is
SIP Parameter values:	Dial string parameters options=PITYPE_SDP= PIXIT	IXIT	
Comments:			ļ
SIP UA A	SUT Activation	SIP UA B	SIP UA C
INVITE	← → → ← Log off U	SUBSCRIBE 200 OK SUBSCRIBE NOTIFY 200 OK NOTIFY ser B	
	Communication diver	sion is performed	
181 Call Is Being Forwar (optional)	ded ←		→ INVITE
180 Ringing	←		← 180 Ringing
200 OK INVITE	←		◆ 200 OK INVITE
ACK	→		→ ACK
	Communic	cation	
BYE	→		→ BYE
200 OK BYE	←	_	← 200 OK BYE
	Log in Us		
		NOTIFY	
	←	200 OK NOTIFY	

SSS_XXSSCFNL02	CDIV reference to:			
	TS 124 504 [12], clause 4.5.2.6.4			
TSS reference:	SIP-SIP-SIP/Supplementary_Service	ces/CFN	IL	
Configuration:	The user B has subscribed to CFN	L		
	Subscription options:			
	Originating user receives notification	n that hi	s communication I	has been diverted = No
Selection criteria:	CFNL supported			
Test purpose:	Ensure that when user A calls user	B which	is not logged in, t	he call is forwarded to
	user C.			
	Ensure that User A does not receive		Call Is Being Forw	varded message.
SIP Parameter values:	Dial string parameters options=PIX	Τ		
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A	SUT			SIP UA C
INVITE	→	→	INVITE	
180 Ringing	←	←	180 Ringing	
200 OK INVITE	_	-	200 OK INVITE	
ACK	→	→	ACK	
BYE	→	→	BYE	
200 OK BYE	←	+	200 OK BYE	

SSS_XXSSCFNL03	CDIV reference to:			
	TS 124 504 [12], clause 4.5.2.6.4			
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFN	L	
Configuration:	The user B has subscribed to CFN	L and ha	as not activated TIR	
	Subscription options:			
	Originating user receives notificatio			
	Served user allows the presentation	າ of dive	rted to URI to originati	ing user in diversion
	notification = No			
	Served user allows the presentation	i of his/h	ner URI to originating u	user in diversion
	notification = No			
Selection criteria:	CFNL supported			
Test purpose:	Ensure that when user A calls user	B which	is not logged in, the o	call is forwarded to
	user C.	_		
	Ensure that User A receives a 181		•	sage
	containing a Privacy header with va			
	not containing a P-Asserted-Identity			
	not containing a History-Info header	r (with C	DIV related cause val	ue) indicating the URI of
OID Developed	user B or user A.	_		
SIP Parameter values:	Dial string parameters options=PIXI	ı I		
0	TYPE_SDP= PIXIT			
Comments: SIP UA A	SUT		eir	P UA C
INVITE	→	→	INVITE	- UA C
181 Call Is Being Forwa	——————————————————————————————————————	7	IINVIIE	
180 Ringing	tilded ←	←	180 Ringing	
200 OK INVITE	← 200 OK INVITE			
ACK	→ ACK			
7.01	-	•	7.010	
BYE	→	→	BYE	
200 OK BYE	-	←	200 OK BYE	

SSS XXSSCFNL04	CDIV reference to:		
	TS 124 504 [12], clause 4.5.2.6.4		
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CFNL	
Configuration:	The user B has subscribed to CFN	_ and has not activated TIR	
	Subscription options:		
		n that his communication has been diverted = Yes	
		of diverted to URI to originating user in diversion	
	notification = Yes		
		of his/her URI to originating user in diversion	
	notification = Yes		
Selection criteria:	CFNL supported		
Test purpose:		B which is not logged in, the call is forwarded to	
	user C.	Call la Daine Famuandad massage	
	Ensure that User A receives a 181 (
	containing a P-Asserted-Identity ind	icating the URI of user B and	
	containing a History-Info header	-targeted-to-URI of user B, index = 1,	
	cause param = 404 and	-targeted-to-ONT of user b, index = 1,	
		e hi-targeted-to-URI of user C, index = 1.1	
SIP Parameter values:	Dial string parameters options=PIXI		
On Taramotor values.	TYPE SDP= PIXIT	'	
Comments:	1 ===		
SIP UA	A SUT	SIP UA C	
INVITE	→	→ INVITE	
181 Call Is Being Forw	arded ←		
180 Ringing	← ← 180 Ringing		
200 OK INVITE	← 200 OK INVITE		
ACK	→	→ ACK	
BYE	→	→ BYE	
200 OK BYE	←	← 200 OK BYE	

SSS_XXSSCFNL05	CDIV reference to:	T		
	TS 124 504 [12], clause 4.5.2.6.2.2			
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CF	-N	L	
Configuration:	The user B has subscribed to CFNL and	ha	as not activated OIR	
	Subscription options:			
	Served user allows the presentation of his	s/h	ner URI to diverted-to	user = Yes
Selection criteria:	CFNL supported			
Test purpose:	Ensure that when user A calls user B which	ch	is not logged in, the	call is forwarded to
	user C.			
	Ensure that User C receives an INVITE m			
	CDIV related cause value) including an er	ntr	y with the hi-targeted	d-to-URI of user B.
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT			
Comments:				
SIP UA A			~	IP UA C
INVITE	→ →	,	INVITE	
181 Call Is Being Forward	rded ←			
(optional)				
180 Ringing	+ +		180 Ringing	
200 OK INVITE	← 200 OK INVITE			
ACK	→ ACK			
BYE	→ →	•	BYE	
200 OK BYE	`		200 OK BYE	

6.2.6.6 CD

6.2.6.6.1 CD Immediate

SSS_XXSSCD01		erence to:		
], clause 4.5.2.6.		
TSS reference:	SIP-SIP-SIP/Sup			
Configuration:			, CDIVN is not activated	
	Subscription op			
		eives indication th	nat a communication has b	peen forwarded = Yes
Selection criteria:	CD supported.			
Test purpose:				mmunication towards user C
				d to user C. Ensure that in
			ster on the media channel	Is is performed correctly (e.g.
	testing QoS para		SSAGE request indicating	a the call diversion
SIP Parameter values:	Dial string param			g the call diversion.
SIF Farameter values.	TYPE_SDP= PIX		A11	
Comments:	1111 L_OD1 = 117	XI I		
SIP UA A		SUT	SIP UA B	SIP UA C
INVITE	→	→	INVITE	
		←	302 Moved Temporarily	
		→	ACK	
		unication divers	sion is performed	
181 Call Is Being Forwar	ded ←			→ INVITE
(optional)		_		
		→	MESSAGE	
400 Dia sia s	•	+	200 OK MESSAGE	# 400 Disarias
180 Ringing 200 OK INVITE	←			← 180 Ringing← 200 OK INVITE
ACK	→			→ ACK
AON		Communic	ation	AON
BYE	→	30 11.111d1110	· · · · · · · · · · · · · · · · · · ·	→ BYE
200 OK BYE	←			€ 200 OK BYE

SSS_XXSSCD02	CDIV refere	nce to:				
	TS 124 504 [12], cla	use 4.5.2.6.5.				
TSS reference:	SIP-SIP/Supplementary_Services/CFB					
Configuration:	The user B has subso		d CDIVN			
Selection criteria:	CD and CDIVN suppo	rted.				
Test purpose:	Ensure that when user A calls user B which deflects the communication towards user C immediately (i.e. before alerting starts), the call is forwarded to user C. Ensure that in the active call state the voice transfer on the media channels is performed correctly (e.g. testing QoS parameters). Ensure that User B, having activated the CDIVN service, receives a NOTIFY request indicating the call diversion.					
SIP Parameter values:	Dial string parameters TYPE_SDP= PIXIT	options=PIXIT	•			
Comments:						
SIP UA A	SUT		SIP UA B	SIP UA C		
	Sta	rt Activation (
	En	→ 20 → No	JBSCRIBE 0 OK SUBSCRIBE DTIFY 0 OK NOTIFY DIVN			
INVITE	→		VITE			
			2 Moved Temporarily			
			CK			
		ation diversio	n is performed			
181 Call Is Being Forward (optional)	ded ←			→ INVITE		
		→ No	OTIFY			
		← 20	0 OK NOTIFY			
180 Ringing	←			← 180 Ringing		
200 OK INVITE	(← 200 OK INVITE		
ACK	→			→ ACK		
DVE		Communicati	on	> 5)/5		
BYE)			→ BYE		
200 OK BYE	+			← 200 OK BYE		

222 1/1/2222		1	
SSS_XXSSCD03	CDIV reference to:		
	TS 124 504 [12], clause 4.5.2.6.4	1	
TSS reference:	SIP-SIP-SIP/Supplementary_Serv	rices/CD	
Configuration:	The user B has subscribed to CD		
	Subscription options:		
	Originating user receives notificati	on that his communication	has been diverted = No
Selection criteria:	CD supported.		
Test purpose:	Ensure that when user A calls use	r B which deflects the com	munication towards user C
	immediately (i.e. before alerting st	arts), the call is forwarded t	o user C.
	Ensure that User A does not recei	ve a 181 Call Is Being Forv	varded message.
SIP Parameter values:			-
	TYPE_SDP= PIXIT		
Comments:			
SIP UA A	SUT	SIP UA B	SIP UA C
INVITE	→ →	INVITE	
	+	302 Moved Temporarily	
	→	ACK	
	Communication deflect	ction is performed	
			→ INVITE
180 Ringing	←		 180 Ringing
200 OK INVITE	←		← 200 OK INVITE
ACK	→		→ ACK
BYE	→		→ BYE
200 OK BYE	←		← 200 OK BYE

SSS_XXSSCD04	CDIV reference to:		
	TS 124 504 [12], clause 4.5.2.6.4		
TSS reference:	SIP-SIP-SIP/Supplementary_Servi	ces/CD	
Configuration:	The user B has subscribed to CD a	and has not activated TIR	
	Subscription options:		
	Originating user receives notification		
	Served user allows the presentatio	n of diverted to URI to origina	ating user in diversion
	notification = No		
	Served user allows the presentatio notification = No	n of his/her URI to originating	g user in diversion
Selection criteria:	CD supported.		
Test purpose:	Ensure that when user A calls user		
	immediately (i.e. before alerting sta		
	Ensure that User A receives a 181		ssage
	containing a Privacy header with va		_
	not containing a P-Asserted-Identit		
	not containing a History-Info heade		3 or user A.
SIP Parameter values:	Dial string parameters options=PIX TYPE_SDP= PIXIT	AT .	
Comments:			
SIP UA A	SUT	SIP UA B	SIP UA C
INVITE		INVITE	
	(302 Moved Temporarily	
	→	ACK	
404 Call la Daine Famue	Communication defle		- INDUTE
181 Call Is Being Forwa			→ INVITE
180 Ringing 200 OK INVITE	←		← 180 Ringing← 200 OK INVITE
ACK	5		→ ACK
ACK	7		Z AUR
BYE	→		→ BYF
200 OK BYE	ě		← 200 OK BYE

SSS_XXSSCD05	CDIV reference to:		
	TS 124 504 [12], clause 4.5.2.6.4		
TSS reference:	SIP-SIP-SIP/Supplementary_Serv		
Configuration:	The user B has subscribed to CD	and has not activated TIR	
	Subscription options:		
	Originating user receives notification		
	Served user allows the presentation	on of diverted to URI to origi	nating user in diversion
	notification = Yes	(1: // LIDI /	
	Served user allows the presentation	on of his/her URI to originati	ng user in diversion
Calaatian aritaria.	notification = Yes		
Selection criteria:	CD supported.	. Durhich deflects the comm	avaisatis a tavaarda vasa C
Test purpose:	Ensure that when user A calls use immediately (i.e. before alerting states)		
	Ensure that User A receives a 181		
	containing a P-Asserted-Identity in		
	containing a History-Info header	idioding the orthologope	
	including a first entry with the h	ni-targeted-to-URI of user B	. index = 1.
	cause param = 480 and	3	,
	including a second entry with t	he hi-targeted-to-URI of use	er C, index = 1.1
	Note: "index of these new H-I of	entries may be different if of	ther entries have been
	added to H-I header."		
SIP Parameter values:		KIT	
_	TYPE_SDP= PIXIT		
Comments:	OUT	CID IIA D	OID IIA O
SIP UA A	SUT	SIP UA B INVITE	SIP UA C
IINVIIE	-	302 Moved Temporarily	
	÷	ACK	
	Communication deflect		
181 Call Is Being Forwa			→ INVITE
180 Ringing	←		← 180 Ringing
200 OK INVITE	←		← 200 OK INVITE
ACK	→		→ ACK
BYE	→		→ BYE
200 OK BYE	←		← 200 OK BYE

SSS XXSSCD06	CDIV reference to:				
	TS 124 504 [12], clause 4.5.2.6.2.2	2			
TSS reference:	SIP-SIP-SIP/Supplementary_Service	es/CD			
Configuration:	The user B has subscribed to CD ar	nd has not activated OII	R		
	Subscription options:				
	Served user allows the presentation	of his/her URI to diverte	ed-to user = Yes		
Selection criteria:	CD supported.				
Test purpose:	Ensure that when user A calls user B which deflects the communication towards user C immediately (i.e. before alerting starts), the call is forwarded to user C. Ensure that User C receives an INVITE message containing a History-Info header (with CDIV related cause value) including an entry with the hi-targeted-to-URI of user B.				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT	-			
Comments:	_				
SIP UA A	SUT	SIP UA B	SIP UA C		
INVITE	→	INVITE			
	←	302 Moved			
	-	Temporarily			
	,	ACK			
181 Call Is Being Forwa	Communication deflection	on is periornied	→ INVITE		
180 Ringing	(← 180 Ringing		
200 OK INVITE	←		€ 200 OK INVITE		
ACK)		→ ACK		
BYE	→		→ BYE		
200 OK BYE	←		← 200 OK BYE		

6.2.6.6.2 CD during alerting

SSS_XXSSCD07	CDIV reference to: TS 124 504 [12], clause 4.5.2.6.	4			
TSS reference:	SIP-SIP/Supplementary_Services				
Configuration:	The user B has subscribed to CD Subscription options: Originating user receives notificat		has been diverted = No		
Selection criteria:	CD supported.				
Test purpose:	Ensure that when user A calls user B which deflects the communication towards user C during alerting, the call is forwarded to user C. Ensure that User A does not receive a 181 Call Is Being Forwarded message.				
SIP Parameter values:	Dial string parameters options=PI TYPE_SDP= PIXIT	XIT	-		
Comments: SIP UA A	SUT	SIP UA B	SIP UA C		
INVITE 180 Ringing	→ → ← ← ←	INVITE 180 Ringing 302 Moved Temporarily ACK			
	Communication defle				
			→ INVITE		
200 OK INVITE ACK	← →		← 180 Ringing← 200 OK INVITE→ ACK		
BYE 200 OK BYE	→		→ BYE← 200 OK BYE		

6.2.7 Test purposes for CONF

6.2.7.1 Conference creation

SSS_XXSSCONF_C	CONF reference to:	
RE_001	TS 124 147 [19], clauses 5.2.1, 5.3.1.3	
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_CRE	
Configuration:	CONF	
	Conference creation by Three-way session creation. REFER request to the user, Conference event package is subscribed.	

SSS XXSSCONF C CONF reference to: RE_001 TS 124 147 [19], clauses 5.2.1, 5.3.1.3 Creation of the conference Test purpose: Ensure that, when User A sends an INVITE request with request URI set to a valid conference factory URI: User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request. User A sends a SUBSCRIBE request with request URI set to the conference URI (previously stored) and the Event header set to "conference". User A receives a 200 OK SIP response to the SUBSCRIBE request. User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference". User A sends a 200 OK SIP response to the NOTIFY request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user (User B or User C) with request URI set to the URI of the address of the remote user and Refer-To header set to the conference URI previously stored (the parameter "method" set to INVITE in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header set to the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conference URI to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. User A sends a BYE request to the remote user in order to release the active SIP session between the user A and the remote user. Remote user receives a BYE request from user A. Remote user sends a 200 OK SIP response to the BYE request. User A receives a 200 OK SIP response to the BYE request. User A receives a NOTIFY from the conference focus (on the same dialog of the SUBSCRIBE previously sent). User A sends a 200 OK SIP response to the NOTIFY request. NOTE: Additionally, User A may include the Referred-By header to the REFER and set it to his SIP URI.

