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IMS Network Testing (INT);

Completion of Communications to Busy Subscriber (CCBS) and Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification; Part 2: Test Suite Structure and Test Purposes (TSS&TP)

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Foreword

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

The present document is part 2 of a multi-part deliverable covering Completion of Communications to Busy Subscriber (CCBS) and Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification, as identified below:

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

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

1 Scope

The present document specifies the test suite structure and test purposes of the Completion of Communications to Busy Subscriber (CCBS) service and the Completion of Communication on no Reply (CCNR) service, based on stage three of the IMS simulation services. Within the Next Generation Network (NGN) the stage 3 description is specified using the IP-Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP).

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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

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2.1 Normative references

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

- [1] ETSI TS 124 642: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; 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 Release 10)".
- [2] ETSI TS 101 588-1: "Technical Committee for IMS Network Testing (INT); Completion of Communications to Busy Subscriber (CCBS) and Completion of Communications by No Reply (CCNR) using IP Multimedia (IM) Core Network (CN) subsystem 3GPP Release 10; Part 1: Protocol Implementation Conformance Statement (PICS)".

2.2 Informative references

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

Not applicable.

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 124 642 [1] apply.

3.2 Symbols

For the purposes of the present document, the symbols given in TS 124 642 [1] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TS 124 642 [1] apply.

4 Test Suite Structure (TSS)

CC			
	originating_AS	Invocation	CC_N01_xxx
		Revocation	CC_N02_xxx
		Operation	CC_N03_xxx
	terminating_AS	possibleIndication	CC_N04_xxx
		Invocation	CC_N05_xxx
		Revocation	CC_N06_xxx
		CCOperation	CC_N07_xxx
	Interaction	TIR	CC_N08_xxx
		CDIV	CC_N09_xxx

Table 4-1: Test Suite Structure

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4.1 Configuration

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

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

Testing of the Application Server: This entity is responsible to perform the service. Hence the ISC interface is the appropriate access point. Figure 4-1 points to this.

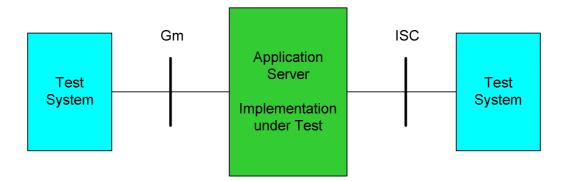


Figure 4-1: Applicable interface to test AS functionalities

If the ISC interface is not accessible it is also applicable to perform the test of the AS using any NNI (Mw, Mg, Mx) interface (consider figure 4-2). In case only the Gm interface is accessible this shall be used instead. In this case, be aware that the verification of several requirements is impeded.

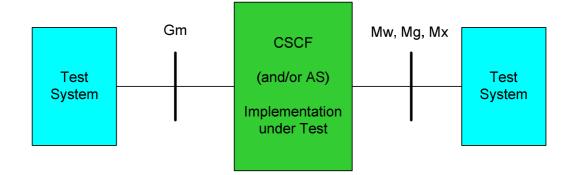


Figure 4-2: Applicable interfaces to test using the (generic) NNI interface

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

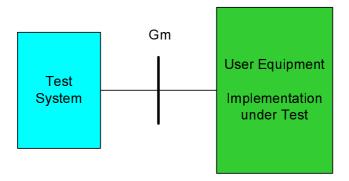


Figure 4-3: Applicable configuration to test the User Equipment

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see table 5-1).

Identifier: <s< th=""><th colspan="9">Identifier: <ss>_<iut><group>_<nnn></nnn></group></iut></ss></th></s<>	Identifier: <ss>_<iut><group>_<nnn></nnn></group></iut></ss>								
<\$\$>	=	supplementary service:	e.g. "CC"						
<iut></iut>	=	type of IUT:	U N	User - equipment Network					
<group></group>	=	group	2 digit field	representing group reference according to TSS					
<nnn></nnn>	=	sequential number	(001 to 999)					

Table 5-1: TP identifier naming convention scheme

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5.1.2 Test strategy

As the base standard TS 124 642 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification TS 101 588-1 [2]. The criteria applied include the following:

• whether or not a test case can be built from the TP is not considered.

5.2 Actions at the originating AS

5.2.1 CC Invocation

TSS CC/originating_AS/Invocation	TP CC_N01_001	Reference 4.5.4.2.1.1.1, 4.5.4.2.1.1.3	Selection expression PICS 4.3.2-1/9
Test purpose Detecting CCNL is possible.			
Ensure that when an originating user estab Progress) response is forwarded to the orig The Application Server provides an annour	inating user if a 480 (1		
Preconditions:			
SIP header values: 480 Temporarily Unavailable Call-Info: <sip:ue-b or="" t-as="">;purpose=</sip:ue-b>	call-completion;m=NL		
Comments:	0.17		
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
INVITE	→	→ INVITE	
192 Section Drogroop	4	 ← 480 (Tempo → ACK 	orarily Unavailable)
183 Session Progress Announcement that CC is			
Announcement that CC is	Apply post test r	outino	
	Apply post lest i	outine	
TSS	ТР	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_002	4.5.4.2.1.1.1, 4.5.4.2.1.1.3	
Test purpose	·		
Detecting CCBS is possible.			
3			
Ensure that when an originating user estab	lishes a session to a te	erminating user is busy	r, a 183 (Session Progress)
response is forwarded to the originating use	er if a 486 (Busy Here)	response has been re	ceived. The Application Server
provides an announcement.			
Preconditions:			
SIP header values:			
486 Busy Here:			
Call-Info: <sip:ue-b or="" t-as="">;purpose=</sip:ue-b>	call-completion;m=BS		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC)	1
INVITE	→	→ INVITE	
	_	← 486 (Busy I	Here)
183 Session Progress	+	→ ACK	
Announcement that CC is			
	Apply post test r	outine	

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_003	4.5.4.2.1.1.1,	-
		4.5.4.2.1.1.3	
Test purpose			
Detecting CCNR is possible.			
Ensure that when an originating user est	abliabae e consign to a tax	rminating upor in huov	a 192 (Sanajan Dragrada)
response is forwarded to the originating			
provides an announcement. The Call-Info			
Preconditions:			
SIP header values:			
180 Ringing 1			
Call-Info: <sip:ue-b or="" t-as="">;purpos</sip:ue-b>	e=call-completion;m=NR		
Comments:	• •		
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
INVITE	→	→ INVITE	
		🗲 180 (Ringing	g) 1
180 (Ringing)	Start CCNR-T5	5	
	Timeout CCNR-	Т5	
Announcement that CC			
	c is possible		
	c is possible		Selection expression
Announcement that CC TSS CC/originating_AS/Invocation	is possible Apply post test ro	putine	Selection expression PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose	C is possible Apply post test ro	Reference	
Announcement that CC TSS CC/originating_AS/Invocation	C is possible Apply post test ro	Reference	
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed.	C is possible Apply post test ro	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do	TP CC_N01_004	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R	TP CC_N01_004	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions:	TP CC_N01_004	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values:	TP CC_N01_004	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values: 480 Temporarily Unavailable 1	TP CC_N01_004 es not confirm the CCNL i etention timer CC-T1 is ex	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values: 480 Temporarily Unavailable 1 Call-Info: <sip:ue-b or="" t-as="">;purpos</sip:ue-b>	TP CC_N01_004 es not confirm the CCNL i etention timer CC-T1 is ex	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values: 480 Temporarily Unavailable 1 Call-Info: <sip:ue-b or="" t-as="">;purpos Comments:</sip:ue-b>	TP CC_N01_004 es not confirm the CCNL i tetention timer CC-T1 is ex se=call-completion;m=NL	Reference 4.5.4.2.1.1.3	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values: 480 Temporarily Unavailable 1 Call-Info: <sip:ue-b or="" t-as="">;purpos Comments: SIP 1 (Gm)</sip:ue-b>	TP CC_N01_004 es not confirm the CCNL i istention timer CC-T1 is expression se=call-completion;m=NL SUT	Reference 4.5.4.2.1.1.3 indication to invoke the xpired. SIP 2 (ISC)	PICS 4.3.2-1/9
Announcement that CC TSS CC/originating_AS/Invocation Test purpose CCNL is possible hence not confirmed. Ensure that when the originating user do forwarded to the originating user when R Preconditions: SIP header values: 480 Temporarily Unavailable 1 Call-Info: <sip:ue-b or="" t-as="">;purpos Comments:</sip:ue-b>	TP CC_N01_004 es not confirm the CCNL i tetention timer CC-T1 is ex se=call-completion;m=NL	Putine Reference 4.5.4.2.1.1.3 indication to invoke the xpired. SIP 2 (ISC) → INVITE	PICS 4.3.2-1/9

Timeout CC-T1

Apply post test routine

 183 Session Progress
 ←
 Start CC-T1

 Announcement that CC is possible

← →

480 (Temporarily Unavailable) ACK 9

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_005	4.5.4.2.1.1.3	• • • • •
Test purpose CCBS is possible hence not confirmed.			
Ensure that when the originating user does r			rvice a 486 (Busy Here) is
forwarded to the originating user when Rete	ntion timer CC-11 is e	xpired.	
Preconditions:			
SIP header values: 486 Busy Here: Call-Info: <sip:ue-b or="" t-as="">;purpose=c</sip:ue-b>	all-completion-m-BS		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
INVITE	•	→ INVITE 486 (Busy Here)
183 Session Progress Announcement that CC is	Start CC-T1	→ ACK	, ,
486 (Busy Here)		1	
ACK	Apply post test ro	Nutino	
CC/originating_AS/Invocation	TP CC_N01_006	Reference 4.5.4.2.1.1.3	Selection expression
Fest purpose CCNR is possible hence not confirmed.			•
Ensure that when the originating user does n			vice a 199 (Early Dialog
	ser when Retention tim	her CC-T1 is expired	
Ferminated) is forwarded to the originating us Preconditions:			
Preconditions: SIP header values:			
Preconditions: SIP header values: 80 Ringing 1			
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca</sip:ue-b>			
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments:</sip:ue-b>	all-completion;m=NR		C)
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments: SIP 1 (Gm)</sip:ue-b>		SIP 2 (IS → INVITE	C)
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments: SIP 1 (Gm)</sip:ue-b>	all-completion;m=NR	SIP 2 (IS ➔ INVITE	
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments: SIP 1 (Gm)</sip:ue-b>	all-completion;m=NR	SIP 2 (IS → INVITE ← 180 (Ring	
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments: SIP 1 (Gm) NVITE →</sip:ue-b>	all-completion;m=NR SUT Start CCNR-T5, 0 Timeout CCNF	SIP 2 (IS → INVITE ← 180 (Ring CC-T1	
Preconditions: SIP header values: 80 Ringing 1 Call-Info: <sip:ue-b or="" t-as="">;purpose=ca Comments: SIP 1 (Gm) NVITE → 80 (Ringing) ←</sip:ue-b>	all-completion;m=NR SUT Start CCNR-T5, 0 Timeout CCNF	SIP 2 (IS → INVITE ← 180 (Ring CC-T1 R-T5	