SSS_XXSSCONF_C	С	ONF reference to:				
RE 001	_	7 [19], clauses 5.2.1, 5.3.	1.3			
Precondition:	User A was participating in two SIP sessions (one with User B and the other with User C).					
		ession between User A and				
SIP Parameter values:		eters options=PIXIT			· · · · · · · · · · · · · · · · · · ·	
	TYPE_SDP= PIX					
	SIP header value					
	INVITE:	Request URI contains the	he <i>confere</i>	nce factory UR	2/	
	200 OK:	"isfocus" feature parame				
		conference URI contain	s in the Co	ntact header fi	eld	
	SUBSCRIBE:	Request URI contains the	he confere	nce URI,		
		Event header contains '	'conferenc	e"		
	REFER:	Refer-to header contain				
	NOTIFY:	Event header contains				
		active, application/confe				
	NOTIFY 1:	Event header contains I				
				essage/sipfrag'	', message/sipfrag body	
	NOTIFY O	contains SIP/2.0 100 Tr				
	NOTIFY 2:				header contains terminated,	
				essage/siprrag	', message/sipfrag body	
	NOTIFY 3:	contains SIP/2.0 200 O		a: Cubagription	State header centains	
	NOTIFT 3.	Event header contains (active, application/conf				
	NOTIFY 4:				header contains active ,	
	11011114.				', message/sipfrag body	
		contains SIP/2.0 100 Tr		cssage/sipirag	, message/sipilag body	
	NOTIFY 5:			scription-State I	header contains terminated,	
					', message/sipfrag body	
		contains SIP/2.0 200 O		g-,pg	, meeting or any	
	NOTIFY 6: Event header contains conference ; Subscription-State header contains					
		active, application/confe	erence-info	o+xml contains	connected, dialled-in	
Comments:		_				
SIP UA A		Focus	_	UA B	SIP UA C	
IND ATE		Establishment of ses				
INVITE 180 Ringing	→	→	INVITE	ina		
200 OK (INVITE)	-	(180 Ring 200 OK (
ACK	→	→	ACK	(IINVIIE)		
AOR	•	•	AOIX			
INVITE (sendonly)	→	→	INVITE (sendonly)		
200 OK (recvonly)	-	+		(recvonly)		
ACK	→	→	ACK	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		Establishment of ses				
INVITE	→			→	NVITE	
180 Ringing	←			+	 180 Ringing 	
200 OK (INVITE)	←			+		
ACK	→			→	ACK	
	_	Conference crea	tion			
INVITE		/ITE				
200 OK (INVITE)		O OK (INVITE)				
ACK	→ AC					
SUBSCRIBE		BSCRIBE				
200 OK (SUBSCRIBE)		O OK (SUBSCRIBE)				
NOTIFY		OK (NOTIEV)				
200 OK (NOTIFY)	7 200	O OK (NOTIFY)				

SSS_XXSSCONF_C	CON	F reference to:					
RE_001	TS 124 147 [19	9], clauses 5.2.1, 5.3	.1.3				
	Inviting UA B to the conference						
REFER	→	→	REFER				
202 Accepted	←	←	202 Ac	cepted			
		INVITE 🗲	INVITE				
NOTIFY 1	←	←	NOTIF'				
200 OK (NOTIFY 1)	→	→	200 OK	(NOTIFY 1)			
		200 OK →					
		ACK ←					
NOTIFY 2	←	←	NOTIF'	Y 2			
200 OK (NOTIFY 2)	→	→	200 OK	(NOTIFY 2)			
BYE	→	→	BYE				
200 OK (BYE)	(←	200 OK	(BYE)			
NOTIFY 3	← NOTIF	-					
200 OK (NOTIFY 3)		K (NOTIFY 3)					
		viting UA C to the c	onference	е			
REFER	→				→	REFER	
202 Accepted	←				←	202 Accepted	
		INVITE 🗲			←	INVITE	
NOTIFY 4	←				←	NOTIFY 4	
200 OK (NOTIFY 4)	→				→	200 OK (NOTIFY 4)	
		200 OK →			→	200 OK	
	-	ACK ←			←	ACK	
NOTIFY 5	(+	NOTIFY 5	
200 OK (NOTIFY 5)	→				→	200 OK (NOTIFY 5)	
BYE	→				→	BYE	
200 OK (BYE)	←	7) (0			←	200 OK (BYE)	
NOTIFY 6	← NOTIF						
200 OK (NOTIFY 6)	→ 200 O	K (NOTIFY 6)					

TS 124 147 [19], clauses 5.2.1, 5.3.1.3 TSS reference: SIP-SIP/Supplementary_Services/CONF_CRE Configuration: CONF Selection criteria: Conference creation by Three-way session creation. REFER request to the user, Conference event package not subscribed. Test purpose: Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a vali conference factory URI: User A receives a 200 OK SIP response from the conference focus cont "isfocus" feature parameter in Contact header. User A shall store the content header as the conference URI. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set it in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends as 1NVITE request with request URI set to conference the conference focus. Remote user sends an INVITE request with request URI set to conference the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialogness resends and the Experimental Conference of the Conference focus. Remote user sends a NOTIFY (on the same dialog of the REFER previously receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Re	
Configuration: Conference creation by Three-way session creation. REFER request to the user, Conference event package not subscribed. Test purpose: Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a vali conference factory URI: User A receives a 200 OK SIP response from the conference focus cont "isfocus" feature parameter in Contact header. User A shall store the content header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user and header set to the conference URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialon REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Tryi User A sends a 200 OK SIP response to the NOTIFY request fro conference focus. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialog REFER previously	
Selection criteria: Conference event package not subscribed. Test purpose: Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valiconference factory URI: User A receives a 200 OK SIP response from the conference focus contine receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to the the conference URI. Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends a 1NVITE request with request URI set to conference the conference focus. Remote user sends an INVITE request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a 200 OK SIP response to the NOTIFY request. Remote user receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends	
Conference event package not subscribed. Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valic conference factory URI: User A receives a 200 OK SIP response from the conference focus continuing users to the contact header. User A shall store the continuing users to the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends a 1NVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK as the conference focus. Remote user sends an ACK as the conference focus. Remote user sends an ACK as the conference focus. Remote user sends an ACK as the conference focus. Remote us	
Test purpose: Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valian conference factory URI: User A receives a 200 OK SIP response from the conference focus contains the receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user of User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conference URI. Remote user sends an INVITE request with request URI set to conference the conference URI. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "refer" and the Content-Type header set to "refer" and the Content-Type header set to "refer" and the Conten	
Ensure that, when User A sends an INVITE request with request URI set to a valic conference factory URI: User A receives a 200 OK SIP response from the conference focus cont "isfocus" feature parameter in Contact header. User A shall store the conthe receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conference the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "refer" and the	
 Conference factory URI: User A receives a 200 OK SIP response from the conference focus cont "isfocus" feature parameter in Contact header. User A shall store the conthe receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set t in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously	
 User A receives a 200 OK SIP response from the conference focus cont "isfocus" feature parameter in Contact header. User A shall store the conthe receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends a NOTIFY request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote us	ı
"isfocus" feature parameter in Contact header. User A shall store the content receive Contact header as the conference URI. • User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): • Remote user receives a REFER request containing the Refer-To header the conference URI. • Remote user sends a 202 Accepted SIP response to the REFER request. • Remote user sends an INVITE request with request URI set to conferent the conference focus. • Remote user sends an INVITE request to the User A (on the same dialon REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. • User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "response to the NOTIFY request. • Remote user receives a NOTIFY (on the same to Invite the NOTIFY request. • Remote user receives a 200 OK SIP response to the NOTIFY request. • Remote user receives a 200 OK SIP response to the NOTIFY request. • Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference	vinina
the receive Contact header as the conference URI. User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set t in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends a INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Tryi. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference set to "refer" and the Type header set to "refer" and the Vevent header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Type header set to "refer" and the Content-Type header set to "refe	
 User A sends an ACK SIP request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set t in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialon REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an NOTIFY request to the User A (on the same dialon REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Content-Type header set to "refer" and the Content-Type header se	torit or
Inviting users to the conference For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends an INVITE request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.	
For each active SIP session, User A sends a REFER request to the remote user or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set t in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Tryi User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Content-Ty	
or User C) with request URI set to the URI of the address of the remote user and header set to the conference URI previously stored (the parameter "method" set t in the Refer-To header can be included or omitted): • Remote user receives a REFER request containing the Refer-To header the conference URI. • Remote user sends a 202 Accepted SIP response to the REFER request. • Remote user sends an INVITE request with request URI set to conferent the conference focus. • Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. • User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi. • User A sends a 200 OK SIP response to the NOTIFY request. • Remote user receives a 200 OK SIP response to the NOTIFY request. • Remote user receives a 200 OK SIP response to the INVITE request from conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends an ACK to the conference focus. • Remote user sends and the Event header set to "refer" and the Type header set to "refer" and the Type header set to "refer" and the Type header set to "refer"	
header set to the <i>conference URI</i> previously stored (the parameter "method" set to in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the <i>conference URI</i> . Remote user sends a 202 Accepted SIP response to the REFER request. Liser A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to <i>conferent</i> the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 200 OK.	
 in the Refer-To header can be included or omitted): Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refe	
 Remote user receives a REFER request containing the Refer-To header the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contail SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type head	INVITE
the conference URI. Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contal SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryill. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contal SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Content-Ty	ant to
 Remote user sends a 202 Accepted SIP response to the REFER request. User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type h	set to
 User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contain SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Con	
 Remote user sends an INVITE request with request URI set to conferent the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryillows a sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "r	
 the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contal SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends an ACK to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Co	e URI to
REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to	0 07 11 10
REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request from conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to	of the
 SIP/2.0 100 Trying. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	
 User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Try User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	าร
with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryi User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to	
 "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryf. User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to "refer" and the Content-Ty	sent)
 User A sends a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	
 Remote user receives a 200 OK SIP response to the NOTIFY request. Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	ng.
 Remote user receives a 200 OK SIP response to the INVITE request fro conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	
 conference focus. Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialogn REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	n tha
 Remote user sends an ACK to the conference focus. Remote user sends a NOTIFY request to the User A (on the same dialogn REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	n une
 Remote user sends a NOTIFY request to the User A (on the same dialog REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	
REFER previously received) with the Event header set to "refer" and the Type header set to "message/sipfrag". The message/sipfrag body conta SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to	of the
Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to	
 SIP/2.0 200 OK. User A receives a NOTIFY (on the same dialog of the REFER previously with the Event header set to "refer" and the Content-Type header set to 	
with the Event header set to "refer" and the Content-Type header set to	
	sent)
"message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.	
User A sends a 200 OK SIP response to the NOTIFY request. NOTIFY	
Remote user receives a 200 OK SIP response to the NOTIFY request. Notice Property Prope	ativa CID
 User A sends a BYE request to the remote user in order to release the a session between the user A and the remote user. 	xive SIP
 Remote user receives a BYE request from user A. 	
 Remote user receives a BTE request from user A. Remote user sends a 200 OK SIP response to the BYE request. 	
User A receives a 200 OK SIP response to the BYE request.	
- Osci A receives a 200 Ort oil response to the DTL request.	
NOTE: Additionally, User A may include the Referred-By header to the REFEF it to his SIP URI.	and set
Precondition: • User A was participating in two SIP sessions (one with User B and the o User C).	ner with
 The SIP session between User A and User B was previously put on HOI User A. 	D by

SSS_XXSSCONF		CONF reference to:	5242		
CRE_002 SIP Parameter values:		7 [19], clauses 5.2.1 meters options=PIXIT			
SIF Farameter values.	TYPE_SDP= P				
	SIP header val				
	INVITE:	Request URI contai	ns the <i>confere</i>	nce factory URI.	
	200 OK:	"isfocus" feature pa			ader field
		conference URI con			
	REFER:	Refer-to header cor			
	NOTIFY 1:	Event header conta	ins refer ; Subs	cription-State he	eader contains active,
		Content-Type head	er contains "me	essage/sipfrag",	message/sipfrag body
		contains SIP/2.0 10			
	NOTIFY 2:	Event header conta			
		terminated, Conter			age/sipfrag",
	NOTIFY	message/sipfrag bo			
	NOTIFY 3:				eader contains active,
				essage/siptrag", i	message/sipfrag body
	NOTIFY 4:	contains SIP/2.0 10 Event header conta		ecription State he	ador contains
	NOTIFT 4.	terminated, Conter			
		message/sipfrag bo			agoraipiiay ,
Comments:	<u> </u>	oooago/sipirag bo	ay contains on	. , <u>2.0 200 OI</u> .	
SIP UA A		Focus	SIP U	IA B	SIP UA C
J		Establishment of se		_	
INVITE	→	→	INVITE		
180 Ringing	(←	180 Ringing		
200 OK (INVITE)	←	←	200 OK (INV	ITE)	
ACK	→	→	ACK	•	
INVITE (sendonly)	→	→	INVITE (send		
200 OK (recvonly)	←	←	200 OK (recv	vonly)	
ACK	→	→	ACK		
IND ATE	•	Establishment of se	ession #2		INIV/ITE
INVITE	→				INVITE
180 Ringing 200 OK (INVITE)	-				180 Ringing 200 OK (INVITE)
ACK	→				ACK
ACK	7	Conference cre	ation	7	ACK
INVITE	→ INVIT		ation		
200 OK (INVITE)		OK (INVITE)			
ACK	→ ACK	··· (····· <u></u>)			
	l:	nviting UAB to the o	conference		
REFER	→	→	REFER		
202 Accepted	←	←	202 Accepte	d	
		INVITE 🗲	INVITE		
NOTIFY 1	←	(NOTIFY 1		
200 OK (NOTIFY 1)	→	→	200 OK (NO		
		200 OK →	200 OK (INV	11E)	
NOTIFY 2	•	ACK ←	ACK		
NOTIFY 2	← →	÷	NOTIFY 2	TIEV 2\	
200 OK (NOTIFY 2)	→ →	→	200 OK (NO	11F1 Z)	
BYE 200 OK (BYE)	7	7	BYE 200 OK (BYE	=)	
200 01 (012)		nviting UA C to the		-1	
REFER	→ "			→	REFER
202 Accepted	É				202 Accepted
		INVITE 🗲			INVITE
NOTIFY 3	←				NOTIFY 3
200 OK (NOTIFY 3)	→				200 OK (NOTIFY 3)
		200 OK →		→	200 OK
	_	ACK ←			ACK
NOTIFY 4	(NOTIFY 4
200 OK (NOTIFY 4)	→				200 OK (NOTIFY 4)
BYE	→				BYE
200 OK (BYE)	+			<u> </u>	200 OK (BYE)

SSSXXSSCONF_ CRE_003	CONF reference to: TS 124 147 [19], clauses 5.2.1, 5.3.1.3						
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_CRE						
Configuration:	CONF						
Selection criteria:	Conference creation by Three-way session creation. REFER request to the conference focus, Conference event package subscribed.						
Test purpose:	 Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valid conference factory URI: User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request. User A sends a SUBSCRIBE request with request URI set to the conference URI (previously stored) and the Event header set to "conference". User A receives a 200 OK SIP response to the SUBSCRIBE request. User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference". User A sends a 200 OK SIP response to the NOTIFY request. 						
	Inviting users to the conference For each active SIP session, User A sends a REFER request to the conference focus with request URI set to the conference URI previously stored and Refer-To header set to the SIP URI of the remote user (the parameter "method" set to INVITE in the Refer-To header can be included or omitted): • User A receives a 202 Accepted SIP response to the REFER request. • Remote user receives an INVITE request from the conference focus to be invited to the conference. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. • User A sends a 200 OK SIP response to the NOTIFY request. • Remote user sends a 200 OK SIP response to the INVITE request from the conference focus. • Remote user receives an ACK from the conference focus. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. • User A sends a 200 OK SIP response to the NOTIFY request. • User A sends a 200 OK SIP response to the NOTIFY request. • Remote user receives a BYE request from user A. • Remote user sends a 200 OK SIP response to the BYE request. • Remote user sends a 200 OK SIP response to the BYE request. • User A receives a NOTIFY from the conference focus (on the same dialog of the SUBSCRIBE previously sent). • User A sends a 200 OK SIP response to the NOTIFY request.						
Precondition:	NOTE: Additionally, User A may include the Referred-By header to the REFER and set it to his SIP URI. • User A was participating in two SIP sessions (one with User B and the other with						
	 User C). The SIP session between User A and User B was previously put on HOLD by User A. 						

SSS_XXSSCONF_ CRE_003		NF reference to: [19], clauses 5.2.1, 5	3 1 3		
SIP Parameter values:		eters options=PIXIT	7.3.1.0	<u>'</u>	
	TYPE_SDP= PIX				
	SIP header valu				
	INVITE:			conference factory U	
	200 OK:			er indicated in Contac in the Contact header	
	SUBSCRIBE:	Request URI contai			neid.
	REFER 1:			the SIP URI of the UA	λВ.
	NOTIFY:				n-State header contains
	NOTIFY 4				s connected, dialled-in
	NOTIFY 1:	Content-Type heade	er con	ntains "message/sipfra	e header contains active , g", message/sipfrag body
	NOTIFY 2:	contains SIP/2.0 10 Event header contains		fer ; Subscription-State	e header contains
	110111 1 2.			e header contains "me	
		message/sipfrag bo	dy co	ntains SIP/2.0 200 OK	ζ.
	NOTIFY 3:				on-State header contains
	REFER 2:			ence-info+xml contain the URI of the UA C.	s connected, dialled-out.
	NOTIFY 4:				e header contains active,
		Content-Type heade	er con	ntains "message/sipfra	g", message/sipfrag body
	NOTIFY 5:	contains SIP/2.0 10			a baadar asatsias
	NOTIFY 5:			fer; Subscription-State e header contains "me	
		message/sipfrag co			Josago, oipilag ,
	NOTIFY 6:	Event contains conf	feren	ce; Subscription-State	
0		application/conferer	nce-in	fo+xml contains conne	ected, dialled-out.
Comments: SIP UA A		Focus		SIP UA B	SIP UA C
		Establishment of s	essio		S. S. S
INVITE	→			INVITE	
180 Ringing	(180 Ringing	
200 OK (INVITE) ACK	← →			200 OK (INVITE) ACK	
INIVITE (condent)	_		_	INI\/ITT/oondonly\	
INVITE (sendonly) 200 OK (recvonly)	→			INVITE(sendonly) 200 OK (recvonly)	
ACK	→			ACK	
		Establishment of s	essio	n #2	
INVITE	→			-	
180 Ringing 200 OK (INVITE)	-			*	180 Ringing200 OK (INVITE)
ACK	÷			-	
	.	Conference cre	eation	1	
INVITE	→ INVITE ← 200 OF				
200 OK (INVITE) ACK	→ ACK	(INVITE)			
SUBSCRIBE	→ SUBS	CRIBE			
200 OK (SUBSCRIBE)		(SUBSCRIBE)			
NOTIFY 200 OK (NOTIFY)	← NOTIF → 200 OF	Y ((NOTIFY)			
ZOU OR (NOTIFY)		NOTIFY) nviting UA B to the	confe	erence	
REFER 1	→ REFE				
202 Accepted	← 202 Ac	ccepted	_		
NOTIFY 1	◆ NOTIF	INVITE V 1	→	INVITE	
200 OK (NOTIFY 1)		(NOTIFY 1)			
(,	_55 0.	200 OK (ÍNVITE)			
NOTIFY :	• ··•	ACK		ACK	
NOTIFY 2 200 OK (NOTIFY 2)	← NOTIF→ 200 Oł	Y 2 K (NOTIFY 2)			
BYE	→ 200 Or	Y (INOTIFIZ)	→	BYE	
200 OK (BYE)	-			200 OK (BYE)	
NOTIFY 3	← NOTIF			. ,	
200 OK (NOTIFY 3)	→ 200 OF	K (NOTIFY 3)			

SSS_XXSSCONF_	CONF reference to:	
CRE_003	TS 124 147 [19], clauses 5.2.1, 5.3.1.3	
	Inviting UA C to the conference	
REFER 2	→ REFER 2	
202 Accepted	← 202 Accepted	
	. INVITE →	→ INVITE
NOTIFY 4	← NOTIFY 4	
200 OK (NOTIFY 4)	→ 200 OK (NOTIFY 4)	
, , ,	200 OK (INVITE) 🗲	← 200 OK (INVITE)
	` ACK →	→ ACK `
NOTIFY 5	← NOTIFY 5	
200 OK (NOTIFY 5)	→ 200 OK (NOTIFY 5)	
BYE ` ´	→	→ BYE
200 OK (BYE)	←	← 200 OK (BYE)
NOTIFY 6	← NOTIFY 6	- (
200 OK (NOTIFY 6)	→ 200 OK (NOTIFY 6)	

SSS XXSSCONF	CONF reference to:
CRE_004	TS 124 147 [19], clauses 5.2.1, 5.3.1.3
TSS reference:	SIP-SIP/Supplementary_Services/CONF_CRE
Configuration:	CONF
Selection criteria:	Conference creation by Three-way session creation. REFER request to the focus,
delection chiena.	Conference event package not subscribed.
Test purpose:	Creation of the conference
rest purpose.	Ensure that, when User A sends an INVITE request with request URI set to a valid conference factory URI:
	 User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request.
	Inviting users to the conference For each active SIP session, User A sends a REFER request to the conference focus with
	request URI set to the <i>conference URI</i> previously stored and Refer-To header set to the SIP URI of the remote user (the parameter "method" set to INVITE in the Refer-To header can be included or omitted):
	 User A receives a 202 Accepted SIP response to the REFER request. Remote user receives an INVITE request from the conference focus to be invited to the conference.
	 User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request.
	 User A sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 200 OK SIP response to the INVITE request from the conference focus.
	Remote user receives an ACK from the conference focus.
	 User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.
	 User A sends a 200 OK SIP response to the NOTIFY request.
	User A sends a BYE request to the remote user in order to release the active SIP associate between the user A and the remote user.
	session between the user A and the remote user. Remote user receives a BYE request from user A.
	 Remote user receives a BYE request from user A. Remote user sends a 200 OK SIP response to the BYE request.
	 Remote user sends a 200 OK SIP response to the BYE request. User A receives a 200 OK SIP response to the BYE request.
	NOTE: Additionally, User A may include the Referred-By header to the REFER and set it to his SIP URI.

SSS_XXSSCONF_		ONF reference to:				
CRE_004		7 [19], clauses 5.2.1, 5				
Precondition:		 User A was participating in two SIP sessions (one with User B and the other with User C). 				
	• The S	SIP session between Us	ser A	and User B was prev	iously	put on HOLD by
	User					
SIP Parameter values:		meters options=PIXIT				
	TYPE_SDP= F SIP header va					
	INVITE:		s the	conference factory U	IRI.	
	200 OK:	"isfocus" feature para	amet	er indicated in Contac	t heade	er field
				in the Contact header		
	REFER 1: NOTIFY 1:			the SIP URI of the UA fer; Subscription-State		or contains setive
	INOTIFY 1.			tains "message/sipfra		
		contains SIP/2.0 100			g , mo	ssage/sipilag body
	NOTIFY 2:	Event header contain	ns re	fer; Subscription-State		
				e header contains "me		/sipfrag",
	REFER 2:	message/sipfrag bod Refer-to header cont		ntains SIP/2.0 200 OK	ί.	
	NOTIFY 3:			fer; Subscription-State	e head	er contains active.
				tains "message/sipfra		
		contains SIP/2.0 100			·	
	NOTIFY 4:			fer; Subscription-State		
				e header contains "me ntains SIP/2.0 200 Ok		/sipirag ,
Comments:		moodago, o.p.nag soa	, 00	110 200 01	••	
SIP UA A		Focus		SIP UA B		SIP UA C
INVITE	→	Establishment of s		on #1 INVITE		
180 Ringing	-		→	180 Ringing		
200 OK (INVITE)	-		÷	200 OK (INVITE)		
ACK	→		→	ACK		
INIVITE (condonly)	_		_	INIVITE (condonly)		
INVITE (sendonly) 200 OK (recvonly)	→ ←		→	INVITE (sendonly) 200 OK (recvonly)		
ACK	÷	→ ACK				
		Establishment of s	essi	on #2		
INVITE	→				→	INVITE
180 Ringing 200 OK (INVITE)	(+	180 Ringing 200 OK (INVITE)
ACK	÷				÷	ACK
		Conference cre	eatio	n		
INVITE		/ITE				
200 OK (INVITE)		OK (INVITE)				
ACK	→ AC	Inviting UAB to the	conf	erence		
REFER 1	→ RE	FER 1				
202 Accepted	← 202	2 Accepted	_			
NOTIEV 1	Z NO		→	INVITE		
NOTIFY 1 200 OK (NOTIFY 1)		TIFY 1 OK (NOTIFY 1)				
	2 200		←	200 OK (INVITE)		
		ACK		ACK		
NOTIFY 2		TIFY 2				
200 OK (NOTIFY 2) BYE	→ 200 →	OK (NOTIFY 2)	→	BYE		
200 OK (BYE)	-		-	200 OK (BYE)		
200 011 (012)				200 OK (DTL)		

SSS_XXSSCONF_		CONF reference to:		
CRE_004	TS 12	24 147 [19], clauses 5.2.1, 5.3.1.3		
		Inviting UA C to the conference		
REFER 2	→	REFER 2		
202 Accepted	←	202 Accepted		
		INVITE →	→	INVITE
NOTIFY 3	←	NOTIFY 3		
200 OK (NOTIFY 3)	→	200 OK (NOTIFY 3)		
, ,		200 OK (INVITE) ←	←	200 OK (INVITE)
		` ACK →	→	ACK `
NOTIFY 4	+	NOTIFY 4		
200 OK (NOTIFY 4)	→	200 OK (NOTIFY 4)		
BYE `	→	,	→	BYE
200 OK (BYE)	+		+	200 OK (BYE)

SSS_XXSSCONF_	CONF reference to:					
CRE_005 TSS reference:	TS 124 147 [19], clauses 5.2.1, 5.3.1.3					
Configuration:	SIP-SIP/Supplementary_Services/CONF_CRE					
Selection criteria:	CONF Conference creation by Three way specien greation, PEEED request to the focus. Penlages.					
Selection chiena.	method is used, Conference event package subscribed.					
Test purpose:	Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valid conference factory URI: User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request. User A sends a SUBSCRIBE request with request URI set to the conference URI (previously stored) and the Event header set to "conference". User A receives a 200 OK SIP response to the SUBSCRIBE request. User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference". User A sends a 200 OK SIP response to the NOTIFY request. Inviting users to the conference For each active SIP session, User A sends a REFER request to the conference focus with request URI set to the conference URI previously stored and Refer-To header set to the SIP URI of the remote user. Also, into the Refer-to header the replaces method is used in order to terminate the active SIP session between the user A and the remote user: User A receives a 202 Accepted SIP response to the REFER request. Remote user receives an INVITE request from the conference focus to be invited to the conference. The INVITE contains the Replaces header with SIP dialog data ("Call-ID", "From" tag, "To" tag) to be replaced. User A sends a 200 OK SIP response to the NOTIFY peheader set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the INVITE request from the conference focus. Remote user sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 200 OK SIP response to the NOTIFY request. User A sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 200 OK SIP response to the NOTIFY request. Remote user sends					
	User A receives a NOTIFY from the conference focus (on the same dialog of the SUBSCRIBE previously sent).					
	User A sends a 200 OK SIP response to the NOTIFY request.					

SSS_XXSSCONF_ CRE_005		ONF reference to: [19], clauses 5.2.1, 5.3.1.3			
Precondition:		was participating in two SIP sessions (one with User B and the other with			
	User C) The SIF	•			
	User A.	P session between User A and User B was previously put on HOLD by			
SIP Parameter values:		neters options=PIXIT			
	TYPE_SDP= PIX				
	SIP header valu				
	200 OK:	Request URI contains the conference factory URI. "isfocus" feature parameter indicated in Contact header field			
		conference URI contains in the Contact header field.			
	NOTIFY:	Event header contains conference; Subscription-State header contains			
	REFER 1:	active, application/conference-info+xml contains connected, dialled-in Refer-to header contains the SIP URI of the UA B .			
	KEFEK I.	Refer-To: <sip: uri-b?replaces="call-id1%3Bto-tagsession1%3Bfrom-</td"></sip:>			
		tagSession1; method=INVITE>.			
	NOTIFY 1:	Event header contains refer ; Subscription-State header contains active ,			
		Content-Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0 100 Trying.			
	NOTIFY 2:	Event header contains refer ; Subscription-State header contains			
		terminated, Content-Type header contains "message/sipfrag",			
	NOTIFY 3:	message/sipfrag body contains SIP/2.0 200 OK. Event header contains conference ; Subscription-State header contains			
	NOTIFY 3.	active, application/conference-info+xml contains connected, dialled-out.			
	BYE 1:	Call-ID: call-id1/ To:; tag=session1/ From:;tag=Session1.			
	REFER 2:	Refer-to header contains the SIP URI of the UA C and Replaces header			
		for session 2. Refer-To: <sip: uri-c?replaces="call-id2%3Bto-tagsession2%3Bfrom-</td"></sip:>			
		tagSession2; method=INVITE>.			
	NOTIFY 4:	Event header contains refer; Subscription-State header contains active,			
		Content-Type header contains "message/sipfrag", message/sipfrag body			
	NOTIFY 5:	contains SIP/2.0 100 Trying. Event header contains refer; Subscription-State header contains			
		terminated, Content-Type header contains "message/sipfrag",			
	NOTIFY	message/sipfrag contains SIP/2.0 200 OK.			
	NOTIFY 6:	Event contains conference ; Subscription-State contains active application/conference-info+xml contains connected, dialled-out.			
	BYE 2:	Call-ID: call-id2/ To:; tag=session2/ From:;tag=Session2.			
Comments:					
SIP UA A		Focus SIP UA B SIP UA C Establishment of session #1			
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 Establishment of session #2			
INVITE	→	→ INVITE			
180 Ringing	(€ 180 Ringing			
200 OK (INVITE) ACK	← →	← 200 OK (INVITE) → ACK			
		Conference creation			
INVITE	→ INVITE				
200 OK (INVITE) ACK	← 200 Oł→ ACK	K (INVITE)			
SUBSCRIBE	→ SUBSO	CRIBE			
200 OK (SUBSCRIBE)	← 200 Oł	K (SUBSCRIBE)			
NOTIFY	← NOTIF				
200 OK (NOTIFY)	→ 200 Oł	K (NOTIFY)			

SSS_XXSSCONF_	CONF reference to:						
CRE_005	TS 124 147 [19], clauses 5.2.1, 5.3.1.3						
Inviting UA B to the conference							
REFER 1	→ REFER 1						
202 Accepted	← 202 Accepted						
	INVITE 4 😝 INVITE 4						
NOTIFY 1	← NOTIFY 1						
200 OK (NOTIFY 1)	→ 200 OK (NOTIFY 1)						
	200 OK (INVITE 4) ← 200 OK (INVITE 4)						
NOTIFY O	ACK → ACK						
NOTIFY 2	NOTIFY 2						
200 OK (NOTIFY 2) BYE 1	→ 200 OK (NOTIFY 2) ← BYE 1						
200 OK (BYE 1)							
NOTIFY 3	→ 200 OK (BYE 1) ← NOTIFY 3						
200 OK (NOTIFY 3)	→ 200 OK (NOTIFY 3)						
200 OK (NOTH 1 9)	Inviting UA C to the conference						
REFER 2	→ REFER 2						
202 Accepted	€ 202 Accepted						
	INVITE 5 →	→ INVITE 5					
NOTIFY 4	◆ NOTIFY 4						
200 OK (NOTIFY 4)	→ 200 OK (NOTIFY 4)						
, , , , ,	200 OK (IŃVITE5) ←	← 200 OK(INVITE 5)					
	ACK →	→ ACK					
NOTIFY 5	← NOTIFY 5						
200 OK (NOTIFY 5)	→ 200 OK (NOTIFY 5)						
BYE 2	(← BYE 2					
200 OK (BYE 2)	→	→ 200 OK (BYE 2)					
NOTIFY 6	← NOTIFY 6						
200 OK (NOTIFY 6)	→ 200 OK (NOTIFY 6)						

SSS XXSSCONF	CONF reference to:
CRE_06	TS 124 147 [19], clauses 5.2.1, 5.3.1.3
TSS reference:	SIP-SIP/Supplementary_Services/CONF_CRE
Configuration:	CONF
Selection criteria:	Conference creation by Three-way session creation. REFER request to the focus, Replaces
	method is used, Conference event package not subscribed.
Test purpose:	Creation of the conference Ensure that, when User A sends an INVITE request with request URI set to a valid conference factory URI: User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request.
Precondition:	Inviting users to the conference For each active SIP session, User A sends a REFER request to the conference focus with request URI set to the conference URI previously stored and Refer-To header set to the SIP URI of the remote user. Also, into the Refer-to header the replaces method is used in order to terminate the active SIP session between the user A and the remote user: • User A receives a 202 Accepted SIP response to the REFER request. • Remote user receives an INVITE request from the conference focus to be invited to the conference. The INVITE contains the Replaces header with SIP dialog data ("Call-ID", "From" tag, "To" tag) to be replaced. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. • User A sends a 200 OK SIP response to the NOTIFY request. • Remote user sends a 200 OK SIP response to the INVITE request from the conference focus. • User A receives an ACK from the conference focus. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. • User A sends a 200 OK SIP response to the NOTIFY request. • Remote user sends a BYE request to the User A in order to release the active SIP session between the user A and the remote user. • User A receives a BYE request from remote user. • User A receives a BYE request from remote user. • User A sends a 200 OK SIP response to the BYE request.
Precondition:	 User A was participating in two SIP sessions (one with User B and the other with User C). The SIP session between User A and User B was previously put on HOLD by User A.