TSS	ТР	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_007	4.5.4.2.1.1.5,	NOT PICS 4.3.2.1/10 AND
3 3 3_		4.5.4.2.1.1.6	NOT PICS 4.3.2.1/11
Test purpose			-
Successful CCBS request.			
A 486 (Busy Here) is received from the	terminating AS containing	a Call-Info header fie	ld a nurnose parameter set to
call-completion and the m parameter is			
Progress and starts to play an announc			
originating user activates via inband inte			
SUBSCRIBE to the terminating AS. The			
of the CC service. The Application Serv	er confirms the successful	invocation to the orig	inating user by sending of a 486
(Busy Here) final response.			
Preconditions:			
SIP header values:			
486 Busy Here 1:			
Call-Info: <sip:ue-b or="" t-as="">;purpo</sip:ue-b>	bse=call-completion;m=BS		
SUBSRIBE sip: T-AS;m=BS			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-c</ue-a>	completion;m=BS		
P-Assertd-Identity: UE-A	-		
Expires: CC-T3			
Event:call-completion			
NOTIFY			
Event:call-completion			
Content-Type: application/call-comp	letion		
cc-state: queued			
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC)
INVITE	→	→ INVITE	
		← 486 (Busy	Here) 1
183 Session Progress	+	→ ACK	
	Announcement that CCE	S is possible	
Inband-interaction procedur	res for the CC activation		
		 ✓ SUBSCRIE ✓ 202 Accep 	
		202 Accep	
		NOTIFY	
		→ 200 OK NO	DTIFY
Confirm	to the caller that the invo	cation was success	ful
486 (Busy Here) 2	←		
ACK	→		
	Apply post test re	outine	

700			
TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_008	4.5.4.2.1.1.5,	PICS 4.3.2.1/10 AND
-		4.5.4.2.1.1.6	PICS 4.3.2.1/11
Test purpose			
Successful CCBS request.			
A 486 (Busy Here) is received from the te	erminating AS containing a	a Call-Info header fiel	d a purpose parameter set to
call-completion and the m parameter is se			
Progress and starts to play an announcer			
originating user activates via inband inter	action the CCBS call com	pletion service. Ensu	ire that the AS sends a
SUBSCRIBE to the terminating AS. The I	NOTIFY received from the	terminating AS conf	irms the successful invocation
of the CC service. The Application Server			
(Busy Here) final response. Ensure that a		ent-Type header con	taining a message/external-
body value are present in the 486 sent to	the originating user.		
Preconditions:			
SIP header values:			
486 Busy Here 1:			
Call-Info: <sip:ue-b or="" t-as="">;purpos</sip:ue-b>	e=call-completion;m=BS		
SURSPIRE cin. T.A.S.mDS			
SUBSRIBE sip: T-AS;m=BS From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-co</ue-a>	moletion m-BS		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion			
• • • • •			
NOTIFY			
Event:call-completion			
Content-Type: application/call-comple	etion		
cc-state: queued			
100 Duov Llara D			
486 Busy Here 2:			
Date: <current and="" date="" time=""></current>		السنيم معرفة الم	
Content-Type: message/external-bod Comments:	y, access-type= URL, UP	KL= < any un >	
SIP 1 (Gm)	SUT	SIP 2 (ISC)
INVITE	→	→ INVITE	
		← 486 (Busy	Here) 1
183 Session Progress	+	→ ACK	
A	nnouncement that CCB		
Inband-interaction procedure		-	
		→ SUBSCRIE	3E
		← 202 Accept	ted
		← NOTIFY	
Openflower (s	the coller that the losses	→ 200 OK NC	
486 (Busy Here) 2	the caller that the invoc	ation was success	lui
ACK	← →		
	Apply post test ro	utino	

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_009	4.5.4.2.1.1.1	
Test purpose	00_101_000	1.0.1.2.1111	
CCBS not possible, A CC queue lii	nit has been exceeded.		
Ensure that the AS does not offer t	he activation of the call complet	ion service if the us	er A CCBS queue limit has been
exceeded. The 486 is passed throu	igh.		
Preconditions: CCBS queue limit	exceeded		
SIP header values:			
486 Busy Here:			
Call-Info: <sip:ue-b>;purpose=</sip:ue-b>	call-completion;m=BS		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (IS	C)
	Set the A queue to		
	→		
100 Trying	~	← 100 Tryir	
486 (Busy Here)	(← 486 (Bus	y Here)
ACK	→	→ ACK	
TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_010	4.5.4.2.1.1.1	NOT PICS 4.3.2-1/3
Test purpose			
	her identical request (communic	ation parameters).	
CCBS invocation not possible, furth			
CCBS invocation not possible, furth	he activation of the CCBS call o	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine	he activation of the CCBS call o	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions:	he activation of the CCBS call o	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values:	he activation of the CCBS call o	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here:	he activation of the CCBS call c ad by the stored basic communi	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose=</sip:ue-b>	he activation of the CCBS call c ad by the stored basic communi	completion service i	f a request was activated for an
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments:</sip:ue-b>	he activation of the CCBS call of by the stored basic communi	completion service i cation information.	·
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments: SIP 1 (Gm)</sip:ue-b>	he activation of the CCBS call of ad by the stored basic communi call-completion;m=BS SUT	completion service i	·
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments: SIP 1 (Gm) A successful CCBS reque</sip:ue-b>	he activation of the CCBS call of ad by the stored basic communi call-completion;m=BS SUT est is already invoked	completion service i cation information. SIP 2 (IS	·
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments: SIP 1 (Gm) A successful CCBS reque</sip:ue-b>	he activation of the CCBS call of ad by the stored basic communi call-completion;m=BS SUT est is already invoked →	completion service i cation information. SIP 2 (IS → INVITE	с)
CCBS invocation not possible, furth Ensure that the AS does not offer t identical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments: SIP 1 (Gm) A successful CCBS reque INVITE 100 Trying</sip:ue-b>	he activation of the CCBS call of ed by the stored basic communi call-completion;m=BS SUT est is already invoked → ←	completion service i cation information. SIP 2 (IS → INVITE ← 100 Tryir	с) г
CCBS invocation not possible, furth Ensure that the AS does not offer t dentical communication, determine Preconditions: SIP header values: 486 Busy Here: Call-Info: <sip:ue-b>;purpose= Comments: SIP 1 (Gm) A successful CCBS reque</sip:ue-b>	he activation of the CCBS call of ad by the stored basic communi call-completion;m=BS SUT est is already invoked →	completion service i cation information. SIP 2 (IS → INVITE	с) г

TSS		ТР	Refere	200	Selection expression
CC/originating_AS/Invoc	ation	CC_N01_011	4.5.4.2		Selection expression
Test purpose	allon		4.3.4.2		
Unsuccessful CCBS req	uppet				
Unsuccessiul CCBS req					
Ensure when the origina	ting user invokes the C	CBS service and th	na Annlica	tion Server r	eceives a 480 (Temporarily
					al the originating user receives
a confirmation that the C				ig term dema	a the originating user receives
Preconditions:	CDO lequest was not s				
SIP header values:					
486 Busy Here 1:					
,	or T-AS>;purpose=call-	completion-m_BS			
	Ji 1-A3>,puipose=caii-	completion,m=b3			
SUBSRIBE sip: T-AS; n	-BS				
From: <ue-a></ue-a>	1-05				
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
	urpose=call-completi	on·m=BS			
P-Assertd-Identity:		011,111=00			
Expires: CC-T3					
Event:call-completi	on				
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
INVITE	→			INVITE	
	_		÷	486 (Busy H	ere) 1
183 Session Progress	+			ACK	
···· ·································	Announ	cement that CCB	S is poss	ible	
Inband-interac	tion procedures for t				
	•		→	SUBSCRIBE	
CASE A			÷	480 (Tempo	rarily Unavailable)
					, ,
CASE B					
			÷	403 (Forbido	len)
	Confirm to the call	er that the invoca	tion was	not success	ful
486 (Busy Here) 2	+				
ACK	→				
		Apply post test ro	Nutino		

TSS		TP	Ref	erence	Selection expression
CC/originating_AS/Invocation		CC_N01_012	4.5.	.4.2.1.1.5	
g <u>g_</u>			4.8.		
Test purpose			1		
CCBS request. Timeout CC-T2.					
Ensure that the CC request operation	on timer CC-	T2 is started after	CCBS	request is rece	eived from caller. When the
timer CC-T2 is expired because no					
request was successful at the term					
Preconditions:	0	ł	,		
SIP header values:					
486 Busy Here:					
Call-Info: <sip:ue-b>;purpose=</sip:ue-b>	call-completi	on:m=BS			
SUBSRIBE sip:T-AS;m=BS		- , -			
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: <ue-a>; purpose=c</ue-a>	all-completi	on;m=BS			
P-Assertd-Identity: UE-A	•	,			
Expires: CC-T3					
Event:call-completion					
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)
INVITÈ	→		→	INVITÈ	,
100 Trying	÷		←	100 Trying	
5 5			←	486 (Busy	
183 Session Progress	+		→	ACK	
	Annour	cement that CCB	S is po	ossible	
Inband-interaction proc			•		
•			→	SUBSCRIE	3E
			←	202 Accep	ted
		Start Timer CC-1	۲2		
		↓			
		Timeout Timer CC	-T2		
Confir		er that the invoca		as not succes	ssful
	←				
486 (Busy Here)	~				