SSS_XXSSCONF_ CRE_06		ONF reference to: [19], clauses 5.2.1, 5.3.1.3			
SIP Parameter values:	Dial string parameters options=PIXIT				
	TYPE_SDP= PI	XIT;			
	SIP header val				
	INVITE:	Request URI contains the conf			
	200 OK:	"isfocus" feature parameter ind			
	DEEED 4.	conference URI contains in the			
	REFER 1:	Refer-to header contains the U	Ri of user#2 and Replaces ne	ader for	
		session 1. Refer-To: <sip:user#2?replac< td=""><td>es-Call-ID1%3Bto-tagesesion</td><td>1%3Rfrom-</td></sip:user#2?replac<>	es-Call-ID1%3Bto-tagesesion	1%3Rfrom-	
		tagSession1; method=INVITE>		1 /03DITOTII-	
	INVITE 4:	Replaces: Call-ID1; to-tag=to-t		aSession1.	
	NOTIFY 1:	Event header contains refer ; S			
		Content-Type header contains	"message/sipfrag", message/s	sipfrag body	
		contains SIP/2.0 100 Trying.			
	NOTIFY 2:	Event header contains refer; S			
		terminated, Content-Type hea		ן",	
	DVE 4	message/sipfrag body contains		.	
	BYE 1: REFER 2:	Call-ID: call-id1/ To:; tag=se Refer-to header contains the U			
	REFER 2.	session 2.	Ri oi usei#3 and Replaces ne	aderior	
		Refer-To: <sip:user#3?replac< td=""><td>es-Call-ID2%3Rto-tag session</td><td>2%3Bfrom-</td></sip:user#3?replac<>	es-Call-ID2%3Rto-tag session	2%3Bfrom-	
		tag Session2; method=INVITE		12 /00DITOITI	
	INVITE 5:	Replaces: Call-ID2; to-tag=to-t		aSession2.	
	NOTIFY 3:	Event header contains refer; S			
		Content-Type header contains			
		contains SIP/2.0 100 Trying.			
	NOTIFY 4:	Event header contains refer; S			
		terminated, Content-Type hea] ",	
	DVE 0	message/sipfrag body contains			
			: - : - : - (/ E : - : - : - : - : - : - : - : - : -		
Commonto	BYE 2:	Call-ID: call-Id2/ To:; tag=se	ession2/ From:;tag=Session	1∠.	
Comments:	BAE 5:	-	-		
Comments: SIP UA A	BYE 2:	Focus	-	IP UA C	
	BAE 5:	-	SIP UA B S		
SIP UA A		Focus Establishment of session #1 → INVIT	SIP UA B S		
SIP UA A	→	Focus Establishment of session #1 → INVIT ← 180 F	SIP UA B S		
SIP UA A INVITE 180 Ringing	→	Focus Establishment of session #1 → INVIT ← 180 F	SIP UA B S		
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK	→ ← ←	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK	SIP UA B S E Ringing OK (INVITE)		
INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly)	→ ← ← →	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK	SIP UA B S ERINGING OK (INVITE) ERINGING		
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly)	→ ← → →	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C	SIP UA B S ERINGING OK (INVITE) EE (sendonly) OK (recvonly)		
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly)	→ ← ← →	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK	SIP UA B S ERINGING OK (INVITE) EE (sendonly) OK (recvonly)		
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK	→ ← → → ←	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C	SIP UA B S Exinging DK (INVITE) EX (sendonly) DK (recvonly)	IP UA C	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE	→ ← → → +	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly)	IP UA C	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing	→ ← → → +	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK	SIP UA B S Ringing OK (INVITE) E (sendonly) OK (recvonly) INVIT	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE	→ ← → → +	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT	IP UA C	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK	> + + + + + + + + + + + + + + + + + + +	Focus Establishment of session #1 INVIT 180 F 200 C ACK INVIT 200 C ACK Stablishment of session #2 Conference creation	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE	→ ← → → + →	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 ROMAN (INVITE) ACK INVITE 200 OK (INVITE)	→ ← → → + + → H + +	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE)	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE	→ ← → → + →	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE)	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK	→ ← → → → → → ACF	Focus Establishment of session #1 INVIT ISO F 200 C ACK INVIT 200 C ACK Conference creation ITE OK (INVITE) (Inviting UA B to the conference creation	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1	→ ← ← → → INV ← 200 → ACF	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference ER 1	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK	→ ← ← → → INV ← 200 → ACF	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted	→ ← ← → → INV ← 200 → ACH → REF ← 202	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1	→ ← ← → → + ← → → REF ← 202 ← NO	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted	→ ← ← → → HNV ← 200 → ACF ← 202 ← NO → 200	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT ITIFY 1 OK (NOTIFY 1)	SIP UA B E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1	→ ← ← → → HNV ← 200 → ACF ← 202 ← NO → 200	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT ITIFY 1 OK (NOTIFY 1)	SIP UA B S E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1 200 OK (NOTIFY 1)	→ ← ← → → → → ← ← → → → ← ← → → ACh → ACh ← 200 → ACh ← NO 200 ←	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT ITIFY 1 OK (NOTIFY 1) OO OK (INVITE 4) ← 200 C ACK → ACK TIFY 2	SIP UA B E Ringing DK (INVITE) E (sendonly) DK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1 200 OK (NOTIFY 1) NOTIFY 2 200 OK (NOTIFY 2)	→ ← ← → → → ← ← → → → ← ← → → ACF ← 200 → ACF ← NO → 200 ← NO ← NO → 200 ← NO ← NO → 200 ← NO ←	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT ITIFY 1 OK (NOTIFY 1) OO OK (INVITE 4) ACK ACK → ACK TIFY 2 OK (NOTIFY 2)	SIP UA B E Ringing OK (INVITE) E (sendonly) OK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	
SIP UA A INVITE 180 Ringing 200 OK (INVITE) ACK INVITE (sendonly) 200 OK (recvonly) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 180 Ringing 200 OK (INVITE) ACK INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1 200 OK (NOTIFY 1)	→ ← ← → → → → ← ← → → → ← ← → → ACh → ACh ← 200 → ACh ← NO 200 ←	Focus Establishment of session #1 → INVIT ← 180 F ← 200 C → ACK → INVIT ← 200 C → ACK Establishment of session #2 Conference creation ITE OK (INVITE) (Inviting UA B to the conference FER 1 Accepted INVITE 4 → INVIT ITIFY 1 OK (NOTIFY 1) OO OK (INVITE 4) ← 200 C ACK → ACK TIFY 2 OK (NOTIFY 2) ← BYE	SIP UA B E Ringing OK (INVITE) E (sendonly) OK (recvonly) INVIT 180 R 200 O ACK	IP UA C E inging	

SSS_XXSSCONF_	CONF reference to:	
CRE_06	TS 124 147 [19], clauses 5.2.1, 5.3.1.3	
	Inviting UA C to the conference	
REFER 2	→ REFER	
202 Accepted	← 202 Accepted	
	INVITE 5 ->	→ INVITE 5
NOTIFY 3	← NOTIFY 3	
200 OK (NOTIFY 3)	→ 200 OK (NOTIFY 3)	
,	200 OK (INVITE 5) ←	← 200 OK (INVITE5)
	` ACK →	→ ACK `
NOTIFY 4	← NOTIFY 4	
200 OK (NOTIFY 4)	→ 200 OK (NOTIFY 4)	
BYE 2	←	★ BYE 2
200 OK (BYE 2)	→	→ 200 OK (BYE 2)

SSS_XXSSCONF_	CONF reference to:				
CRE_007	TS 124 147 [19], clauses 5.2.1, 5.3.1.3				
TSS reference:	SIP-SIP/Supplementary_Services/CONF_CRE CONF				
Configuration:					
Selection criteria: Test purpose:	Conference creation by SIP URI-list. Conference event package subscribed. Ensure that, when User A sends an INVITE request with "resource-list+xml" body (which				
	 contains a SIP URI-list of the participants that User A wants to invite to the conference) and request URI set to a valid <i>conference factory URI</i>: User A receives a 200 OK SIP response from the <i>conference focus</i> containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the <i>conference URI</i>. User A sends an ACK SIP request. User A sends a SUBSCRIBE request with request URI set to the <i>conference URI</i> (previously stored) and the Event header set to "conference". User A receives a 200 OK SIP response to the SUBSCRIBE request. User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference". User A sends a 200 OK SIP response to the NOTIFY request. Remote user (User B/User C) receives an INVITE request from the conference focus to be invited to the conference. Remote user (User B/User C) sends a 180 Ringing SIP response to the INVITE request from the conference focus. Remote user (User B/User C) sends a 200 OK SIP response to the INVITE request from the conference focus. Remote user receives an ACK from the conference focus. User A receives a NOTIFY from the conference focus (on the same dialog of the 				
	SUBSCRIBE previously sent).				
	User A sends a 200 OK SIP response to the NOTIFY request.				
Precondition:					
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; SIP header values: INVITE: Request URI contains the conference factory URI, Require header contains "recipient-list-invite", Content-Disposition header contains "recipient-list", Content-Type header contains "application/resource-lists+xml" and the resource-lists+xml body contains the SIP URI-list of participants at the conference (according to RFC 5366 [25]). 200 OK: "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field. SUBSCRIBE: Request URI contained the conference URI. NOTIFY: Event header contains conference; Subscription-State header contains active, application/conference-info+xml contains connected, dialled-in INVITE 2: The P-Asserted-Identity contains the conference URI. "isfocus" feature parameter indicated in Contact header field. Referred-By contains SIP or tel URI of UA A. (This is not mandatory) The P-Asserted-Identity contains the conference URI. "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field. "isfocus" feature parameter indicated in Contact header field conference URI. "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field.				

SSS_XXSSCONF_	CONF reference to:		
CRE_007	TS 124 147 [19], clauses 5.2.1, 5.3.	1.3	
Comments:			
SIP UA A	Focus	SIP UA B	SIP UA C
	Conference creati	on	
INVITE	→ INVITE		
200 OK (INVITE)	← 200 OK (INVITE)		
ACK	→ ACK		
SUBSCRIBE	→ SUBSCRIBE		
200 OK (SUBSCRIBE)	← 200 OK (SUBSCRIBE)		
NOTIFY	← NOTIFY		
200 OK (NOTIFY)	→ 200 OK (NOTIFY)		
	Inviting UA B to the cor		
	INVITE 2 →		
	180 Ringing ←		
	200 OK (INVITE 2)		
NOTIFY	ACK →	ACK	
NOTIFY	NOTIFY		
200 OK (NOTIFY)	→ 200 OK (NOTIFY)		
	Inviting UA C to the cor	iterence	- > INIVITE 0
	INVITE 3 →		→ INVITE 3
	180 Ringing ←		← 180 Ringing
	200 OK (INVITE 3) ← ACK →		← 200 OK (INVITE 3) → ACK
NOTIFY	← NOTIFY		7 ACK
200 OK (NOTIFY)	→ 200 OK (NOTIFY)		

SSS XXSSCONF	CONF reference to:			
CRE_008	TS 124 147 [19], clauses 5.2.1, 5.3.1.3			
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_CRE			
Configuration:	CONF			
Selection criteria:	Conference creation by SIP URI-list. Conference event package not subscribed.			
Test purpose:	 Conference creation by SIP URI-list. Conference event package not subscribed. Ensure that, when User A sends an INVITE request with "resource-list+xml" body (which contains a SIP URI-list of the participants that User A wants to invite to the conference) and request URI set to a valid conference factory URI: User A receives a 200 OK SIP response from the conference focus containing "isfocus" feature parameter in Contact header. User A shall store the content of the receive Contact header as the conference URI. User A sends an ACK SIP request. Remote user (User B/User C) receives an INVITE request from the conference focus to be invited to the conference. Remote user (User B/User C) sends a 180 Ringing SIP response to the INVITE request from the conference focus. Remote user (User B/User C) sends a 200 OK SIP response to the INVITE request 			
	from the conference focus.			
Precondition:	Remote user receives an ACK from the conference focus.			
SIP Parameter values:	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT; SIP header values: INVITE: Request URI contains the conference factory URI, Require header contains "recipient-list-invite", Content-Disposition header contains "recipient-list", Content-Type header contains "application/resource-lists+xml" and the resource-lists+xml body contains the SIP URI-list of participants at the conference (according to RFC 5366 [25]). 200 OK: "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field. INVITE 2: The P-Asserted-Identity contains the conference URI. "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field. Referred-By contains SIP or tel URI of UA A. (This is not mandatory) INVITE 3: "isfocus" feature parameter indicated in Contact header field conference URI contained in the Contact header field. Referred-By contains SIP or tel URI of UA A. (This is not mandatory).			
Comments: SIP UA A	Focus SIP UA B SIP UA C			
INVITE 200 OK (INVITE) ACK	Conference creation → INVITE ← 200 OK (INVITE) → ACK Inviting UA B to the conference INVITE 2 → INVITE 2 180 Ringing ← 180 Ringing 200 OK (INVITE 2) ← 200 OK (INVITE 2) ACK → ACK Inviting UA C to the conference INVITE 3 → INVITE 3 180 Ringing ← 180 Ringing 200 OK (INVITE 3) ← 200 OK (INVITE 3)			

SSS_XXSSCONF_	CONF reference to:			
CRE_09	TS 124 147 [19], clauses 5.2.1, 5.3.1.3			
TSS reference:	SIP-SIP/Supplementary_Services/CONF_CRE			
Configuration:	CONF			
Selection criteria:	Unsuccessful. Conference creation with a <i>conference factory URI</i> not allocated by the conference focus.			
Test purpose:	Ensure that, when User A sends an INVITE request with request URI set to a not valid conference factory URI: • User A receives a 488 Not Acceptable Here SIP response from the conference focus.			
-	User A sends an ACK SIP request			
Precondition:				
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; SIP header values: INVITE: Request URI contains a conference factory URI not allocated by the conference focus.			
Comments:				
SIP U	P UA A Focus			
INVITE	→ INVITE			
488 Not Acceptable He	ere 488 Not Acceptable Here			
ACK	→ ACK			

6.2.7.2 Inviting other users to a conference

SSS_XXSSCONF_I	CONF reference to:					
NV_001	TS 124 147 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5					
TSS reference:	SIP-SIP/Supplementary_Services/CONF_INV					
Configuration:	CONF					
Selection criteria:	Inviting participant by sending REFER to the conference focus. The conference event package is subscribed.					
Test purpose:						
	Repeat the above steps twice in order to invite to the conference User B (when remote user is UA B) and User C (when remote user is UA C).					
	When User C has joined the conference:					
	User B receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference".					
	User B sends a 200 OK SIP response to the NOTIFY request.					
	NOTE: Additionally, User A may include the Referred-By header to the REFER and set it to his SIP URI.					
Precondition:	User A has created a conference by using a conference factory URI.					

SSS_XXSSCONF_I		CONF reference to:				
NV_001	TS 124	147 [19], clauses 5.2.1, 5	.3.1.4	_		
144_001	10.124	5.3.1.5	.0	,		
SIP Parameter values:	Dial string parameters options=PIXIT					
	TYPE_SDP= PIXIT;					
		SIP header values:				
	REFER 1:	ER 1: Request URI contains the <i>conference URI (</i> previously stored).				
		Refer-To header contains the SIP URI of UA B .				
		Referred-By contains SIP or tel URI of UA A. (This is not mandatory) The P-Asserted-Identity contains the <i>conference URI</i> .				
	INVITE 2:					
		"isfocus" feature param				er tiela
		conference URI contain				not mandatory)
	NOTIFY 1:	Event header contains				
		Content-Type header of				
		contains SIP/2.0 100 T			, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
	NOTIFY 2:				State header conta	ins terminated, Content-
		Type header contains	"mess	age/si	pfrag", message/sip	ofrag body contains SIP/2.0
		200 OK.				
	SUBSCRIB	E: Request URI contained	d the c	confere	ence URI, Event hea	ader contains
	NOTIFY 2:	"conference".			o. Cultonintion Ctat	a baaday aantaina aatiya
	NOTIFY 3:	application/conference				e header contains active ,
	REFER 2:	Request URI contained				
	IKEI EIK Z.	Refer-To header conta				y 5.010d).
		Referred-By contains S				not mandatory)
	INVITE 3:	The P-Asserted-Identit				,
		"isfocus" feature param				er field
		conference URI contained in the Contact header field.				
	NOTIFY 4.	Referred-By contains S				
	NOTIFY 4:					
		Content-Type header contains "message/sipfrag", message/sipfrag body, contains SIP/2.0 100 Trying.				
	NOTIFY 5:				State header conta	ins terminated, Content-
		Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0				
		200 OK.		•		
	SUBSCRIB	E: Request URI contained	d the c	confere	ence URI, Event hea	ader contains
	NOTIFY 6:					e header contains active,
	NOTIFY 7:	application/conference				e header contains active ,
	NOTIFT 7.	application/conference				-
Comments:	<u> </u>	аррисалоги согногогос			mano comicolog, c	Jianea Gati
SIP UA A		Focus			SIP UA B	SIP UA C
	_	Conference	creat	ion		
INVITE	→	INVITE				
200 OK (INVITE)	← →	200 OK (INVITE) ACK				
ACK	7	Inviting UA B to t	he co	nferer	nce	
REFER 1	→	REFER 1				
202 Accepted	-	202 Accepted				
·		INVITE 2	→	INVI	TE 2	
NOTIFY 1	(NOTIFY 1				
200 OK (NOTIFY 1)	→	200 OK (NOTIFY 1)	_	400.	D	
		180 Ringing 200 OK (INVITE 2)			Ringing	
			→			
NOTIFY 2	←	NOTIFY 2	. •	, .		
200 OK (NOTIFY 2)	→	200 OK (NOTIFY 2)				
,		SUBSCRIBE			SCRIBE	
		200 OK (SUBSCRIBE)			OK(SUBSCRIBE)	
		NOTIFY 3			IFY 3	
		200 OK (NOTIFY 3)	←	200 (OK (NOTIFY 3)	

SSS_XXSSCONF_I		CONF reference to:				
NV_001	TS 12	4 147 [19], clauses 5.2.1, 5.3.1.4,				
		5.3.1.5				
		Inviting UA C to th	е со	nference		
REFER 2	→	REFER 2				
202 Accepted	←	202 Accepted				
-		INVITE 3	→		→	INVITE 3
NOTIFY 4	←	NOTIFY 4				
200 OK (NOTIFY 4)	→	200 OK (NOTIFY 4)				
		180 Ringing	←		←	180 Ringing
		200 OK (INVITE 3)	←		←	200 OK (INVITE 3)
		ACK	→		→	ACK
NOTIFY 5	←	NOTIFY 5				
200 OK (NOTIFY 5)	→	200 OK (NOTIFY 5)				
,		SUBSCRIBE	←		←	SUBSCRIBE
		200 OK (SUBSCRIBE)	→		→	200 OK(SUBSCRIBE)
		NOTIFY 6	→		→	NOTIFY 6
		200 OK (NOTIFY 6)	←		←	200 OK (NOTIFY 6)
		NOTIFY 7	→	NOTIFY 7		·
		200 OK (NOTIFY 7)	←	200 OK (NOTIFY 7)		

SSSXXSSCONF_I NV_002	CONF reference to: TS 124 147 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_INV
Configuration:	CONF
Selection criteria:	Inviting participant by sending REFER to the conference focus. The conference event package is not subscribed.
Test purpose:	Ensure that, when User A sends a REFER request to the conference focus with request URI set to the conference URI previously stored and Refer-To header set to the SIP URI of the remote user (the parameter "method" set to INVITE in the Refer-To header can be included or omitted): User A receives a 202 Accepted SIP response to the REFER request. Remote user receives an INVITE request from the conference focus to be invited to the conference. User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. User A sends a 200 OK SIP response to the NOTIFY request. Remote user sends a 180 Ringing SIP response to the INVITE request from the conference focus. Remote user sends a 200 OK SIP response to the INVITE request from the conference focus. Remote user receives an ACK from the conference focus. User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. User A sends a 200 OK SIP response to the NOTIFY request. Repeat the above steps twice in order to invite to the conference User B (when remote user is UA B) and User C (when remote user is UA C).

SSS_XXSSCONF_I		CONF reference to:				
NV_002	TS 124 1	47 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5				
Precondition:	• Us	er A has created a conference by usi	ng a conference factor	y URI.		
SIP Parameter values:		ial string parameters options=PIXIT				
	TYPE_SDP=					
	SIP header REFER 1:	Request URI contains the <i>conferen</i>	ce URI (previously stor	ed).		
		Refer-To header contains the URI of	of UA B .	·		
	IND //TE 0	Referred-By header contains SIP URI of UA A . (This is not mandatory)				
	INVITE 2:	The P-Asserted-Identity contains the conference URI. "isfocus" feature parameter indicated in Contact header field				
		conference URI contained in the Contact header field.				
	NOTICY 1.	Referred-By contains SIP or tel UR				
	NOTIFY 1:	Event header contains refer ; Subsc Type header contains "message/sig				
		100 Trying.				
	NOTIFY 2:	Event header contains refer; Subsc				
		Type header contains "message/sip OK.	otrag", message/siptrag	contains SIP/2.0 200		
	REFER 2:	Request URI contained the confere		ored).		
		Refer-To header contains the URI of Referred-By header contains SIP U		t mandatary)		
	INVITE 3:	The P-Asserted-Identity contains th		i manuatory)		
		"isfocus" feature parameter indicate	ed in Contact header fie	ld		
		conference URI contained in the Co Referred-By contains SIP or tel UR		nandatory)		
	NOTIFY 3:	Event header contains refer; Subsc				
		Type header contains "message/sip				
	NOTIFY 4:	100 Trying. Event header contains refer ; Subscription-State header contains active , Content-				
	110111 1 4.	Type header contains "message/sip				
Commonto		OK.				
Comments: SIP UA A		Focus	SIP UA B	SIP UA C		
INVITE	→	Conference creation INVITE				
200 OK (INVITE)	-	200 OK (INVITE)				
ACK	→	ACK	naa			
REFER 1	→	Inviting UA B to the confere REFER 1	nce			
202 Accepted	←	202 Accepted				
NOTIFY 4	_	INVITE 2 → INV	/ITE 2			
NOTIFY 1 200 OK (NOTIFY 1)	← →	NOTIFY 1 200 OK (NOTIFY 1)				
,		180 Ringing ← 180				
		200 OK (INVITE 2) ← 200 ACK → AC				
NOTIFY 2	←	NOTIFY 2	TX.			
200 OK (NOTIFY 2)	→	200 OK (NOTIFY 2)				
REFER 2	→	Inviting UA C to the confere REFER 2	nce			
202 Accepted	-	202 Accepted				
·	-	invite 3 →	→	INVITE 3		
NOTIFY 3 200 OK (NOTIFY 3)	← →	NOTIFY 3 200 OK (NOTIFY 3)				
200 OK (NOTIFT 3)	7	180 Ringing ←	←	180 Ringing		
		200 OK (INVITE 3) ←	←	200 OK (INVITE 3)		
NOTIFY 4	←	ACK → NOTIFY 4	→	ACK		
200 OK (NOTIFY 4)	→	200 OK (NOTIFY 4)				
/		· /				

SSS_XXSSCONF_	CONF reference to:				
INV_003	TS 124 147 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5				
TSS reference:	SIP-SIP/Supplementary_Services/CONF_INV				
Configuration:	CONF				
Selection criteria:	Inviting participant by sending REFER to the participant. The conference event package is subscribed.				
Test purpose:	Ensure that, when User A sends a REFER request to the remote user with request URI set to the SIP URI of the remote user and Refer-To header set to the <i>conference URI</i> previously stored (the parameter "method" set to INVITE in the Refer-To header can be included or omitted):				
	 Remote user receives a REFER request containing the Refer-To header set to the conference URI. 				
	 Remote user sends a 202 Accepted SIP response to the REFER request. 				
	 User A receives a 202 Accepted SIP response to the REFER request. Remote user sends an INVITE request with request URI set to conference URI to the conference focus. 				
	 Remote user sends a NOTIFY request to the User A (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. 				
	 User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. 				
	 User A sends a 200 OK SIP response to the NOTIFY request. 				
	 Remote user receives a 200 OK SIP response to the NOTIFY request. 				
	Remote user receives a 200 OK SIP response to the INVITE request from the conference focus.				
	Remote user sends an ACK to the conference focus.				
	 Remote user sends a NOTIFY request to the User A (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Content- Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. 				
	 User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. 				
	User A sends a 200 OK SIP response to the NOTIFY request.				
	 Remote user sends a SUBSCRIBE request with request URI set to the conference URI (previously stored) and the Event header set to "conference". 				
	Remote User receives a 200 OK SIP response to the SUBSCRIBE request.				
	Remote user receives a NOTIFY request (on the same dialog of the SUBSCRIBE)				
	previously sent) with the Event header set to "conference".				
	Remote user sends a 200 OK SIP response to the NOTIFY request.				
	Repeat the above steps twice in order to invite to the conference User B (when remote user is UA B) and User C (when remote user is UA C).				
	When User C has joined the conference:				
	 User B receives a NOTIFY request (on the same dialog of the SUBSCRIBE previously sent) with the Event header set to "conference". 				
	User B sends a 200 OK SIP response to the NOTIFY request.				
	NOTE: Additionally, User A may include the Referred-By header to the REFER and set it to his SIP URI.				
Precondition:	User A has created a conference by using a conference factory URI.				

SSS XXSSCONF		CONF reference to:					
INV_003		7 [19], clauses 5.2.1, 5.3					
SIP Parameter values:		Dial string parameters options=PIXIT					
	TYPE_SDP						
	SIP header						
	REFER 1:		Request URI contains the SIP URI of UA B Refer-To header contains the <i>conference URI</i> (previously stored).				
			SIP or tel URI of UA A. (This				
	INVITE 2:	Request URI contains		s is not mandatory)			
			ty contains the URI of UA B .				
			neter indicated in Contact he				
		conference URI conta	ined in the Contact header fi	eld.			
			SIP or tel URI of UA A. (This				
	NOTIFY 1:		refer; Subscription-State he				
			contains "message/sipfrag",	message/sipfrag body,			
	NOTIFY 2:	contains SIP/2.0 100		entaine terminated Content			
	NOTIFY 2.		"message/sipfrag", message	ontains terminated , Content-			
		SIP/2.0 200 OK.	message/sipilag , message	e/sipirag body contains			
	SUBSCRIB		d the conference URI, Even	t header contains			
		"conference".	, , ,				
	NOTIFY 3:			State header contains active ,			
			e-info+xml contains connecte	ed, dialled-out.			
	REFER 2:	Request URI contains					
			ains the <i>conference URI</i> (pre				
	INVITE 3:		SIP or tel URI of UA A. (This	s is not mandatory)			
	INVITE 3:	Request URI contains	the <i>conterence URI</i> . ty contains the URI of UA C .				
			neter indicated in Contact he				
			ined in the Contact header fi				
			SIP or tel URI of UA A. (This				
	NOTIFY 4:		refer; Subscription-State he				
			Content-Type header contains "message/sipfrag", message/sipfrag body,				
		contains SIP/2.0 100					
	NOTIFY 5:			ontains terminated , Content-			
			"message/sipfrag", message	e/sipfrag body contains			
	NOTIFY 6:	SIP/2.0 200 OK.	a conference Cubacriation	State bander contains estive			
	NOTIFY 6.		e-info+xml contains connecte	State header contains active ,			
	NOTIFY 7:			State header contains active ,			
	11011117.		e-info+xml contains connecte				
Comments:				,			
SIP UA A		Focus	SIP UA B	SIP UA C			
		Conference of	creation				
INVITE	→	INVITE					
200 OK (INVITE)	(200 OK (INVITE)					
ACK	→	ACK	a canforonce				
REFER 1	→	Inviting UA B to th	REFER 1				
202 Accepted	-		€ 202 Accepted				
202 / 1000ptca	•	INVITE 2	← INVITE 2				
NOTIFY 1	←		NOTIFY 1				
200 OK (NOTIFY 1)	→		→ 200 OK (NOTIFY 1)				
,			→ 200 OK (INVITE 2)				
		ACK	← ACK				
NOTIFY 2	(← NOTIFY 2				
200 OK (NOTIFY 2)	→	OUROORISE	→ 200 OK (NOTIFY 2)				
			← SUBSCRIBE				
			→ 200 OK (SUBSCRIBE)→ NOTIFY 3				
			← 200 OK (NOTIFY 3)				
		200 OK (NOTH 13)	• 200 OK (NOTH 13)				

SSSXXSSCONF_	CONF reference to:		
INV_003	TS 124 147 [19], clauses 5.2.1, 5.3	3.1.4, 5.3.1.5	
	Inviting UA C to th	ne conference	
REFER 2	→		→ REFER 2
202 Accepted	←		 202 Accepted
	INVITE 3	←	← INVITE 3
NOTIFY 4	←		← NOTIFY 4
200 OK (NOTIFY 4)	→		→ 200 OK (NOTIFY 4)
	200 OK (INVITE 3)	→	→ 200 OK (INVITE 3)
	ACK	-	← ACK
NOTIFY 5	←		← NOTIFY 5
200 OK (NOTIFY 5)	→		→ 200 OK (NOTIFY 5)
	SUBSCRIBE	←	← SUBSCRIBE
	200 OK (SUBSCRIBE)	→	→ 200 OK (SUBSCRIBE)
	NOTIFY 6	→	→ NOTIFY 6
	200 OK (NOTIFY 6)	←	← 200 OK (NOTIFY 6)
	NOTIFY 7	→ NOTIFY 7	^
	200 OK (NOTIFY 7)	← 200 OK (NOTIFY 7)	

SSS XXSSCONF	CONF reference to:					
INV_004	TS 124 147 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5					
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_INV					
Configuration:	CONF					
Selection criteria:	Inviting participant by sending REFER to the participant. The conference event package is not subscribed.					
Precondition:	5.3.1.5 SIP-SIP-SIP/Supplementary_Services/CONF_INV CONF Inviting participant by sending REFER to the participant. The conference event package is					