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_013	4.5.4.2.1.1.5,	Selection expression
CC/originating_AS/invocation	CC_N01_013	4.5.4.2.1.1.6	
Test purpose		4.0.4.2.1.1.0	
CCNR successful request.			
Contra Successian request.			
A 180 (Ringing) is received from the terminating	a AS containing a Ca	ll-Info header field a pur	oose parameter set to
call-completion and the m parameter is set to B			
the Call-Info header to the originating user and			
Completion is possible. The originating user ac			
that the AS sends a SUBSCRIBE to the termina			
successful invocation of the CC service. The A			
user by sending of a 480 (Temporarily Unavaila			5 5
Preconditions:	/ 1		
SIP header values:			
180 Ringing 2:			
Call-Info: <sip:ue-b or="" t-as="">;purpose=call-</sip:ue-b>	-completion:m=NR		
	, , , , , , , , , , , , , , , , , , ,		
SUBSRIBE sip: T-AS;m=NR			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: UE-A; purpose=call-completior	n;m=NR		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion			
NOTIFY Event:call-completion Content-Type: application/call-completion cc-state: queued			
480 Temporarily Unavailable			
Date: <current and="" date="" time=""></current>			
Content-Type: message/external-body; acc	ess-type="URL"; URI	_= < any url >	
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
INVITE -			
100 Trying 🗧 🗧		← 100 Trying	
		← 180 Ringing 1	
180 Ringing 2		!!!. !-	
	ncement that CCNR	is possible	
Inband-interaction procedures for t			
		→ SUBSCRIBE	
		← 202 Accepted	
		NOTIFY	
		-	1
Confirm to the o		→ 200 OK NOTIF [*] ation was successful	T
Commit to the c			
			-
		 ← 200 OK CANCE ← 487 Request Te 	
480 (Temporarily Unavailable) ← ACK →		→ ACK	anninaleu

TSS	TP		rence	Selection expression
CC/originating_AS/Invocation	CC_N01_01	14 4.5.4	.2.1	
Test purpose				
CCNR not possible, A CC queue lim	nt has been exceeded.			
Ensure that the originating AS does	not offered the call compl	otion sonvice	if a 180 (Pingi	a) is received and a Call-Info
header with a purpose parameter se				
limit is exceeded.	to call-completion and a	in parameter	361 10 101 13 10	cerved and the CODO quede
Preconditions: CCBS queue limit e	vceeded			
SIP header values:				
180 Ringing 1:				
Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	all-completion m=NR			
Comments:				
SIP 1 (Gm)	SUT		SIP 2 (ISC)	
	Set the A que	ue to limit		
INVITE	→	→	INVITE	
100 Trying	+	÷	100 Trying	
180 Ringing 2	+	+	180 Ringing	1
3 3			5 5 5	
CANCEL	→	→	CANCEL	
200 OK CANCEL	+	÷	200 OK CAN	CEL
487 Request Terminated	÷	+	487 Request	Terminated
ACK	→	→	ACK	
TSS	TP		rence	Selection expression
CC/originating_AS/Invocation	CC_N01_07	15 4.5.4	.2.1	NOT PICS 4.3.2-1/3
Test purpose				
		nunication na	rameters).	
CCNR invocation not possible, furthe	er identical request (comm	nunication pa		
CCNR invocation not possible, furthe				
CCNR invocation not possible, furthe Ensure that the AS does not offer the	e activation of the CCNR	call completio		equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined	e activation of the CCNR	call completio		equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions:	e activation of the CCNR	call completio		equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values:	e activation of the CCNR	call completio		equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1:	e activation of the CCNR d by the stored basic com	call completio		equest was activated for an
CCNR invocation not possible, further Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	e activation of the CCNR d by the stored basic com	call completio		equest was activated for an
CCNR invocation not possible, further Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments:</sip:ue-b>	e activation of the CCNR d by the stored basic com all-completion;m=NR	call completio	formation.	equest was activated for an
CCNR invocation not possible, further Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm)</sip:ue-b>	e activation of the CCNR d by the stored basic com all-completion;m=NR SUT	call completion in	formation. SIP 2 (ISC)	equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm)</sip:ue-b>	e activation of the CCNR d by the stored basic com call-completion;m=NR SUT successful CCNR reque	call completic munication in est is alread	formation. SIP 2 (ISC) y invoked	equest was activated for an
CCNR invocation not possible, further Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE</sip:ue-b>	e activation of the CCNR d by the stored basic comm call-completion;m=NR SUT successful CCNR reque →	call completion munication in est is alread →	formation. SIP 2 (ISC) y invoked INVITE	equest was activated for an
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE 100 Trying</sip:ue-b>	e activation of the CCNR d by the stored basic comm call-completion;m=NR SUT successful CCNR reque → ←	call completion munication in est is alread → ←	formation. SIP 2 (ISC) y invoked INVITE 100 Trying	
CCNR invocation not possible, further Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE</sip:ue-b>	e activation of the CCNR <u>d by the stored basic com</u> <u>sall-completion;m=NR</u> SUT SUT SUT SUT ← ← ←	call completion munication in est is alread → ← ←	formation. SIP 2 (ISC) y invoked INVITE	
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE 100 Trying 180 Ringing 2</sip:ue-b>	e activation of the CCNR <u>d by the stored basic com</u> <u>sall-completion;m=NR</u> SUT SUT SUT SUT CONR reque → ← ← No offer to inv	call completion munication in est is alread → ← ← roke CCNR	SIP 2 (ISC) y invoked INVITE 100 Trying 180 Ringing	
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE 100 Trying 180 Ringing 2 CANCEL</sip:ue-b>	e activation of the CCNR d by the stored basic comm call-completion;m=NR SUT SUT SUT SUT SUT SUT SUT SUT	call completion munication in est is alread → ← ← voke CCNR →	SIP 2 (ISC) y invoked INVITE 100 Trying 180 Ringing CANCEL	1
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE 100 Trying 180 Ringing 2 CANCEL 200 OK CANCEL</sip:ue-b>	e activation of the CCNR d by the stored basic comm call-completion;m=NR SUT SUT SUT SUT SUT CONR reque → ← No offer to inv → ←	call completion munication in est is alread → ← coke CCNR → ←	SIP 2 (ISC) y invoked INVITE 100 Trying 180 Ringing CANCEL 200 OK CAN	1 CEL
CCNR invocation not possible, furthe Ensure that the AS does not offer the identical communication, determined Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=ca Comments: SIP 1 (Gm) A INVITE 100 Trying 180 Ringing 2 CANCEL</sip:ue-b>	e activation of the CCNR d by the stored basic comm call-completion;m=NR SUT SUT SUT SUT SUT SUT SUT SUT	call completion munication in est is alread → ← ← voke CCNR →	SIP 2 (ISC) y invoked INVITE 100 Trying 180 Ringing CANCEL	1 CEL

	TD			
TSS CC/originating_AS/Invocation	TP CC_N01_016		erence 4.2.1.1.4	Selection expression PICS 4.3.2-1/12
Test purpose	·			-
Communication to user B is cancelled when	CCNR is invoked by	the origi	nating user.	
Ensure when the confirmation of the CCNR in				ut CC-T1 the Application
Server terminated the session with user B by	sending a CANCEL	- request	to user B.	
Preconditions: SIP header values:				
180 Ringing 1:				
Call-Info: <sip:ue-b or="" t-as="">;purpose=c</sip:ue-b>	all-completion;m=NI	२		
Comments:				
SIP 1 (Gm)	SUT		SIP 2 (ISC)	
INVITE -	,	→	INVITE	
100 Trying		÷	100 Trying	
		÷	180 Ringing 1	
180 Ringing 2				
Anno	uncement that CC	NR is po	ssible	
Inband-interaction procedures for	or the CC activation		0.000	
		→	CANCEL	-
		÷	200 OK CANC	
		÷	487 Request T	erminated
	Annly next test	→	ACK	
	Apply post test	routine		
TSS	TP	Pofe	erence	Selection expression
CC/originating_AS/Invocation	CC_N01_017		4.2.1.2	Selection expression
Test purpose		4.0.	T.Z.1.Z	
Unsuccessful CCNR request.				
Ensure when the originating user invokes the	CCNR service and	the Appli	cation Server rec	eives a 480 (Temporarily
Unavailable) to indicate short term denial or a	a 403 (Forbidden) to	indicate	long term denial t	he originating user receives
a confirmation that the CCBS requesr was no	ot successful.		J	3 3 3
Preconditions:				
SIP header values:				
180 Ringing 1:				
Call-Info: <sip:ue-b or="" t-as="">;purpose=c</sip:ue-b>	all-completion;m=NI	२		
	• •			
SUBSRIBE sip: T-AS;m=NR				
From: <ue-a></ue-a>				
To: <ue-b></ue-b>				
Contact: <o-as></o-as>				
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl</ue-a></o-as>	etion;m=NR			
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A</ue-a></o-as>	etion;m=NR			
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3</ue-a></o-as>	etion;m=NR			
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion</ue-a></o-as>	etion;m=NR			
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments:</ue-a></o-as>				
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm)</ue-a></o-as>	SUT		SIP 2 (ISC)	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments:</ue-a></o-as>	SUT	→	INVITE	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE →</ue-a></o-as>	SUT	→ ←		
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2</ue-a></o-as>	SUT	+	INVITE 180 Ringing 1	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2</ue-a></o-as>	SUT SUT	← BS is po	INVITE 180 Ringing 1	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2</ue-a></o-as>	SUT SUT	← BS is po	INVITE 180 Ringing 1 ssible	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2 ← Inband-interaction procedures for</ue-a></o-as>	SUT SUT	← BS is po	INVITE 180 Ringing 1	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2</ue-a></o-as>	SUT SUT	← BS is po →	INVITE 180 Ringing 1 ssible SUBSCRIBE	ily I Ingygilabla)
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2 ← Inband-interaction procedures for</ue-a></o-as>	SUT SUT	← BS is po	INVITE 180 Ringing 1 ssible SUBSCRIBE	ily Unavailable)
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2 ← Inband-interaction procedures for CASE A</ue-a></o-as>	SUT SUT	← BS is po →	INVITE 180 Ringing 1 ssible SUBSCRIBE	ily Unavailable)
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2 ← Inband-interaction procedures for</ue-a></o-as>	SUT SUT	← BS is por → ←	INVITÉ 180 Ringing 1 ssible SUBSCRIBE 480 (Temporal	
Contact: <o-as> Call.Info: <ue-a>; purpose=call-compl P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Comments: SIP 1 (Gm) INVITE → 180 Ringing 2 ← Anno Inband-interaction procedures fo CASE A CASE B</ue-a></o-as>	SUT SUT	← BS is por → ← ←	INVITE 180 Ringing 1 ssible SUBSCRIBE 480 (Temporal 403 (Forbidder	n)