SSS XXSSCONF		CONF reference to):					
INV_004	TS 124	147 [19], clauses 5.2		5.3.1.4,				
_		5.3.1.5	,	,				
SIP Parameter values:	Dial string p	parameters options=F	TIXI					
	TYPE_SDP							
	SIP header	values:						
	REFER 1:	Request URI cont						
		Refer-To header of						
		Referred-By conta				This is	not mandatory)	
	INVITE 2:	Request URI cont						
		The P-Asserted-Id						
		"isfocus" feature p						
		conference URI co						
		Referred-By conta						
	NOTIFY 1:						der contains active,	
					essage/sipfra	ag", me	essage/sipfrag body,	
	NOTIFY	contains SIP/2.0 1			0			
	NOTIFY 2:	Event contains re						
	1				essage/sipfra	ag", me	essage/sipfrag body	
	DEELD O	contains SIP/2.0 2		_	l of IIA C			
	REFER 2:	Request URI cont				(nrovii-	undy storod)	
	1	Refer-To header of Referred-By contains						
	INVITE 3:					11115 15	not manuatory)	
	INVITE 3:	Request URI cont The P-Asserted-Id				۸ ۲		
		"isfocus" feature p					lar field	
		conference URI contained in the Contact header field. Referred-By contains SIP or tel URI of UA A. (This is not mandatory)						
	NOTIFY 3:						der contains active ,	
	110111 1 3.						essage/sipfrag body,	
		contains SIP/2.0 1			essage/sipire	ag , iiic	ssage/sipilag body,	
	NOTIFY 4:	Event contains re			-State heade	er cont	ains terminated	
	110111 1 4.						essage/sipfrag body	
		contains SIP/2.0 2			cooage/opine	ag , iiic	233ago/3ipirag boay	
Comments:	1							
SIP UA A		Focus		SI	P UA B		SIP UA C	
		Conference	e cr	eation				
INVITE	→ II	NVITE						
200 OK (INVITE)	← 2	00 OK (INVITE)						
ACK `		CK `						
		Inviting UA B to	the	conferenc	е			
REFER 1	→	_	→	REFER 1				
202 Accepted	←		←	202 Acce	oted			
		INVITE 2	←	INVITE 2				
NOTIFY 1	←		←	NOTIFY 1				
200 OK (NOTIFY 1)	→		→		NOTIFY 1)			
		200 OK (INVITE 2)	→	200 OK (I	NVITE 2)			
		` ACK		ACK `	•			
NOTIFY 2	←		←	NOTIFY 2	2			
200 OK (NOTIFY 2)	→		→		NOTIFY 2)			
		Inviting UA C to	the	conferenc	е .			
REFER 2	→					→	REFER 2	
202 Accepted	←					←	202 Accepted	
		INVITE 3	←			←	INVITE 3	
NOTIFY 3	←					←		
200 OK (NOTIFY 3)	→		_			→		
		200 OK (INVITE 3)				→		
	_	ACK	←				ACK	
NOTIFY 4 200 OK (NOTIFY 4)	((NOTIFY 4	
	→					→	200 OK (NOTIFY 4)	

SSS_XXSSCONF_	CONF reference to:	
INV_005	TS 124 147 [19], clauses 5.2.1, 5.3.1.4, 5.3.1.5	
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_INV	
Configuration:	CONF	
Selection criteria:	Unsuccessful. User joining a conference by using a not valid conference URI.	
Test purpose:	Ensure that, when User A sends a REFER request to the User B with request URI set to SIP URI of the User B and Refer-To header set to the conference URI previously stored (parameter "method" set to INVITE in the Refer-To header can be included or omitted): • User B receives a REFER request containing the Refer-To header set to the conference URI. • User B sends a 202 Accepted SIP response to the REFER request. • User A receives a 202 Accepted SIP response to the REFER request. • Remote user sends an INVITE request with request URI set to a not valid conference URI to the conference focus. • User B sends a NOTIFY request to the User A (on the same dialog of the REFE previously received) with the Event header set to "refer" and the Content-Type heat to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Tryin • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag body contains SIP/2.0 100 Trying. • User A sends a 200 OK SIP response to the NOTIFY request. • User B receives a 200 OK SIP response to the NOTIFY request. • User B receives a 488 Not Acceptable Here SIP response to the INVITE request the conference focus. • Remote user sends a NOTIFY request to the User A (on the same dialog of the REFER previously received) with the Event header set to "refer" and the Content Type header set to "message/sipfrag". The message/sipfrag body contains SIP/503 Service Unavailable. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with Event header set to "message/sipfrag". The message/sipfrag body contains SIP/503 Service Unavailable.	ER neader ng. with pfrag".
	User A sends a 200 OK SIP response to the NOTIFY request.	
Precondition:	User A has created a conference by using a conference factory URI.	
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; SIP header values: REFER 1: Request URI contains the SIP URI of UA B Refer-To header contains the conference URI (previously stored). Referred-By contains SIP or tel URI of UA A. (This is not mandatory) INVITE 2: URI contained the conference URI not allocated in the conference focus. The P-Asserted-Identity contains the URI of UA B. Referred-By contains SIP or tel URI of UA A. (This is not mandatory) NOTIFY 1: Event header contains refer; Subscription-State header contains active, Content-Type header contains "message/sipfrag", message/sipfrag body, contains SIP/2.0 100 Trying. NOTIFY 2: Event contains refer; Subscription-State header contains terminated, Cor Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0 503 Service Unavailable.	ntent-
Comments: SIP UA	A Focus SIP UA B	
SIF UA	Conference creation	
INVITE 200 OK (INVITE) ACK	→ INVITE ← 200 OK (INVITE) → ACK Inviting UA B to the conference	
REFER 1 202 Accepted	→ REFER 1 ← 202 Accepted	
NOTIFY 1 200 OK (NOTIFY 1)	INVITE 2 NOTIFY 1 NOTIFY 1 NOTIFY 1 NOTIFY 1 NOTIFY 1 A88 Not Acceptable Here ACK ACK	:
NOTIFY 2 200 OK (NOTIFY 2)	 ← NOTIFY 2 → 200 OK (NOTIFY 2) 	

6.2.7.3 Leaving a conference

SSS_XXSSCONF	CONF reference to:			
LEAV_001	TS 124 147 [19], clauses 5.2.1, 5.3.1.6			
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CONF_LE	AV		
Configuration:	CONF			
Selection criteria:	A participant leaves the conference. The conference event package is subscribed.			
Test purpose:	Ensure that, when User B sends a BYE request (in ord	der to leave the conference) to the	
	conference focus with request URI set to the conference focus with request under the conference			
	 User B sends a 200 OK SIP response to User B receives a NOTIFY request (on the second se			
	 User B receives a NOTIFY request (on the previously sent) with the Event header sent the sent header sent the sent the sent header sent the sen			
	header set to "terminated".	ici io	comerence and oubscription-otate	
	User B sends a 200 OK SIP response to	the	NOTIFY request.	
Precondition:	User A has created a conference by usi			
	User A has invited User B to the conference			
	 User B has joined the conference. 			
	User B has subscribed to the conference	e eve	ent package.	
SIP Parameter	Dial string parameters options=PIXIT			
values:	TYPE_SDP= PIXIT;			
	SIP header values:			
	NOTIFY 4: Event header contains conference ; S terminated , Content-Type header co			
Comments:	terminated, Content-Type header co	IIIaiii	s application/contenence-into+xitti .	
SIP UA	A Focus		SIP UA B	
	Conference creation		5 5	
INVITE	→ INVITE			
200 OK (INVITE)	← 200 OK (INVITE)			
ACK	→ ACK			
REFER 1	Inviting UA B to the conference	ce →	REFER 1	
202 Accepted	-	-	202 Accepted	
202 / 1000ptcu	INVITE 2	÷	INVITE 2	
NOTIFY 1	←	←	NOTIFY 1	
200 OK (NOTIFY 1)	→	→	200 OK (NOTIFY 1)	
	200 OK (INVITE 2)	→	,	
NOTIFY	ACK	(ACK	
NOTIFY 2 200 OK (NOTIFY 2)	← →	←	NOTIFY 2 200 OK (NOTIFY 2)	
200 OK (NOTIFT 2)	SUBSCRIBE	-	` ,	
	200 OK (SUBSCRIBE)	→	200 OK (SUBSCRIBE)	
	NOTIFY 3	→	NOTIFY 3	
	200 OK (NOTIFY 3)	←	200 OK (NOTIFY 3)	
	Conference communication	1		
	UA B leaves the conference			
	BYE	·	BYE	
	200 OK (BYE)	→	200 OK (BYE)	
	NOTIFY 4	→	NOTIFY 4	
	200 OK (NOTIFY 4)	←	200 OK (NOTIFY 4)	

SSS_XXSSCONF	CONF reference to:		
_LEAV_002	TS 124 147 [19], clauses 5.2.1, 5.3.1.6		
TSS reference:	S SIP-SIP-SIP/Supplementary_Services/CONF	_LEAV	1
Configuration:	CONF		
Selection criteria:	A participant leaves the conference. The conference	ence e	vent package is not subscribed.
Test purpose:	Ensure that, when User B sends a BYE request conference focus with request URI set to the co. • User B sends a 200 OK SIP response	ngeren	ce URI (previously stored):
Precondition:	 User A has created a conference by use User A has invited User B to the confe 	_	,
	 User B has joined the conference. 		
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;		
Comments:			
SIP UA	A Focus		SIP UA B
INVITE 200 OK (INVITE) ACK REFER 1 202 Accepted NOTIFY 1 200 OK (NOTIFY 1) NOTIFY 2 200 OK (NOTIFY 2)	Conference creation INVITE 200 OK (INVITE) ACK SIP UA B joining the confere INVITE 2 INVITE 2 Conference communication	+++++++	REFER 1 202 Accepted INVITE 2 NOTIFY 1 200 OK (NOTIFY 1) 200 OK (INVITE 2) ACK NOTIFY 2 200 OK (NOTIFY 2)
	Participant leaves the confere BYE 200 OK (BYE)	←	BYE 200 OK (BYE)

6.2.7.4 Removing a conference participant from a conference

SSS XXSSCONF	CONF reference to:			
REMOV_001	TS 124 147 [19], clauses 5.2.1, 5.3.1.6			
TSS reference:	SIP-SIP/Supplementary_Services/CONF_REMOV			
Configuration:	CONF			
Selection criteria:	A participant removes another conference participant from the conference. The			
-	conference event package is subscribed.			
Test purpose:	Ensure that, when User A sends a REFER request to the conference focus with request URI set to the <i>conference URI</i> (previously stored) and Refer-To header set to the SIP			
	URI of User B (the parameter "method" must be set to BYE):			
	User A receives a 202 Accepted SIP response to the REFER request.			
	User A receives a NOTIFY (on the same dialog of the REFER previously sent)			
	with the Event header set to "refer" and the Content-Type header set to			
	"message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying.			
	User A sends a 200 OK SIP response to the NOTIFY request.			
	 User B receives a BYE request from the conference focus to be removed from the conference. 			
	 User B sends a 200 OK SIP response to the BYE request. 			
	User A receives a NOTIFY (on the same dialog of the REFER previously sent)			
	with the Event header set to "refer" and the Content-Type header set to			
	"message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.			
	User A sends a 200 OK SIP response to the NOTIFY request.			
	User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE			
	previously sent) with the Event header set to "conference".			
Precondition:	User A sends a 200 OK SIP response to the NOTIFY request. Llear A has greated a conference by using a conference factor (UD).			
Precondition.	 User A has created a conference by using a conference factory URI. User A has subscribed to the conference event package. 			
	 User A has invited User B to the conference. 			
	User B has joined the conference.			
SIP Parameter	Dial string parameters options=PIXIT			
values:	TYPE_SDP= PIXIT;			
	SIP header values:			
	REFER 2: Request URI contains conference URI (previously stored). Refer-To header contains the URI of UA B; method=BYE.			
	Referred-By header contains SIP URI of UA A. (This is not mandatory)			
	NOTIFY 4: Event header contains refer ; Subscription-State header contains active ,			
	Content-Type header contains "message/sipfrag", message/sipfrag body			
	contains SIP/2.0 100 Trying.			
	NOTIFY 5: Event header contains refer; Subscription-State header contains			
	terminated, Content-Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0 200 OK.			
	NOTIFY 6: Event header contains conference ; Subscription-State header contains			
	active, Content-Type header contains "application/conference-info+xml".			
Comments:	-			
SIP UA A	Focus SIP UA B Conference creation			
INVITE	→ INVITE			
200 OK (INVITE)	€ 200 OK (INVITE)			
ACK	→ ACK			
SUBSCRIBE)			
200 OK (SUBSCRIBE				
NOTIFY 200 OK (NOTIFY)	NOTIFY→ 200 OK (NOTIFY)			
200 OK (NOTIFT)	UA B joining the conference			
REFER 1	→ REFER 1			
202 Accepted	← 202 Accepted			
NOTIFY 4	INVITE 2 ← INVITE 2			
NOTIFY 1 200 OK (NOTIFY 1)	 ← NOTIFY 1 → 200 OK (NOTIFY 1) 			
200 OK (NOTIFIT)	200 OK (INVITE 2) → 200 OK (INVITE 2)			
	ACK ← ACK			
NOTIFY 2	← NOTIFY 2			
200 OK (NOTIFY 2)	→ 200 OK (NOTIFY 2)			
NOTIFY 3	 NOTIFY 3 → 200 OK (NOTIFY 3) 			
200 OK (NOTIFY 3)	→ 200 OK (NOTIFY 3)			

SSS_XXSSCONF_	CON	NF reference to:			
REMOV_001	TS 124 147 [1	19], clauses 5.2.1, 5.3.1.6			
		Conference communication	n		
	UA A I	removes UA B from the co	nfere	nce	
REFER 2	→	REFER 2			
202 Accepted	←	202 Accepted			
NOTIFY 4	←	NOTIFY 4			
200 OK (NOTIFY 4)	→	200 OK (NOTIFY 4)			
, ,) BYE	→	BYE	
		200 OK (BYE)	←	200 OK (BYE)	
NOTIFY 5	←	NOTIFY 5		,	
200 OK (NOTIFY 5)	→	200 OK (NOTIFY 5)			
NOTIFY 6	←	NOTIFY 6			
200 OK (NOTIFY 6)	→	200 OK (NOTIFY 6)			

SSS_XXSSCONF_	CONF reference to:				
REMOV 002	TS 124 147 [19], clauses 5.2.1, 5.3.1.6				
TSS reference:	SIP-SIP/Supplementary_Services/CONF_REMOV				
Configuration:	CONF				
Selection criteria:	A participant removes another conference participant from the conference. The				
	conference event package is not subscribed.				
Test purpose:	Ensure that, when User A sends a REFER request to the conference focus with				
	request URI set to the <i>conference URI</i> (previously stored) and Refer-To header set to				
	the SIP URI of User B (the parameter "method" must be set to BYE):				
	User A receives a 202 Accepted SIP response to the REFER request.				
	User A receives a NOTIFY (on the same dialog of the REFER previously A received a NOTIFY (on the same dialog of the REFER previously) A received a NOTIFY (on the same dialog of the REFER previously) A received a NOTIFY (on the same dialog of the REFER previously)				
	sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying.				
	 User A sends a 200 OK SIP response to the NOTIFY request. 				
	 User B receives a BYE request from the conference focus to be removed 				
	from the conference.				
	User B sends a 200 OK SIP response to the BYE request.				
	User A receives a NOTIFY (on the same dialog of the REFER previously)				
	sent) with the Event header set to "refer" and the Content-Type header set to				
	"message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.				
	User A sends a 200 OK SIP response to the NOTIFY request.				
Precondition:	User A has created a conference by using a conference factory URI.				
	User A has invited User B to the conference.				
	User B has joined the conference.				
SIP Parameter values:					
	TYPE_SDP= PIXIT;				
	SIP header values:				
	REFER 2: Request URI contains conference URI (previously stored). Refer-To header contains the URI of UA B; method=BYE.				
	Referred-By header contains SIP URI of UA A. (This is not mandatory)				
	NOTIFY 3: Event header contains refer ; Subscription-State header contains active ,				
	Content-Type header contains "message/sipfrag", message/sipfrag body				
	contains SIP/2.0 100 Trying.				
	NOTIFY 4: Event header contains refer ; Subscription-State header contains				
	terminated, Content-Type header contains "message/sipfrag",				
Cammanta	message/sipfrag body contains SIP/2.0 200 OK.				
Comments: SIP UA A	Focus SIP UA B				
SIF UA A	Conference creation				
INVITE	→ INVITE				
200 OK (INVITE)	← 200 OK (INVITE)				
ACK	→ ACK				
	UA B joining the conference				
REFER 1	→ REFER 1				
202 Accepted	← 202 Accepted				
NOTIFY 1	INVITE 2 ← INVITE 2 ← NOTIFY 1				
200 OK (NOTIFY 1)	→ 200 OK (NOTIFY 1)				
200 01 (10111 1 1)	200 OK (INVITE 2) → 200 OK (INVITE 2)				
	ACK ← ACK				
NOTIFY 2	← NOTIFY 2				
200 OK (NOTIFY 2)	→ 200 OK (NOTIFY 2)				
	Conference communication				
	IIA A removes IIA P from the conference				
REFER 2	UA A removes UA B from the conference → REFER 2				
202 Accepted	← 202 Accepted				
NOTIFY 3	NOTIFY 3				
200 OK (NOTIFY 3)	→ 200 OK (NOTIFY 3)				
-/	→ BYE				
	← 200 OK (BYE)				
NOTIFY 4	NOTIFY 4				
200 OK (NOTIFY 4)	→ 200 OK (NOTIFY 4)				