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_018	4.5.4.2.1.1.5	
e e, eg		4.8.1	
Test purpose			
CCNR request. Timeout CC-T2.			
Ensure that the CC request operatio			
timer CC-T2 is expired because no N			
request was successful at the termin	ating AS the CCNR request is	s rejected. The ca	ller is informed.
Preconditions:			
SIP header values:			
180 Ringing 2:			
Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	all-completion;m=NR		
SUBSRIBE sip:T-AS;m=NR			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=cal</ue-a>	II-completion;m=NR		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion Comments:			
SIP 1 (Gm)	SUT	SIP 2 (
INVITE	→	→ INVITE	
100 Trying	→ ←	← 100 Tr	-
Too Trying	C .	← 180 Ri	
180 Ringing 2	L		
	Announcement that CCB	S is nossible	
Inband-interaction proce	dures for the CC activation		
		→ SUBSC	RIBE
		← 202 Ac	
	Start Timer CC-		
	↓ ↓		
	Timeout Timer CO	C-T2	
Confirm	to the caller that the invoca	tion was not suc	ccessful
CANCEL	→	→ CANCE	EL
200 OK CANCEL	+		K CANCEL
487 Request Terminated	+	← 487 Re	equest Terminated
ACK	→	→ ACK	•

TSS		TP	Refe	rence	Selection expression
CC/originating_AS/Invocation		CC_N01_019	4.5.4	.2.1.1.5, .2.1.1.6	PICS 4.3.2-1/9
Test purpose			1.0.1	.2.11.110	
CCNL successful request.					
A 480 (Temporarily Unavailable					
parameter set to call-completio					
(Session Progress) to the origin					
Completion is possible. The ori that the AS sends a SUBSCRI					
successful invocation of the CC					
user by sending of a 480 (Tem					invocation to the originating
Preconditions:	,				
SIP header values:					
480 Temporarily Unavailable 1					
Call-Info: <sip:ue-b or="" t-a<="" td=""><td>S>;purpose=call-c</td><td>ompletion;m=NL</td><td></td><td></td><td></td></sip:ue-b>	S>;purpose=call-c	ompletion;m=NL			
SUBSRIBE sip: T-AS;m=NL					
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: UE-A; purpose=	call-completion;	m=NL			
P-Assertd-Identity: UE-A	···· ,				
Expires: CC-T3					
Event:call-completion					
NOTICY					
NOTIFY Event:call-completion					
Content-Type: application/c	all-completion				
cc-state: queued	an completion				
480 Temporarily Unavailable 2					
Date: <current and="" date="" td="" tim<=""><td></td><td></td><td></td><td></td><td></td></current>					
Content-Type: message/ex	ternal-body; acces	ss-type="URL"; UF	RL= < ar	ny url >	
Comments: SIP 1 (Gm)		SUT		SIP 2 (ISC)	
INVITE	→	501	→	INVITE	
	-		÷	=	orarily Unavailable) 1
			÷	ACK	
183 (Session Progress)	÷			-	
	Annound	ement that CCN	R is pos	ssible	
Inband-interaction p	procedures for th	e CC activation	د	SUBSCRIB	E
			→ ←	202 Accept	
			•		
			←	NOTIFY	
			→	200 OK NO	TIFY
	onfirm to the ca	ller that the invo	cation w	as successf	ul
480 (Temporarily Unavailable)					
ACK	→				

TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_020	4.5.4.2.1.1.1	PICS 4.3.2-1/9
Test purpose			
CCNL not possible, A CC queue limit ha	as been exceeded.		
Ensure that the AS does not offer the ad			er A CCNL queue limit has bee
exceeded. The 480 (Temporarily Unava			
Preconditions: CCBS queue limit exce	eded		
SIP header values:			
480 Temporarily Unavailable 1:			
Call-Info: <sip:ue-b>;purpose=call-</sip:ue-b>	completion;m=NL		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC	
	Set the A queue	o limit	
INVITE	→	→ INVITE	
100 Trying	+	🗲 100 Trying]
480 (Temporarily Unavailable)	+	🗲 480 (Temp	oorarily Unavailable) 1
ACK	→	→ ACK	
TSS	TP	Reference	Selection expression
CC/originating_AS/Invocation	CC_N01_021	4.5.4.2.1.1.1	PICS 4.3.2-1/9 AND NOT PICS 4.3.2-1/3
Test purpose	•	·	·
CCNL invocation not possible, further ic	lentical request (communi	cation parameters).	
• •		. ,	
Ensure that the AS does not offer the ad	ctivation of the CCNL call	completion service if a	a request was activated for an
identical communication, determined by			
Inavailable) is passed through			· · ·

identical communication, determined	l by the stored basic commu	unication	information. The 480 (Temporarily
Unavailable) is passed through.			
Preconditions:			
SIP header values:			
480 Temporarily Unavailable 1:			
Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	all-completion;m=NL		
Comments:			
SIP 1 (Gm)	SUT		SIP 2 (ISC)
A successful CCNL reques	st is already invoked		
INVITE	→	→	INVITE
100 Trying	+	←	100 Trying
480 (Temporarily Unavailable)	+	←	480 (Temporarily Unavailable) 1
ACK	→	→	ACK

TSS	T	P	Refe	rence	Selection expression
CC/originating_AS/Invocation	Ċ	C N01 022	4.5.4	.2.1.2	PICS 4.3.2-1/9
Test purpose			1		
Unsuccessful CCNL request.					
Ensure when the originating user	invokes the CCN	service and th	e Applic	ation Server	receives a 480 (Temporarily
Unavailable) to indicate short terr					
a confirmation that the CCNL req	uesr was not succ	essful.		C C	
Preconditions:					
SIP header values:					
480 Temporarily Unavailable 1:					
Call-Info: <sip:ue-b or="" t-as=""></sip:ue-b>	;purpose=call-con	npletion;m=NL			
SUBSRIBE sip: T-AS;m=NL					
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: <ue-a>; purpose=</ue-a>	=call-completion;	m=NL			
P-Assertd-Identity: UE-A					
Expires: CC-T3					
Event:call-completion Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC	N
INVITE	→	301	→	INVITE)
	7		7		oorarily Unavailable) 1
183 Session Progress	4		÷	ACK	
Teo Gession i Togress	-	ment that CCB	-		
Inband-interaction pro					
			→	SUBSCRIE	3F
CASE A			-		
			←	480 (Temp	oorarily Unavailable)
CASE B					
			←	403 (Forbi	dden)
Conf	irm to the caller t	hat the invoca	tion was		
480 (Temporarily Unavailable) 2	←				
ACK	→				
	Δpr	oly post test ro	utino		

TSS		ТР	Ref	erence	Selection expression
CC/originating_AS/Invocation		CC_N01_023		4.2.1.1.5	PICS 4.3.2-1/9
ee, onginaang_, te, invesation		00_1101_020	4.8.		
Test purpose			1.0.	•	
CCNL request. Timeout CC-T2.					
Ensure that the CC request ope	ration timer CC-	T2 is started after	CCNL	request is rece	eived from caller. When the
timer CC-T2 is expired because	no NOTIFY is r	eceived from the te	erminat	ing user as a (confirmation that the CCNL
request was successful at the te	erminating AS th	e CCNL request is	rejecte	ed. The caller i	s informed.
Preconditions:		•			
SIP header values:					
480 Temporarily Unavailable:					
Call-Info: <sip:ue-b>;purpos</sip:ue-b>	se=call-completi	on:m=NL			
SUBSRIBE sip:T-AS;m=NL		- ,			
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: <ue-a>; purpose</ue-a>	e=call-completi	on:m=NL			
P-Assertd-Identity: UE-A	•				
Expires: CC-T3					
Event:call-completion					
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)
INVITÈ	→		→	INVITÈ	,
100 Trying	←		←	100 Trying	
,			←		orarily Unavailable)
183 Session Progress	←		→	ACK	
	Annour	cement that CCB	S is po	ossible	
Inband-interaction p					
			→	SUBSCRIE	3E
			←	202 Accep	ted
		Start Timer CC-	-	202 Accep	ted
		Start Timer CC-⊺ ↓	-	202 Accep	ted
		Start Timer CC-⊺ ↓ Timeout Timer CC	ſ2 [¯]	202 Accep	ted
Con		\downarrow	72 -T2		
Co n 480 (Temporarily Unavailable)		↓ Timeout Timer CC	72 -T2		

5.2.2 CC Revocation

TSS	TP	Reference	Selection expression
CC/originating_AS/Revocation	CC_N02_001	4.5.4.2.2.1.2	PICS 4.3.2-1/8
Test purpose	00_1102_001	4.0.4.2.2.1.2	1100 4.0.2 1/0
CCBS revocation request received fro	om the user		
	in the user.		
Ensure that the originating AS sends a	a SUBCRIBE request and th	e Expires header is s	et to zero when the originating
user revokes the outstanding CCBS re			
Request URI is set to the service code			
Preconditions:			
SIP header values:			
INVITE: Request URI= Service Cod	de Command (revoke CCB	S request)	
SUBSRIBE sip:T-AS;m=BS			
Call.Info: UE-A (Public user identi	ity); purpose=call-completior	;m=BS	
P-Assertd-Identity: UE-A (Public			
Event:call-completion			
Expires=0			
NOTIFY sip:O-AS			
Event:call-completion			
Subscription-State: terminated; rea	ason=timeout		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC	5)
Establish a success	sful CCBS request		
Revocation reque	est from the user		
INVITE	→		
200 OK INVITE	÷		
ACK	÷		
	-		
		→ SUBSCRI	BE
		← 202 Accep	oted
		NOTIFY	
		→ 200 OK N	OTIFY
Confirm	n to the caller that the revo	cation was success	ful
BYE	→		
200 OK BYE	+		

			-	
TSS	TP	_	erence	Selection expression
CC/originating_AS/Revocation	CC_N02_002	4.5	.4.2.2.1.2	PICS 4.3.2-1/8
Test purpose				
CCNR revocation request received	from the user.			
Ensure that the originating AS send				
user revokes the outstanding CCNF				= request and the userpart of
the Request URI is set to the servic	ce code command to cancel a	CONR r	equest.	
Preconditions:				
SIP header values:	Sada Command (novalia CCI		t\	
INVITE: Request URI= Service C	Code Command (revoke CCI	NR requ	est)	
SUBSRIBE sip:T-AS;m=NR Call.Info: UE-A (Public user ide	ntity): purpose-call-completic	n·m_NE	b	
P-Assertd-Identity: UE-A (Pub		///,/// _/ ///	N	
Event:call-completion	all user identity)			
Expires=0				
2,0100-0				
NOTIFY sip:O-AS				
Event:call-completion				
Subscription-State: terminated;	reason=timeout			
Comments:				
SIP 1 (Gm)	SUT		SIP 2 (ISC)
Establish a succe	essful CCNR request			
Boycontion roo	uest from the user			
INVITE	\rightarrow			
200 OK INVITE	÷			
ACK	→			
	2			
		→	SUBSCRI	ЗЕ
		÷	202 Accep	
		-		
		←	NOTIFY	
		→	200 OK NO	DTIFY
Confi	irm to the caller that the rev	ocation	was success	ful
BYE	→			
200 OK BYE	+			

TSS	TP	Reference	Selection expression
CC/originating_AS/Revocation	CC_N02_003	4.5.4.2.2.1.2	PICS 4.3.2-1/8
			AND PICS 4.3.2-1/9
Test purpose			
CCNL revocation request receive	d from the user.		
Ensure that the originating AS as	ada a SUDCDIDE request and t	ha Evoirea haadar ia	act to zero when the originating
Ensure that the originating AS ser user revokes the outstanding CCN			
Request URI is set to the service			E request and the userpart of the
Preconditions:			
SIP header values:			
INVITE: Request URI= Service	Code Command (revoke CCI	NL request)	
SUBSRIBE sip:T-AS; m=NL	1 24 3 11 1 2	N.I.	
	dentity); purpose=call-completic	n;m=NL	
P-Assertd-Identity: UE-A (Pu Event:call-completion	iblic user identity)		
Expires=0			
Expires=0			
NOTIFY sip:O-AS			
Event:call-completion			
Subscription-State: terminated	l; reason=timeout		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (IS	C)
Establish a suc	cessful CCNL request		
Revocation re	equest from the user		
INVITE	· →		
200 OK INVITE	+		
ACK	→		
		→ SUBSCR	IRE
		 ✓ SUBSCR ✓ 202 Acce 	
		 ZUZ AUCE 	pieu
		NOTIFY	
		→ 200 OK N	IOTIFY
Con	firm to the caller that the rev		
BYE	→		
200 OK BYE	←		

TSS		Refer		Selection expression
CC/originating_AS/Revocation	CC_N02_004	4.5.4.	2.2.1.3	
Test purpose	, ,			
CCBS revocation caused by timer expiry CC-T3	í.			
Ensure that the originating AS revokes the outst	anding CCBS req	uest if the	CC service dura	ation timer CC-T3 expires.
Preconditions:				
SIP header values:				
SUBSRIBE sip:T-AS;m=BS				
Event:call-completion				
Call.Info: UE-A (Public user identity); purpo		n;m=NL		
P-Assertd-Identity: UE-A (Public user identity)	tity)			
Expires=0				
NOTIFY sip:O-AS				
Event:call-completion				
Subscription-State: terminated; reason=time	out			
Comments:				
SIP 1 (Gm)	SUT		SIP 2 (ISC)	
Establish a successful CCBS	5 request			
Start CC-T3				
Timeout CC-T3				
		→	SUBSCRIBE	
		÷	202 Accepted	
		•	202700000100	
		←	NOTIFY	
		→	200 OK NOTIF	Y
TSS	TP	Refer		Selection expression
CC/originating_AS/Revocation	CC_N02_005	4.5.4.	2.2.1.3	
Test purpose	_			
CCNR revocation caused by timer expiry CC-T3	3.			
Ensure that the originating AS revokes the outst	onding CONP roc	woot if the	CC convice dur	ation timer CC T2 avairag
Ensure that the originating AS revokes the outst Preconditions:	anding CONR rec	uest ii the	e CC service dur	auon umer CC-13 expires.
SIP header values:				
SUBSRIBE sip:T-AS;m=NR				
Call.Info: UE-A (Public user identity); purpo	so-call completio	n·m_ND		
P-Assertd-Identity: UE-A (Public user identity), purpo		11,111=INIK		
	uty)			
Event:call-completion Expires=0				
LAP1100-0				
NOTIFY sip:O-AS				
Event:call-completion				
Subscription-State: terminated; reason=time	out			
Comments:				
SIP 1 (Gm)	SUT		SIP 2 (ISC)	
Establish a successful CCBS	S request			
Start CC-T3	-			
Timeout CC-T3		_		
		→	SUBSCRIBE	
		→ ←	SUBSCRIBE 202 Accepted	

NOTIFY 200 OK NOTIFY

÷ ≁

TSS	ТР	Reference 4.5.4.2.2.1.3		Selection expression
CC/originating_AS/Revocation	CC_N02_006			PICS 4.3.2-1/9
Fest purpose	_			
CCNL revocation caused by timer expiry CC-T3	3.			
Ensure that the originating AS revokes the outsi	tanding CCNL requ	est if tl	he CC service (duration timer CC-T3 expires
Preconditions:		001111		
SIP header values:				
SUBSRIBE sip:T-AS				
Call.Info: UE-A (Public user identity); purpo	se=call-completion	;m=NL		
P-Assertd-Identity: UE-A (Public user iden		,		
Event:call-completion				
Expires=0				
NOTIFY sip:O-AS				
Event:call-completion Subscription-State: terminated; reason=time	out			
Comments:	Jui			
SIP 1 (Gm)	SUT		SIP 2 (ISC)	
Establish a successful CCN	L request		()	
Start CC-T3				
Timeout CC-T3				
Timeout 60-15		→	SUBSCRIB	F
		÷	202 Accept	—
		←	NOTIFY	
		→	200 OK NO	TIFY
TSS	TP	Ref	erence	Selection expression
CC/originating_AS/Revocation	CC_N02_007	4.5	.4.2.2.2	
Test purpose				
CCBS revocation caused by terminating AS.				
Ensure that the originating AS revokes the outs				
terminating user and the the Subscription-State	header field set to	"termir	nated"; and the	"reason" Subscription-State
header field parameter set to "noresource".				
Preconditions:				
SIP header values:				

→

200 OK NOTIFY

TSS	TP	Reference	Selection expression
CC/originating_AS/Revocation	CC_N02_008	4.5.4.2.2.2	
Test purpose			•
CCNR revocation caused by terminating AS.			
Ensure that the originating AS revokes the outs			
terminating user and the the Subscription-State	header field set to	"terminated"; and the "	reason" Subscription-State
header field parameter set to "noresource".			
Preconditions: SIP header values:			
NOTIFY sip:O-AS Event:call-completion			
Subscription-State: terminated; reason= no	resource		
Comments:			
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
Establish a successful CCN	R request	- ()	
	•		
		NOTIFY	
		→ 200 OK NOT	IFY
TSS	TP	Reference	Selection expression
CC/originating_AS/Revocation	CC_N02_009	4.5.4.2.2.2	PICS 4.3.2-1/9
Test purpose			
CCNL revocation caused by terminating AS.			
Ensure that the originating AS revokes the outs			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource".			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions:			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values:			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS			
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion	header field set to		
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason= no	header field set to		
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason= no Comments:	e header field set to	"terminated"; and the "	
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason= no	resource		
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason= no Comments: SIP 1 (Gm)	resource	"terminated"; and the "	
Ensure that the originating AS revokes the outs terminating user and the the Subscription-State header field parameter set to "noresource". Preconditions: SIP header values: NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason= no Comments: SIP 1 (Gm)	resource	"terminated"; and the "	reason" Subscription-State

5.2.3 CC Operation

TSS		TP			rence	Selection expression
	g_AS/Operation		<u>N03_001</u>	4.5.4	.2.3.1	NOT PICS 4.3.2-1/4
Test purpos						
CCBS Recall	l successful by sendin	g a REFER re	quest to the origi	nating us	ser.	
L						
						e callee is available to recall
						t to "ready". A REFER
				is set to I	BS in the INVITE	request sent to the callee
	of the received INVITE	E request from	the caller.			
Precondition	IS:					
SIP header v	alues:					
NOTIFY 1	sip:O-AS					
	Event:call-completion	า				
	Content-Type: applic	ation/call-com	pletion			
	cc-state: ready					
REFER:	sip: UE A; m=BS					
	Refer-To; UE B; met	hod=INVITE				
INVITE 1:	sip: UE B; m=BS					
	From: UE A					
	To: UE B					
	Call-Info: <sip:ue-a></sip:ue-a>	:purpose=cal	I-completion:m=B	S		
NOTIFY 2	sip:O-AS		··· ,	-		
	Event:call-completion	า				
	Subscription-State: to		ason=timeout			
Comments:		,				
SIP 1 (Gm)			SUT		SIP 2 (ISC)	
,	Invoke C	CBS request				
	CCBS reques					
	•		•	nating us	ser available for	recall
			NOTIF	Y 🖌	NOTIFY 1	
			200 OK NOTIF	Y 🗲	200 OK NOTIF	Ϋ́Υ
REFER	+	REFER				-
202 Accepted		202 Accept	ed			
	-	_0_ / 1000p1				
NOTIFY (100)) →	NOTIFY (10	00)			
200 OK NOT		200 OK NC				
200 011101		200 01110				
INVITE	→	INVITE				
[-		INVITE	1 →	INVITE	
180 Ringing	+			÷	180 Ringing	
	x			•		
			NOTIF	Y 🗲	NOTIFY 2	
			200 OK NOTIF		200 OK NOTIF	Y
200 OK INVI	TE 🗲		200 01 10 11	· +	200 OK INVITE	
ACK	· · · · · · · · · · · · · · · · · · ·			← →	ACK	-
	7			7		
NOTIFY (200	– ((NOTIFY (20	20)			
200 OK NOT		200 OK NC				
				utino		
		A	pply post test ro	Junie		