SSS_XXSSCONF_	CC	ONF reference to:		1
REMOV_003		[19], clauses 5.2.1, 5.3.1.6		
TSS reference:		oplementary_Services/CONF_RI	-MO	W
Configuration:	CONF			•
Selection criteria:		owner releases the entire confer	ence	by sending a BYE to the focus. The
		nt package is subscribed.		, ,
Test purpose:			o the	e conference focus with request URI set
		e URI (previously stored):		
		receives a 200 OK SIP respons		
	User B receives a BYE request from the conference focus to be removed from the			
	confere		a +b.a	DVC request
		sends a 200 OK SIP response t receives a NOTIFY request (on		
		isly sent) with the Event headers		
	•	sends a 200 OK SIP response t		
Precondition:		has created a conference by us		
1 1000Hallion.		has subscribed to the conference		
		has invited User B to the confer		. •
	User B	has joined the conference.		
SIP Parameter	Dial string paran	neters options=PIXIT		
values:	TYPE_SDP= PIX			
	SIP header valu			
		quest URI contains the conference		
		nt neader contains conterence ; tent-Type header contains "appl		scription-State header contains active,
Comments:	Con	tent-Type neader contains appr	Call	on/comerence-into-xitti
SIP UA A		Focus		SIP UA B
		Conference creation		
INVITE	→	INVITE		
200 OK (INVITE)	←	200 OK (INVITE)		
ACK	→	ACK		
SUBSCRIBE 200 OK (SUBSCRIBE)	→	SUBSCRIBE 200 OK (SUBSCRIBE)		
NOTIFY	÷	NOTIFY		
200 OK (NOTIFY)	→	200 OK (NOTIFY)		
,		UA B joining the conference	е	
REFER 1	→		→	REFER 1
202 Accepted	+	W 11 (TE 0	÷	202 Accepted
NOTIFY 1	←	INVITE 2	+	INVITE 2 NOTIFY 1
200 OK (NOTIFY 1)	→		→	200 OK (NOTIFY 1)
200 011 (110111 1 1)	-	200 OK (INVITE 2)		· ·
		ACK	←	` ,
NOTIFY 2	←		←	
200 OK (NOTIFY 2)	→		→	200 OK (NOTIFY 2)
NOTIFY 3	+	NOTIFY 3		
200 OK (NOTIFY 3)	→	200 OK (NOTIFY 3) Conference communication	,	
			•	
	U	IA A releases the entire confer	ence	e
BYE	→	BYE		
200 OK (BYE)	←	200 OK (BYE)	_	
	focu	is removes UAB from the con		
			→	BYE
NOTIFY 4	←	NOTIFY 4	~	200 OK BYE
1 T T T T				
200 OK (NOTIFY 4)	→	200 OK (NOTIFY 4)		

SSS_XXSSCONF_	CO	NF reference to:			
REMOV_004		[19], clauses 5.2.1, 5.3.1.6			
TSS reference:		SIP-SIP-SIP/Supplementary_Services/CONF_REMOV			
Configuration:	CONF	•			
Selection criteria:	The conference	owner releases the entire co	nfere	nce by sending a BYE to the focus.	
	The conference	event package is not subscri	ibed.		
Test purpose:	Ensure that, when User A sends a BYE request to the conference focus with request URI set to the <i>conference URI</i> (previously stored):				
		receives a 200 OK SIP resp		to the DVE request	
				conference focus to be removed from	
		receives a bit request from	n me	conference focus to be removed from	
			to	the DVC request	
Precondition:		sends a 200 OK SIP respon			
Precondition:		has created a conference by			
		has invited User B to the co	ntere	nce.	
OID D		has joined the conference.			
SIP Parameter		neters options=PIXIT			
values:	TYPE_SDP= PI SIP header value				
		lest URI contains the confere	nco I	IPI (proviously stored)	
Comments:	DIE. Requ	lest OKI contains the contere	iiice c	oki (previously storeu).	
SIP UA A		Focus		SIP UA B	
Oii OAA		Conference creation		on on b	
INVITE	→	INVITE			
200 OK (INVITE)	←	200 OK (INVITE)			
ACK `	→	ACK			
		UA B joining the confere	nce		
REFER 1	→		→	REFER 1	
202 Accepted	+		←	202 Accepted	
	_	INVITE 2	←		
NOTIFY 1	((NOTIFY 1	
200 OK (NOTIFY 1)	→		→	200 OK (NOTIFY 1)	
		200 OK (INVITE 2) ACK	→	200 OK (INVITE 2) ACK	
NOTIFY 2	←	ACK	-	NOTIFY 2	
200 OK (NOTIFY 2)	•		÷	200 OK (NOTIFY 2)	
200 OK (140 111 1 2)	•	Conference communicat	-	200 OK (NOTH 1 2)	
	U	A A releases the entire con	feren	ce	
BYE	→	BYE			
200 OK (BYE)	+	200 OK (BYE)			
	focus	s removes UA B from the c			
			→	BYE	
			←	200 OK (BYE)	

SSS XXSSCONF	CONF reference to:
REMOV_005	TS 124 147 [19], clauses 5.2.1, 5.3.1.6
TSS reference:	SIP-SIP/Supplementary_Services/CONF_REMOV
Configuration:	CONF
Selection criteria:	The conference owner releases the entire conference by sending a REFER to the focus. The
	conference event package is subscribed.
Test purpose:	Ensure that, when User A sends a REFER request to the conference focus with request URI
	set to the conference URI (previously stored) and Refer-To header set to the conference URI
	(the parameter "method" must be set to BYE):
	User A receives a 202 Accepted SIP response to the REFER request.
	User A receives a BYE request from the conference focus to be removed from the
	conference.
	User B receives a BYE request from the conference focus to be removed from the
	conference.
	User A receives a NOTIFY (on the same dialog of the REFER previously sent) with
	the Event header set to "refer" and the Content-Type header set to
	"message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying.
	User A sends a 200 OK SIP response to the NOTIFY request. User A sends a 200 OK SIP response to the RVF request.
	User A sends a 200 OK SIP response to the BYE request. User B sends a 200 OK SIP response to the BYE request. Output Description:
	 User B sends a 200 OK SIP response to the BYE request. User A receives a NOTIFY (on the same dialog of the REFER previously sent) with
	 User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to
	"message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK.
	 User A sends a 200 OK SIP response to the NOTIFY request.
	User A receives a NOTIFY request (on the same dialog of the SUBSCRIBE)
	previously sent) with the Event header set to "conference".
	User A sends a 200 OK SIP response to the NOTIFY request.
Precondition:	User A has created a conference by using a conference factory URI.
r recondition.	 User A has subscribed to the conference event package.
	 User A has invited User B to the conference.
SIP Parameter	User B has joined the conference. Dial string parameters options=PIXIT
values:	TYPE_SDP= PIXIT;
values.	SIP header values:
	REFER 2: Request URI contains the conference URI (previously stored).
	Refer-To header contains the conference URI; method=BYE.
	Referred-By header contains SIP URI of UA A. (This is not mandatory)
	NOTIFY 4: Event header contains refer; Subscription-State header contains active,
	Content-Type header contains "message/sipfrag", message/sipfrag body
	contains SIP/2.0 100 Trying.
	NOTIFY 5: Event header contains refer ; Subscription-State header contains terminated ,
	Content-Type header contains "message/sipfrag", message/sipfrag body
	contains SIP/2.0 200 OK.
	NOTIFY 6: Event header contains conference ; Subscription-State header contains
Commonto	terminated, Content-Type header contains "application/conference-info+xml".
Comments: SIP UA A	A Focus SIP UA B
SIP UA F	A Focus SIP UA B Conference creation
INVITE	→ INVITE
200 OK (INVITE)	€ 200 OK INVITE)
ACK	→ ACK
SUBSCRIBE	→ SUBSCRIBE
200 OK (SUBSCRIBE)	**-**
NOTIFY	← NOTIFY
200 OK (NOTIFY)	→ 200 OK (NOTIFY)
,	UA B joining the conference
REFER 1	→ REFER 1
202 Accepted	← 202 Accepted
	INVITE 2 ← INVITE 2
NOTIFY 1	← NOTIFY 1
200 OK (NOTIFY 1)	→ 200 OK (NOTIFY 1)
	200 OK (INVITE 2) → 200 OK (INVITE 2)
NOTIFY C	ACK ← ACK
NOTIFY 2	← NOTIFY 2
200 OK (NOTIFY 2)	→ 200 OK (NOTIFY 2) ← NOTIFY 3
NOTIFY 3 200 OK (NOTIFY 3)	
ZUU UN (NUTIFT 3)	→ 200 OK (NOTIFY 3)

SSS_XXSSCONF_	CONF reference to:			
REMOV_005	TS 124 147 [19], clauses 5.2.1, 5.3.1.	6		
	Conference commun	icatio	n	
	UA A releases the entire	confe	rence	
REFER 2	→ REFER 2			
202 Accepted	← 202 Accepted			
BYE	← BYE			
		BYE	→	BYE
NOTIFY 4	← NOTIFY 4			
200 OK (NOTIFY 4)	→ 200 OK NOTIFY 4			
200 OK (BYE)	→ 200 OK (BYE)			
, ,	200 OK (I	BYE)	←	200 OK (BYE)
NOTIFY 5	← NOTIFY 5			
200 OK (NOTIFY 5)	→ 200 OK (NOTIFY 5)	→ 200 OK (NOTIFY 5)		
NOTIFY 6	← NOTIFY 6	← NOTIFY 6		
200 OK (NOTIFY 6)	→ 200 OK (NOTIFY 6)			

OOO VYOOONE	CONF reference to			
SSSXXSSCONF_ REMOV_006	CONF reference to: TS 124 147 [19], clauses 5.2.1, 5.3.1.6			
TSS reference:	SIP-SIP/Supplementary Services/CONF REMOV			
	11 /			
Configuration:	CONF			
Selection criteria:	The conference owner releases the entire conference by sending a REFER to the focus. The conference event package is not subscribed.			
Test purpose:	Ensure that, when User A sends a REFER request to the conference focus with request URI set to the conference URI (previously stored) and Refer-To header set to the conference URI (the parameter "method" must be set to BYE): • User A receives a 202 Accepted SIP response to the REFER request. • User A receives a BYE request from the conference focus to be removed from the conference. • User B receives a BYE request from the conference focus to be removed from the conference. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 100 Trying. • User A sends a 200 OK SIP response to the NOTIFY request. • User B sends a 200 OK SIP response to the BYE request. • User A receives a NOTIFY (on the same dialog of the REFER previously sent) with the Event header set to "refer" and the Content-Type header set to "message/sipfrag". The message/sipfrag body contains SIP/2.0 200 OK. • User A sends a 200 OK SIP response to the NOTIFY request.			
Precondition:	 User A has created a conference by using a conference factory URI. User A has invited User B to the conference. User B has joined the conference. 			
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;			
	SIP header values:			
	REFER 2: Request URI contains the conference URI (previously stored).			
	Refer-To header contains the conference URI; method=BYE.			
	Referred-By header contains SIP URI of UA A. (This is not mandatory) NOTIFY 3: Event header contains refer ; Subscription-State header contains active , Content- Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0 100 Trying.			
	NOTIFY 4: Event header contains refer ; Subscription-State header contains terminated , Content-Type header contains "message/sipfrag", message/sipfrag body contains SIP/2.0 200 OK.			

SSS_XXSSCONF_	CONF reference to:			
REMOV_006	TS 124 147 [19], clauses 5.2.1, 5.3.1.6			
Comments:				
SIP UA A	Focus			SIP UA B
	Conference creation	า		
INVITE	→ INVITE			
200 OK (INVITE)	← 200 OK (INVITE)			
ACK	→ ACK			
	UA B joining the confer	ence		
REFER 1	→		→	REFER 1
202 Accepted	←		←	202 Accepted
	INVIT	E 2	←	INVITE 2
NOTIFY 1	←		←	NOTIFY 1
200 OK (NOTIFY 1)	→		→	200 OK (NOTIFY 1)
	200 OK (INVITE	2)	→	200 OK (INVITE 2)
	A	CK	←	ACK
NOTIFY 2	←		←	NOTIFY 2
200 OK (NOTIFY 2)	→		→	200 OK (NOTIFY 2)
	Conference communication	ation		
	UA A releases the entire co	nferer	nce	
REFER 2	→ REFER 2			
202 Accepted	 202 Accepted 			
BYE	← BYE			
	В	ΥE	→	BYE
NOTIFY 3	← NOTIFY 3			
200 OK (NOTIFY 3)	→ 200 OK (NOTIFY 3)			
200 OK (BYE)	→ 200 OK (BYE)			
	200 OK (B)	YE)	←	200 OK (BYE)
NOTIFY 4	← NOTIFY 4	•		, ,
200 OK (NOTIFY 4)	→ 200 OK (NOTIFY 4)			

6.2.8 Test purposes for Call Waiting

SSXXSSCW01	CW reference to:		
	TS 124 615 [21], clause 4.5.5.2		
TSS reference:	SIP-SIP-SIP/Supplementary_Servic	es/CW	
Configuration:	The user B has subscribed to CW		
Selection criteria:	CW and approaching NDUB condition		
	NDUB status can be achieved for us	ser B.	
Test purpose:	*	ends an INVITE towards user B which is in the	
	approaching NDUB condition, delive		
	containing a Content-Type header s		
	and containing a MIME body including	ng a "call-waiting-indication" element.	
SIP Parameter values:	INVITE1		
	Dial string parameters options=PIXIT		
	TYPE_SDP= PIXIT		
	INVITE2		
	Content-Type header application/vn	d 3ann cw+xml	
	MIME body with "call-waiting-indication" element		
Comments:			
SIP UA A	SIP UA A SUT SIP UA B		
UA B enters NDUB condition (e.g. by establishing a communication)			
INVITE1	→	→ INVITE2	

SSXXSSCW02	CW reference to:			
	TS 124 615 [21], clause 4.5.5.2			
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CV	N		
Configuration:	The user B has subscribed to CW			
Selection criteria:	CW and approaching NDUB condition su	pported,		
	NDUB status can be achieved for user B.			
Test purpose:	Ensure that the SUT, having delivered ar	NINVITE indicating Call Waiting to user B which		
	is in the approaching NDUB condition, or	receipt of a 415 Unsupported Media Type from		
	user B,			
	sends a 486 Busy Here to user A.			
SIP Parameter values:	INVITE1			
	Dial string parameters options=PIXIT			
	TYPE_SDP= PIXIT			
	INVITE2			
	Content-Type header application/vnd.3gpp.cw+xml			
0	MIME body with "call-waiting-indication" e	element		
Comments: SIP UA A	CUT	CID IIA D		
	SUT SIP UA B B enters NDUB condition (e.g. by establishing a communication)			
INVITE1	• enters NDOB condition (e.g. by estable	INVITE2		
IIIVII E I	→	415 Unsupported Media Type		
486 Busy Here	← →	ACK		
ACK	→	7.010		

SSXXSSCW03	CW reference to:		
	TS 124 615 [21], clause 4.5.5.2		
TSS reference:	SIP-SIP-SIP/Supplementary_Servic	es/CW	
Configuration:	The user B has subscribed to CW		
Selection criteria:	CW supported, Notification of calling user of CW status is supported.		
Test purpose:	Ensure that the SUT, having delivered an INVITE from user A to user B, on receipt of a 180 Ringing containing an Alert-Info header set to "urn:alert:service:call-waiting", delivers this 180 Ringing to user A and provides an announcement about the CW condition.		
SIP Parameter values:	Dial string parameters options=PIXITYPE_SDP= PIXIT 180 Ringing Alert-Info header set to "urn:alert:se		
Comments:			
SIP UA A	SUT	SIP UA B	
INVITE	→	→ INVITE	
180 Ringing	←	← 180 Ringing	
Announcement to UE A			