TSS		TP		Refe	rence	Selection expression
	AS/Operation	CC I	N03_002		.2.3.1	NOT PICS 4.3.2-1/4
Test purpose					-	
	successful by sending	a REFER ree	quest to the origina	ting us	ser.	
	, ,			U		
						callee is available to recall
	NOTIFY request and t					
				set to I	NR in the INVITE	request sent to the callee
	f the received INVITE	request from	the caller.			
Precondition						
SIP header va						
	sip:O-AS					
	Event:call-completion	tion/coll com	alation			
	Content-Type: applica cc-state: ready	luon/can-com	Dielion			
REFER:	sip: UE A; m=NR					
	Refer-To; UE B; meth	od=INVITE				
	sip: UE B; m=NR					
	From: UE A					
	To: UE B					
	Call-Info: <sip:ue-a>;</sip:ue-a>	purpose=call-	completion;m=NR			
	sip:O-AS					
	Event:call-completion		<i></i>			
	Subscription-State: te	rminated; reas	son=timeout			
Comments: SIP 1 (Gm)			SUT		SIP 2 (ISC)	
	Invoke CC	CNR request	001			
	CCNR request		v AS			
	•			ting us	ser available for	recall
			NOTIFY	÷	NOTIFY 1	
			200 OK NOTIFY	→	200 OK NOTIF	Y
REFER	+	REFER				
202 Accepted	→	202 Accepte	ed			
NOTIFY (100)	→	NOTIFY (10	0)			
200 OK NOTI		200 OK NO				
200 OK NOTI		200 01 100				
INVITE	→	INVITE				
_	2			→	INVITE 1	
180 Ringing	+			←	180 Ringing	
			NOTIFY	←		
	_		200 OK NOTIFY		200 OK NOTIF	
200 OK INVIT	E 🗲			÷	200 OK INVITE	
ACK	→			→	ACK	
	_		0)			
NOTIFY (200) 200 OK NOTII		NOTIFY (20 200 OK NO				
			oply post test rout	tine		

TSS		ТР		Refer	anco	Selection expression
	g_AS/Operation	CC_N03	_003	4.5.4.2		NOT PICS 4.3.2-1/4 AND PICS 4.3.2-1/9
Test purpos		·				•
CCNL Recal	l successful by sendin	g a REFER reques	st to the originat	ing use	er.	
Enguro that t	he originating AC stor	to the CCNIL recell	procedure when	a tha in	diaction that the	collegio ovoilable to recoll
	NOTIFY request and					callee is available to recall
						request sent to the callee
	of the received INVIT					
Precondition		•				
SIP header v	values:					
NOTIFY 1	sip:O-AS					
	Event:call-completio					
	Content-Type: applie	cation/call-completi	on			
	cc-state: ready					
REFER:	sip: UE A; m=NL Refer-To; UE B; met					
INVITE 1:	sip: UE B; m=NL					
	From: UE A					
	To: UE B					
	Call-Info: <sip:ue-a< td=""><td>;purpose=call-cor</td><td>npletion;m=NL</td><td></td><td></td><td></td></sip:ue-a<>	;purpose=call-cor	npletion;m=NL			
NOTIFY 2	sip:O-AS					
	Event:call-completio					
0	Subscription-State: t	erminated; reason	=timeout			
Comments: SIP 1 (Gm)		su	ıт		SIP 2 (ISC)	
	Invoke (CNL request	, I		SIF 2 (13C)	
		t confirmed by A	S			
				ing use	er available for	recall
			NOTIFY	÷	NOTIFY 1	
	_		00 OK NOTIFY	→	200 OK NOTIFY	Y
REFER	÷ +	REFER				
202 Accepte	d 🔸	202 Accepted				
NOTIFY (100)) 🗕	NOTIFY (100)				
200 OK NOT		200 OK NOTIF	(
200 011101		200 01110111	•			
INVITE	→	INVITE				
				→	INVITE 1	
180 Ringing	÷			+	180 Ringing	
		-	NOTIFY	÷	NOTIFY 2	
		20	00 OK NOTIFY	→ ∠	200 OK NOTIFY	
200 OK INVI ACK	TE 🗲			← →	200 OK INVITE ACK	
	7			,		
NOTIFY (200)) 🗕	NOTIFY (200)				
200 OK NOT		200 OK NOTIF	ſ			
			post test rout	ine		

TSS		TP	Re	eferenc	ce Selection expression
CC/originatin	ng_AS/Operation	CC_N03_	_004 4.	5.4.2.3.	
Test purpos			·		
CCBS Recal	ll successful by using t	he special REFER	interworking. Sendi	ing an Il	NVITE request to the originating user
F					tion that the collection of the black of the
					tion that the callee is available to reca body is set to "ready". An INVITE
					VITE request is sent to the callee and
					ession, caller and callee are
connected.					
Preconditio	-				
SIP header					
NOTIFY 1	sip:O-AS				
	Event:call-completion				
	Content-Type: applic cc-state: ready	ation/call-completio	n		
INVITE 2:	sip: UE B; m=BS				
	From: UE A				
	To: UE B				
	Call-Info: <sip:ue-a></sip:ue-a>	;purpose=call-com	pletion;m=BS		
NOTIFY 2	sip:O-AS				
	Event:call-completion Subscription-State: to		norocourco		
Comments:	Subscription-State.		noresource		
SIP 1 (Gm)		5	UT		SIP 2 (ISC)
	Invok	e CCBS request			(),
	CCBS requ	est confirmed by			
			•		vailable for recall
			NOTIFY 200 OK NOTIFY	-	
INVITE	+	INVITE 1	200 OK NOTIFY	→	200 OK NOTIFY
180 Ringing	÷	180 Ringing			
	-	100 igg			
200 OK INVI	TE 🔶	200 OK INVITE			
ACK	+	ACK		→	INVITE 2
				÷	180 Ringing
			NOTIFY	←	NOTIFY 2
			200 OK NOTIFY		200 OK NOTIFY
			Loo on no ni i	-	
				←	200 OK INVITE
				→	ACK
		Apply	post test routine		

TSS		ТР	R	eferend	ce	Selection expression
	g_AS/Operation	CC N03		.5.4.2.3		PICS 4.3.2-1/4
Test purpos			•			
		he special REFER	interworking. Sena	ling an l	NVITE requ	uest to the originating user.
						e callee is available to recall
						to "ready". An INVITE
						st is sent to the callee and
	eter in the Request line	e is set to NR. Whe	n the callee answe	ers the s	ession, cal	er and callee are
connected.						
Precondition	-					
SIP header v						
NOTIFY 1	sip:O-AS					
	Event:call-completion					
	Content-Type: applica cc-state: ready	ation/call-completio	n			
INVITE 2:	sip: UE B; m=NR					
	From: UE A					
	To: UE B					
	Call-Info: <sip:ue-a></sip:ue-a>	purpose=call-com	oletion·m=NR			
NOTIFY 2	sip:O-AS		olotion, m=rat			
	Event:call-completion					
	Subscription-State: te		noresource			
Comments:	•					
SIP 1 (Gm)		S	UT		SIP 2 (IS	C)
		CCNR request				
	CCNR requ	est confirmed by A				
			Terminating			
			NOTIFY	-	NOTIFY [·]	
	_		200 OK NOTIFY	∕ →	200 OK N	IOTIFY
INVITE	+	INVITE 1				
180 Ringing	→	180 Ringing				
				-		
200 OK INVI ACK	TE →	200 OK INVITE ACK		→ ←	INVITE 2 180 Ringi	na
ACK	T	ACK		T		ing
			NOTIFY	∕ ←	NOTIFY 2	2
			200 OK NOTIFY		200 OK N	
					200 0111	
				←	200 OK II	NVITE
				÷	ACK	
			post test routine	-		

TSS		TP		Reference	e	Selection expression
CC/originatin	g_AS/Operation	CC_N03_	006	4.5.4.2.3	.1	PICS 4.3.2-1/4 AND PICS 4.3.2-1/9
Test purpos						
CCNL Recall	successful by using th	e special REFER i	nterworking. Sen	ding an ll	NVITE requ	lest to the originating user.
Ensure that t	he originating AS starts	the CCNL recall p	rocedure when th	he indicat	tion that the	e callee is available to recall
						t to "ready". An INVITE
						est is sent to the callee and
	eter in the Request line	is set to NL. Wher	the callee answ	ers the se	ession, call	er and callee are
connected.						
Precondition						
SIP header v						
NOTIFY 1	sip:O-AS					
	Event:call-completion Content-Type: applica		n			
	cc-state: ready	alion/call-completio	11			
INVITE 2:	sip: UE B; m=NL					
	From: UE A					
	To: UE B					
	Call-Info: <sip:ue-a></sip:ue-a>	purpose=call-comp	oletion;m=NL			
NOTIFY 2	sip:O-AS					
	Event:call-completion					
Commenter	Subscription-State: te	rminated; reason=i	noresource			
Comments: SIP 1 (Gm)		s	UT		SIP 2 (IS	
	Invoke	CCNL request	01			3)
		est confirmed by A	AS			
	•		Terminating	g user av	ailable for	recall
			NOTIF	Y 🗲	NOTIFY '	1
			200 OK NOTIF	Y →	200 OK N	JOTIFY
INVITE	+	INVITE 1				
180 Ringing	→	180 Ringing				
200 OK INVI	TE →	200 OK INVITE		→	INVITE 2	
ACK	+	ACK		÷	180 Ringi	
					•	-
			NOTIF	-	NOTIFY 2	
			200 OK NOTIF	Y →	200 OK N	NOTIFY
				←	200 OK II	NVITE
				÷	ACK	
		Apply	post test routine	e		

TSS		ТР		erence	Selection expression
	ng_AS/Operation	CC_N03_007	4.5.4	1.2.3.2.1	
Test purpos					
CCBS Reca	Ill not accepted by origin	ating user. CC-T4 expires.			
		es the outstanding CCBS rec			
		and the caller does not acce	pt the rea	call offer. A SUBC	CRIBE is sent to the
	AS and the Expires hea	der is set to zero.			
Preconditio					
SIP header	values:				
NOTIFY 1	sip:O-AS				
	Event:call-completion				
	Content-Type: applica	ation/call-completion			
	cc-state: ready				
REFER:	sip: UE A; m=BS				
	Refer-To; UE B methe	od=INVITE			
INVITE:	sip: UE A; m=BS				
		the From header of original	communi	<i>cation</i>); purpose=	call-completion;m=BS
	From: UE B				
SUBSRIBE					
		ntity); purpose=call-completio	n;m=NL		
	td-Identity: UE-A (Publ	ic user identity)			
	Ill-completion				
Expires=					
NOTIFY 2 s	•				
	Ill-completion				
	tion-State: terminated; i	eason=timeout			
Comments					
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
		CBS request			
	CCBS request	confirmed by AS			
				ser available for	recall
		NOTI			n /
0.05.4		200 OK NOTI	FY 🗲	200 OK NOTIF	Υ
CASE A	-				
REFER	+	REFER			
202 Accepte	ed →	202 Accepted			
		Start Timer CC-T4			
INVITE	+	INVITE			
180 (Ringing	g) 🔶	180 (Ringing)			
		Start Timer CC-T4			
		1			
		Timeout Timer CC-T4			
		SUBSCRI		SUBSCRIBE	
		202 Accept	ed 🗲	202 Accepted	
				NOTIFY 2	~~
		200 OK NOTI		200 OK NOTIF	Ť
		Apply post test i	outine		

TSS		TP	Refe	rence	Selection expression
	ng_AS/Operation	CC_N03_008		.2.3.2.1	delection expression
Test purpos		005_000	+.U.F	.2.0.2.1	
	ll not accepted by origin	atina user			
00/11/1/000	in not decepted by origin				
Ensure that	the originating AS revok	es the outstanding CCNR	request afte	r having received	the notification that the
		e and the caller does not a			
	AS and the Expires head				
Preconditio					
SIP header	values:				
NOTIFY 1	sip:O-AS				
	Event:call-completion				
	Content-Type: applica	tion/call-completion			
	cc-state: ready	-			
REFER:	sip: UE A; m=NR				
	Refer-To; UE B; meth	od=INVITE			
INVITE:	sip: UE A; m=NR				
		the From header of origina	al communic	cation); purpose=0	call-completion;m=NR
	From: UE B				
SUBSRIBE :					
		ntity); purpose=call-comple	etion;m=NL		
	td-Identity: UE-A (Publ	ic user identity)			
	Il-completion				
Expires= NOTIFY 2 si					
	II-completion tion-State: terminated; r	eason-timeout			
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
	Invoke CO	CBS request			
		confirmed by AS			
		Ter	minating us	ser available for	recall
		NC	TIFY 🗲	NOTIFY 1	
		200 OK NC	DTIFY →	200 OK NOTIF	Y
CASE A					
REFER	+	REFER			
202 Accepte	ed 🔶	202 Accepted			
		Start Timer CC-T4			
INVITE	→ (r	INVITE			
180 (Ringing)) –	180 (Ringing) Start Timor CC-T4			
		Start Timer CC-T4			
		I			
		Timeout Timer CC-T	Ъ		
		SUBSC		SUBSCRIBE	
		202 Acc		202 Accepted	
		202 A00			
			TIFY 🗲	NOTIFY 2	
		200 OK NC		200 OK NOTIF	Y
		Apply post tes		200 01110111	

TSS		TP	Refe	rence	Selection expression
	g_AS/Operation	CC_N03_009		.2.3.2.1	PICS 4.3.2-1/9
Test purpose		00_100_000	1.0.1	.2.0.2.1	1100 4.0.2 1/3
	not accepted by origin	ating user.			
		es the outstanding CCNL i and the caller does not ac			
	S and the Expires head				
Precondition					
SIP header v					
NOTIFY 1	sip:O-AS Event:call-completion Content-Type: applica cc-state: ready	tion/call-completion			
REFER:	sip: UE A; m=NL Refer-To; UE B; meth	od=INVITF			
INVITE:	sip: UE A; m=NL	the From header of origina	al communic	<i>ation</i>); purpose	e=call-completion;m=NL
P-Asserto	p:T-AS UE-A (Public user iden J-Identity: UE-A (Publ -completion	ntity); purpose=call-comple ic user identity)	tion;m=NL		
NOTIFY 2 sip Event:call		eason=timeout			
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
	Invoke CO	CBS request			
		confirmed by AS			
	q		minating us	ser available fo	or recall
			TIFY C	NOTIFY 1	
		200 OK NC		200 OK NOT	IFY
CASE A REFER 202 Accepted	← →	REFER 202 Accepted Start Timer CC-T4			
CASE B INVITE 180 (Ringing)	← →	INVITE 180 (Ringing) Start Timer CC-T4			
		↓ Timeout Timer CC-T SUBSC 202 Acc	RIBE → epted ←	SUBSCRIBE 202 Accepted	
		NC 200 OK NC Apply post tes		NOTIFY 2 200 OK NOT	IFY

TSS		TP	Reference	Selection expression
	g_AS/Operation	CC_N03_010	4.5.4.2.3.2.2	NOT PICS 4.3.2-1/4
Test purpos				
CCBS Caller	is found to be busy, wh	nen a CC recall notificatio	n has been received.	
Encure that w	when the coller is found	to be buoy, when a CCP	S CC recall notification ha	a been received then the
			ecomes not busy. The orig	
				"closed". The originating AS
shall send a	PLIBLISH request to the	terminating AS containing	ng a presence XML body	status set to "open" when the
caller is no lo				
Preconditio	<u> </u>			
SIP header				
NOTIFY 1	sip:O-AS			
	Event:call-completion			
	Content-Type: applica	tion/call-completion		
	cc-state: ready	•		
REFER:	sip: UE A; m=BS			
	Refer-To; UE B; meth	od=INVITE		
INVITE:	sip: UE A; m=BS			
		the From header of origi	nal communication); purpo	se=call-completion;m=BS
	From: UE B			
PUBLISH 1:	•	· · · · · · · · · · · · · · · · · · ·		
		ic user identity); purpose		
		IE A (Public user identity)	
	Expires=(> 0) Event: presence			
	Content-Type: applic	ation/nidf+xml		
	xml version="1.0" e</td <td></td> <td></td> <td></td>			
	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>			
	<pre><tuple id=" any uri</pre></td><td>"></tuple></pre>			
	<status></status>	-		
		sed		
NOTIFY 2 sig	b:O-AS			
	I-completion			
	Type: application/call-co	mpletion		
cc-sta	te: queued			
PUBLISH 2:				
	To: UE B	in unor idontitale numero	-aall completion m DC	
		<i>ic user identity</i>); purpose: IE A (Public user identity		
	Expires=(> 0))	
	Event: presence			
	Content-Type: applic	ation/pidf+xml		
	xml version="1.0" e</td <td></td> <td></td> <td></td>			
	<pre><pre>content</pre></pre>			
	<pre><tuple id=" any uri</pre></td><td>"></tuple></pre>			
	<status></status>			
	<basic>ope</basic>			

Comments:	0.117							
SIP 1 (Gm)	SUT		SIP 2 (ISC)					
	CBS request							
CCBS request	confirmed by AS		ar available for recall					
Terminating user available for recall								
Establish a session to Si	Establish a session to SIP 2 (make UE A busy) NOTIFY 1 ← NOTIFY 1							
	200 OK NOTIFY	-	-					
CASE A	200 OK NOTIFT	7						
REFER +	REFER							
486 (Busy Here)	486 (Busy Here)							
	PUBLISH 1	→	PUBLISH					
	200 OK PUBLISH	←	200 OK PUBLISH					
	NOTIFY 1	-						
	200 OK NOTIFY	→	200 OK NOTIFY					
CASE B								
INVITE								
486 (Busy Here) →	486 (Busy Here) PUBLISH 1	د	PUBLISH					
	200 OK PUBLISH	-						
	200 OK FÜBLISIT	v	200 OK FOBLISH					
	NOTIFY 1	←	NOTIFY 2					
	200 OK NOTIFY		200 OK NOTIFY					
Disconnect session to SIP		-						
	PUBLISH 2	→	PUBLISH					
	200 OK PUBLISH	←	200 OK PUBLISH					
	NOTIFY 1		NOTIFY 2					
	200 OK NOTIFY	-	200 OK NOTIFY					
	Apply post test routi	ine						

TSS		TP	Reference	Selection expression
	g_AS/Operation	CC_N03_011	4.5.4.2.3.2.2	NOT PICS 4.3.2-1/4
Test purpos	e			
CCNR Caller	is found to be busy, whe	en a CC recall notification	has been received.	
				s been received, then the
		equest until the caller bec		
				closed". The originating AS
		terminating AS containing	a presence XML body s	status set to "open" when the
caller is no lo Preconditior				
SIP header v				
NOTIFY 1				
NOTIFITI	sip:O-AS Event:call-completion			
	Content-Type: application	on/call-completion		
	cc-state: ready			
REFER:	sip: UE A; m=NR			
	Refer-To; UE B; method	d=INVITE		
NVITE:	sip: UE A; m=NR			
		he From header of origina	al communication); purpo	se=call-completion;m=NR
	From: UE B	-	<i>,</i>	•
PUBLISH 1:				
		user identity); purpose=c	all-completion;m=NR	
		A (Public user identity)		
	Expires=(> 0)			
	Event: presence			
	Content-Type: application			
	xml version="1.0" end</td <td>coding="UTF-8"?></td> <td></td> <td></td>	coding="UTF-8"?>		
	<presence <tuple_id=" "="" opv_uri=""></tuple_id="></presence 			
	<tuple :<br="" id=" any uri "><status></status></tuple>	>		
	<basic>close</basic>	d		
NOTIFY 2 sig				
	l-completion			
	Type: application/call-com	npletion		
	te: queued			
PUBLISH 2:				
	To: UE B			
		user identity); purpose=c A (Public user identity)	all-completion;m=NR	
		A (Public user identity)		
	Expires=(> 0)			
	Event: presence Content-Type: application	on/nidf+yml		
	xml version="1.0" end</td <td></td> <td></td> <td></td>			
	<pre><pre>center</pre></pre>			
	<pre><tuple ;<="" id=" any uri " pre=""></tuple></pre>	>		
	<status></status>			
	<basic>open</basic>			