SS XXSSCW04	CW reference to:		
	TS 124 615 [21], clause 4.5.5.3		
TSS reference:	SIP-SIP-SIP/Supplementary_Services/CW		
Configuration:	The user B has subscribed to CW		
Selection criteria:	CW and approaching NDUB condition	on supported,	
	NDUB status can be achieved for us		
Test purpose:		ed an INVITE from user B, which is in the	
		er A containing a Content-Type header set to	
		user A leaves the NDUB condition and accepts the	
	waiting call,		
	handles the call with normal establis		
		on the media channels is performed correctly (e.g.	
SIP Parameter values:	testing QoS parameters).		
SIF Farameter values.	Dial string parameters options=PIXI	Т	
	TYPE_SDP= PIXIT	'	
	111 2_651 = 1 17(1)		
	INVITE2		
	Content-Type header application/vn/	d.3gpp.cw+xml	
	MIME body with "call-waiting-indicat	ion" element	
Comments:			
SIP UA A	SUT	SIP UA B	
		by establishing a communication)	
INVITE1	→ → INVITE2 aves approaching NDUB condition (e.g. by releasing a communication)		
180 Ringing	es approaching NDOB condition (e. ←		
200 OK INVITE	 ← 180 Ringing ← 200 OK INVITE 		
ACK	→ ACK		
Check media			
BYE	→	→ BYE	
200 OK BYE	← 200 OK BYE		

SS XXSSCW05	CW reference to:			
	TS 124 615 [21], clause 4.5.5.3			
TSS reference:	SIP-SIP/Supplementary_Services/CW			
Configuration:	The user B has subscribed to CW			
Selection criteria:	CW supported,			
	Notification of calling user of CW st	atus is	supported.	
Test purpose:	Ensure that the SUT, having delive		~ ~	•
	to "urn:alert:service:call-waiting" fro	m user	B to user A, when u	user B accepts the call by
	sending a 200OK,	a la a		
	handles the call with normal establi Ensure that the voice/data transfer			porformed correctly (e.g.
	testing QoS parameters).	on the	media channels is p	enormed correctly (e.g.
SIP Parameter values:	Dial string parameters options=PIX	IT		
on Taramotor values.	TYPE_SDP= PIXIT	• •		
	180 Ringing			
	Alert-Info header set to "urn:alert:se	ervice:c	all-waiting"	
Comments:				
SIP UA A	SUT	_	-	SIP UA B
INVITE	→	→	INVITE	ļ
180 Ringing	*	+	180 Ringing	
200 OK INDUITE	Announcement			
200 OK INVITE ACK	← →	←	200 OK INVITE ACK	
ACK	Check media			
BYE	→	— →	BYE	
200 OK BYE	÷	÷	200 OK BYE	

6.2.9 Test purposes for Completion of Communications to Busy Subscriber

NOTE: The descriptions of invocation and operation of the CCBS service by the communication originating user are not yet fully described in TS 124 642 [22]. Therefore no test purposes have been defined for the current version of this document.

6.2.10 Test purposes for Completion of Communications by No Reply

NOTE: The descriptions of invocation and operation of the CCNR service by the communication originating user are not yet fully described in TS 124 642 [22]. Therefore no test purposes have been defined for the current version of this document.

6.2.11 Test purposes for Explicit Communication Transfer

NOTE: In this clause the following conventions apply:

• user A: transferee, user B: transferor (served user), user C: transfer target.

ECT reference to:		
TS 124 529 [23], clause 4.5.2		
SIP-SIP/Supplementary_Services/ECTD		
The user B has subscribed to ECT		
ECT supported.		
 Blind/Assured transfer, served user B is callee in original communication Ensure that the SUT, when user B has established an original communication with user A and user B requests transfer of the communication towards user C by sending a REFER request to user A: delivers the REFER request to user A containing the ECT Session Identifier URI and when user A responds with a 202 Accepted and a NOTIFY indicating 100 Trying delivers the 202 Accepted and the NOTIFY to user B and when user A has held the original communication and sends a new INVITE to the ECT Session Identifier URI delivers the INVITE to user C and continues normal call establishment between user A and user C and when user A sends a NOTIFY indicating 200 OK to user B and user B sends a BYE to release the original communication. delivers the BYE to user A and continues normal call release between user A and user B. Ensure that the voice/data transfer on the media channels of the transferred call (A-C) is performed correctly (e.g. testing QoS parameters). 		
REFER1 Request URI: contact URI of user A from original call Refer-To: public address of user C Referred-By: user B REFER2 Request URI: user A Refer-To: ECT Session Identifier Referred-By: user B NOTIFY1 body: 100 Trying INVITE1 Request URI: ECT Session Identifier INVITE2 Referred-By: user B NOTIFY2		

SSS XXSSECT01	ECT reference to:		
	TS 124 529 [23], clause 4.5.2		
Comments:		•	
SIP UA A	SUT	SIP UA B	SIP UA C
	Original communication is estal	blished from user A to us	ser B
REFER2	+ +	REFER1	
202 Accepted	→ →	202 Accepted	
NOTIFY1	→ →		
200 OK NOTIFY	+ +	200 OK NOTIFY	
could also tal	23] 4.5.2.5 does not specify the ord ke place before answering to the R	EFER request.	e original communication A-B
Re-INVITE (sendonly)	→ →	Re-INVITE (sendonly)	
200 OK INVITE (recvon	ly) ← ←	200 OK	
		INVITE(recvonly)	
ACK	→ →	ACK	
INVITE1	→		→ INVITE2
180 Ringing	←		180 Ringing
200 OK INVITE	←		← 200 OK INVITE
ACK	→		→ ACK
NOTIFY2	→ →	NOTIFY2	
200 OK NOTIFY	+ +	200 OK NOTIFY	
BYE	+ +	BYF	
200 OK BYE	• •	200 OK BYE	
200 011 212	Check med		
BYE	→	,	→ BYE
200 OK BYE	←		← 200 OK BYE

SSS_XXSSECT02	ECT reference to:
	TS 124 529 [23], clause 4.5.2
TSS reference:	SIP-SIP-SIP/Supplementary_Services/ECTD
Configuration:	The user B has subscribed to ECT
Selection criteria:	ECT supported.
Test purpose:	Blind/Assured transfer, served user B is caller in original communication Ensure that the SUT, when user B has established an original communication with user A and user B requests transfer of the communication towards user C by sending a REFER request to user A, • delivers the REFER request to user A containing the ECT Session Identifier URI and when user A responds with a 202 Accepted and a NOTIFY indicating 100 Trying • delivers the 202 Accepted and the NOTIFY to user B and when user A has held the original communication and sends a new INVITE to the ECT Session Identifier URI • delivers the INVITE to user C and continues normal call establishment between user A and user C and when user A sends a NOTIFY indicating 200 OK to user B and user B sends a BYE to release the original communication • delivers the BYE to user A and continues normal call release between user A and user B. Ensure that the voice/data transfer on the media channels of the transferred call (A-C) is performed correctly (e.g. testing QoS parameters).

SSS_XXSSECT02	ECT reference to:	
SIP Parameter values:	TS 124 529 [23], clause 4.5.2	
SIP Parameter values:	Request URI: contact URI of user A Refer-To: public address of user C Referred-By: user B	A from original call
	REFER2 Request URI: user A Refer-To: ECT Session Identifier Referred-By: user B	
	NOTIFY1 body: 100 Trying	
	INVITE1 Request URI: ECT Session Identifi	er
	INVITE2 Referred-By: user B	
	NOTIFY2 body: 200K	
Comments: SIP UA A	SUT	SIP UA B SIP UA C
Sii SAA	Original communication is estab	
REFER2	+ +	
202 Accepted NOTIFY1	→ → → →	202 Accepted NOTIFY1
200 OK NOTIFY	`	200 OK NOTIFY
communication Re-INVITE (sendonly)	on A-B could also take place before	Re-INVITE (sendonly)
200 OK INVITE (recvon	ly) ← ←	200 OK INVITE(recvonly)
ACK	→ →	ACK
INVITE1 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ INVITE2 ← 180 Ringing ← 200 OK INVITE → ACK
NOTIFY2 200 OK NOTIFY	→ → ←	NOTIFY2 200 OK NOTIFY
BYE 200 OK BYE	← ← ← → Check medi	BYE 200 OK BYE (a. (A-C)
BYE 200 OK BYE	→ ←	→ BYE ← 200 OK BYE

SSS_XXSSECT03	ECT reference to:		
	TS 124 529 [23], clause 4.5.2		
TSS reference:	SIP-SIP-SIP/Supplementary_Services/ECTD		
Configuration:	The user B has subscribed to ECT		
Selection criteria:	ECT supported.		
Test purpose:	Consultative transfer, served user B is callee in original communication Ensure that the SUT, when user A has established an original communication with user B, user B has established a consultation communication with user C and user B requests transfer of the original communication towards user C by sending a REFER request to user A: • delivers the REFER request to user A containing the ECT Session Identifier URI and the call replacement data and when user A responds with a 202 Accepted and a NOTIFY indicating 100 Trying • delivers the 202 Accepted and the NOTIFY to user A and when user A has held the original communication and sends a new INVITE to the ECT Session Identifier URI • delivers the INVITE to user C and continues normal call establishment between user A and user C and when user C sends a BYE to release the consultation communication (B-C) • delivers the BYE to user B and continues normal call release between user C and user B and when user A sends a NOTIFY indicating 200 OK to user B and user B sends a BYE to release the original communication (A-B) • delivers the BYE to user A and continues normal call release between user A and user B. Ensure that the voice/data transfer on the media channels of the transferred call (A-C) is		
SIP Parameter values:	performed correctly (e.g. testing QoS parameters). REFER1 Request URI: contact URI of user A from original call Refer-To: public address of user C, using Replaces: from-tag and to-tag of communication B-C Referred-By: user B REFER2 Request URI: user A Refer-To: ECT Session Identifier Referred-By: user B NOTIFY1 body: 100 Trying INVITE1 Request URI: ECT Session Identifier INVITE2 Referred-By: user B NOTIFY2 body: 20OK		

SSS_XXSSECT03	ECT reference to:				
	TS 124 529 [23], clause 4.5.2				
Comments:	Comments:				
SIP UA A	SUT		SIP UA B		SIP UA C
	Original communication is				
	onsultation communication			user	С
REFER2	←	(REFER1		
202 Accepted	→	→	202 Accepted		
NOTIFY1	→	→			
200 OK NOTIFY	←	+	200 OK NOTIFY		
NOTE: TS 124 529 [2	23], clause 4.5.2.5 does not	specify	the order of events, hold	ding of	the original
	on A-B could also take place				
Re-INVITE (sendonly)	→	→	Re-INVITE (sendonly)		
200 OK INVITE (recvonl	ly)	←	200 OK `		
,	• /		INVITE(recvonly)		
ACK	→	→	ACK		
INVITE1	→			→	INVITE2
180 Ringing	←			←	180 Ringing
200 OK INVITE	←			←	200 OK INVITE
ACK	→			→	ACK
	DVE	,		,	DVE
	BYE 200 OK BYE	←		←	BYE 200 OK BYE
	200 OK BYE	7		7	200 OK DTE
NOTIFY2	→	→	NOTIFY2		
200 OK NOTIFY	É	ŕ	200 OK NOTIFY		
	-	_			
BYE	←	←	BYE		
200 OK BYE	→	→	200 OK BYE		
Check media (A-C)					
BYE	→			→	BYE
200 OK BYE	+			←	200 OK BYE

SSS XXSSECT04	ECT reference to:		
	TS 124 529 [23], clause 4.5.2		
TSS reference:	SIP-SIP-SIP/Supplementary_Services/ECTD		
Configuration:	The user B has subscribed to ECT		
Selection criteria:	ECT supported.		
Test purpose:	Consultative transfer, served user B is caller in original communication Ensure that the SUT, when user B has established an original communication with user A, user B has established a consultation communication with user C and user B requests transfer of the original communication towards user C by sending a REFER request to user A: • delivers the REFER request to user A containing the ECT Session Identifier URI and the call replacement data and when user A responds with a 202 Accepted and a NOTIFY indicating 100 Trying • delivers the 202 Accepted and the NOTIFY to user A and when user A has held the original communication and sends a new INVITE to the ECT Session Identifier URI • delivers the INVITE to user C and continues normal call establishment between user A and user C and when user C sends a BYE to release the consultation communication (B-C) • delivers the BYE to user B and continues normal call release between user C and user B and when user A sends a NOTIFY indicating 200 OK to user B and user B sends a BYE to release the original communication (B-A) • delivers the BYE to user A and continues normal call release between user A and user B.		
	Ensure that the voice/data transfer on the media channels of the transferred call (A-C) is performed correctly (e.g. testing QoS parameters).		

SSS_XXSSECT04	ECT reference to:	2			
SIP Parameter values:	TS 124 529 [23], clause 4.5	.4			
SIP Parameter values:	REFER1 Request URI: contact URI of user A from original call				
	Refer-To: public address of user C, using Replaces: from-tag and to-tag of communication B-CReferred-By: user B			ion	
	REFER2				
	Request URI: user A Refer-To: ECT Session Identifi	er			
	Referred-By: user B				
	NOTIFY1 body: 100 Trying				
	INVITE1 Request URI: ECT Session Identifier				
	INVITE2 Referred-By: user B				
	NOTIFY2 body: 200K				
Comments: SIP UA A	SUT	SIP	UA B SIP UA C		
Oii OAA	Original communication is es				
С	onsultation communication is				
REFER2	-	← REFER1			
202 Accepted		→ 202 Accepte	ed		
NOTIFY1 200 OK NOTIFY		NOTIFY1€ 200 OK NOT	TIFY		
			holding of the original communication A-	-В	
Re-INVITE (sendonly)	ke place before answering to the	Re-INVITE (
200 OK INVITE (recvon	-	€ 200 OK	Schooliny)		
		INVITE(recv	ronly)		
ACK	→	→ ACK			
INVITE1	→		→ INVITE2		
180 Ringing	←		← 180 Ringing		
200 OK INVITE	+		€ 200 OK INVITE		
ACK	7		→ ACK		
		← →	← BYE→ 200 OK BYE		
NOTIFY2	→	→ NOTIFY2			
200 OK NOTIFY	←	€ 200 OK NOT	ΠFY		
BYE	(← BYE			
200 OK BYE		→ 200 OK BYE	<u> </u>		
BYE	Cneck r	nedia (A-C)	→ BYE		
200 OK BYE	+		← 200 OK BYE		
	-				

Annex A (informative): Bibliography

- IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".
- IETF RFC 2806: "URLs for Telephone Calls".
- IETF RFC 3262: "Reliability of Provisional Responses in the Session Initiation Protocol (SIP)".
- IETF RFC 3264: "An Offer/Answer Model with the Session Description Protocol (SDP)".
- IETF RFC 3323: "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
- IETF RFC 3325: "Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks".
- IETF RFC 3326: "The Reason Header Field for the Session Initiation Protocol".
- IETF RFC 3515: "The Session Initiation Protocol (SIP) Refer Method".
- IETF RFC 3891: "The Session Initiation Protocol (SIP) Replaces Header".
- IETF RFC 3892: "The Session Initiation Protocol (SIP) Referred-By Mechanism".
- IETF RFC 3891: "The Session Initiation Protocol (SIP) Replaces Header".
- IETF RFC 4967 (2007): "Dial String Parameter for the Session Initiation Protocol Uniform Resource Identifier".
- ETSI ES 283 027 (V2.5.1): "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Endorsement of the SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks [3GPP TS 29.163 (Release 7), modified]".
- ETSI TS 183 028 (V2.5.0): "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Common Basic Communication procedures; Protocol specification".
- ETSI TS 124 505 (V8.0.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; PSTN/ISDN simulation services: Conference (CONF); Protocol specification (3GPP TS 24.505 version 8.0.0 Release 8)".

History

Document history				
V1.0.0	April 2008	Publication		
V2.1.1	October 2009	Publication		