Comments:	0.17						
SIP 1 (Gm)	SUT		SIP 2 (ISC)				
	CNR request						
CONR reques	t confirmed by AS	ina ua	sor available for recall				
Terminating user available for recall Establish a session to SIP 2 (make UE A busy)							
NOTIFY 1 ← NOTIFY 1							
	200 OK NOTIFY	-	-				
CASE A							
REFER 🗲	REFER						
486 (Busy Here) →	486 (Busy Here)						
	PUBLISH 1	-	PUBLISH				
	200 OK PUBLISH	+	200 OK PUBLISH				
	NOTIFY 1	←	NOTIFY 2				
	200 OK NOTIFY	-					
CASE B							
INVITE +	INVITE						
486 (Busy Here) →	486 (Busy Here)						
	PUBLISH 1	-	PUBLISH				
	200 OK PUBLISH	+	200 OK PUBLISH				
	NOTIFY 1	←	NOTIFY 2				
	200 OK NOTIFY		200 OK NOTIFY				
Disconnect session to SIF		-					
	PUBLISH 2	→	PUBLISH				
	200 OK PUBLISH	←	200 OK PUBLISH				
		+	NOTIFY 2				
	200 OK NOTIFY	-	200 OK NOTIFY				
	Apply post test rout	ine					

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TSS		TP	Reference	Selection expression
CC/originatin	g_AS/Operation	CC_N03_012	4.5.4.2.3.2.2	NOT PICS 4.3.2-1/4PICS 4.3.2-1/9
Test purpos				
CCNL Caller	is found to be busy, when	n a CC recall notification	has been received.	
Ensure that v	when the caller is found to	be busy, when a CCNL	CC recall notification has	s been received, then the
	S shall suspend the CC re			
				closed". The originating AS
		erminating AS containing	a presence XML body s	status set to "open" when the
caller is no lo Preconditior				
SIP header v				
NOTIFY 1	sip:O-AS			
	Event:call-completion			
	Content-Type: application	on/call-completion		
REFER:	cc-state: ready sip: UE A; m=NL			
	Refer-To; UE B; method			
INVITE:	sip: UE A; m=NL			
		ne From header of origina	al communication); purpo	se=call-completion;m=NL
	From: UE B			
PUBLISH 1:				
	P-Assertd-Identity: UE	user identity); purpose=c	all-completion;m=NL	
	Expires=(> 0)			
	Event: presence			
	Content-Type: application			
	xml version="1.0" end</td <td>coding="UTF-8"?></td> <td></td> <td></td>	coding="UTF-8"?>		
	<presence stuplo id=" opy uri "></presence 			
	<tuple id=" any uri "> <status></status></tuple>	>		
	<basic>close</basic>	d		
NOTIFY 2 sip	o:O-AS			
	-completion			
	ype: application/call-com	pletion		
cc-sta	te: queued			
PUBLISH 2:	sip T-AS			
	To: UE B			
		user identity); purpose=c	all-completion;m=NL	
	P-Assertd-Identity: UE	A (Public user identity)		
	Expires=(> 0)			
	Event: presence Content-Type: application	on/pidf+xml		
	xml version="1.0" end</td <td></td> <td></td> <td></td>			
	<presence< td=""><td></td><td></td><td></td></presence<>			
	<tuple id=" any uri "></tuple>	>		
	<status></status>	<td></td> <td></td>		
	<basic>open-</basic>			

Comments:	0.17		
SIP 1 (Gm)	SUT		SIP 2 (ISC)
	CNL request confirmed by AS		
CCIL request		ina ua	ser available for recall
Establish a session to SI		ing us	
	NOTIFY 1	4	NOTIFY 1
	200 OK NOTIFY	-	-
CASE A	200 011101111		
REFER 🗧	REFER		
486 (Busy Here) →	486 (Busy Here)		
	PUBLISH 1	→	PUBLISH
	200 OK PUBLISH	+	200 OK PUBLISH
	NOTIFY 1	←	NOTIFY 2
	200 OK NOTIFY	→	200 OK NOTIFY
CASE B			
INVITE ←	INVITE		
486 (Busy Here) →	486 (Busy Here)	_	
	PUBLISH 1	-	
	200 OK PUBLISH	+	200 OK PUBLISH
	NOTIFY 1	←	NOTIFY 2
	200 OK NOTIFY		-
Disconnect session to SIP	2 (make UE A available)		
	PUBLISH 2	→	PUBLISH
	200 OK PUBLISH	←	200 OK PUBLISH
	NOTIFY 1	←	NOTIFY 2
	200 OK NOTIFY	→	200 OK NOTIFY
	Apply post test rout	ine	

TSS	TP	Refe	rence	Selection expression			
CC/originating_AS/Operation	CC_N03_013	4.5.4	.2.3.2.3	NOT PICS 4.3.2-1/3			
Test purpose							
The caller initiates another communication to the same destination B and activates the same CC service CCBS again.							
The two communications are identical. The AS discards the current request.							
Ensure that the caller initiates another							
(CCBS) again then the originating AS							
caller that the request has not been ad	ccepted because a CC request	had a	Iready been store	d against the requested			
callee.							
Preconditions:							
SIP header values:							
486 Busy Here:							
Call-Info: <sip:ue-b>;purpose=cal</sip:ue-b>	Il-completion;m=BS						
Comments:	0.17						
SIP 1 (Gm)	SUT		SIP 2 (ISC)				
CCBS request co	onfirmed by AS	•					
INVITE -		→ ∠	INVITE 100 Truing				
100 Trying E	486 (Duoy Horo)	(100 Trying	\			
183 Session Progress	486 (Busy Here)	← →	486 (Busy Here ACK)			
183 Session Progress 🗧 🗧	183 Session Progress Announcement that CCBS	-					
Inband-interaction proced		s pos	SIDIE				
inband-interaction proceed							
Announcement that CCBS is not invoked							
	Apply post test rout	ine					

TSS	TP	Reference	Selection expression
CC/originating_AS/Operation	CC_N03_014	4.5.4.2.3.2.3	NOT PICS 4.3.2-1/3
Test purpose			
The caller initiates another communi			ame CC service CCNR agair
The two communications are identica	al. The AS discards the curr	ent request.	
Ensure that the caller initiates anothe			
(CCNR) again then the originating As caller that the request has not been a			
callee.	iccepted because a CC leq	uest had alleady been s	soled against the requested
Preconditions:			
SIP header values:			
180 Ringing 2:			
Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	all-completion;m=NR		
Comments:	· · ·		
SIP 1 (Gm)	SUT	SIP 2 (ISC)	
	NR request		
	confirmed by AS		
INVITE -		→ INVITE	
100 Trying 🗧 🗲		← 100 Trying	
		🗲 180 Ringing	j 1
180 Ringing 2	Announcement that CC	ND is pessible	
Inband-interaction procee	Announcement that CC		
inband-interaction proces			
	Announcement that CCB	S is not invoked	
CANCEL →		→ CANCEL	
200 OK CANCEL		← 200 OK CA	NCEL
487 Request Terminated 🗧 🗧		← 487 Reques	st Terminated
ACK →		→ ACK	
	Apply post test	routine	
TSS	TP	Reference	Selection expression
CC/originating_AS/Operation	CC_N03_015	4.5.4.2.3.2.3	PICS 4.3.2-1/9 AND
5 5=			NOT PICS 4.3.2-1/3

Ensure that the caller initiates another communication to the same destination B and activates the same CC service (CCNL) again then the originating AS retains the original request and discards the current request and informs the caller that the request has not been accepted because a CC request had already been stored against the requested callee.

Preconditions: SIP header values: 480 Temporarily Unavailable: Call-Info: <sip:UE-B>;purpose=call-completion;m=NL

Comments:		
SIP 1 (Gm)	SUT	SIP 2 (ISC)
	Invoke CCBS request	
CCB	S request confirmed by AS	
INVITE	→	→ INVITE
100 Trying	÷	 100 Trying
, ,	480 (Temporarily Unavailable)	← 480 (Temporarily Unavailable)
183 Session Progress	← 183 Session Progress	→ ACK
	Announcement that CCBS is po	ssible
Inband-interac	tion procedures for the CC activation	
	Announcement that CCBS is not i	invoked
	Apply post test routine	

TSS		ТР	Re	ference	Selection expression
CC/originating_AS/Operati	on	CC_N03_016	-	.4.2.3.2.3	PICS 4.3.2-1/3
Test purpose					
	communication	to the same destination B	and a	activates the s	ame CC service CCBS again.
The two communications a					
					ivates the same CC service
					uest is sent to the terminating
AS indicating a CCBS requ	iest - a m param	eter set to "BS" is attache	d at th	ne Request lin	е.
Preconditions:					
SIP header values:					
486 Busy Here:					
Call-Info: <sip:ue-b>;p</sip:ue-b>		pletion;m=BS			
SUBSRIBE sip:T-AS;m=B	3				
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: <ue-a>; pu</ue-a>		pletion;m=BS			
P-Assertd-Identity: UI	E-A				
Expires: CC-T3					
Event:call-completion					
NOTIFY sip:O-AS					
Event:call-completion					
Content-Type: applicati	on/call-completion	on			
cc-state: queued					
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
	nvoke CCBS re				
	request confirm	med by AS	_		
INVITE	→			INVITE	
100 Trying	+			100 Trying	
	6 100 0	486 (Busy Here	,		Here)
183 Session Progress		ssion Progress	-	ACK	
half an el internet		nouncement that CCBS	is pos	sidle	
Inband-Interacti	on procedures	for the CC activation			
					-
			→	SUBSCRIB	—
			+	202 Accepte	ea
				NOTION	
			÷	NOTIFY	TIE)/
	Confirm to t	he caller that the invoca	tion w	200 OK NO as successfu	
					-
		Apply post test rout	ine		

TSS		ТР	Ref	erence	Selection expression
CC/originating_AS/Ope	eration	CC_N03_017	4.5.	4.2.3.2.3	PICS 4.3.2-1/4
Test purpose					· ·
The caller initiates anot	ther communicat	tion to the same destination	on B and a	ctivates the s	ame CC service CCNR again.
The two communication	ns are identical.	The AS treat this as a ne	w CC requ	est.	-
					tivates the same CC service
					quest is sent to the terminating
	request - a m pa	rameter set to "NR" is atta	ached at th	e Request lir	1e.
Preconditions:					
SIP header values:					
180 Ringing 2:					
Call-Info: <sip:ue-b< td=""><td></td><td>completion;m=NR</td><td></td><td></td><td></td></sip:ue-b<>		completion;m=NR			
SUBSRIBE sip:T-AS;m	=NR				
From: <ue-a></ue-a>					
To: <ue-b></ue-b>					
Contact: <o-as></o-as>					
Call.Info: <ue-a>;</ue-a>		completion;m=NR			
P-Assertd-Identity Expires: CC-T3	: UE-A				
Event:call-completion					
NOTIFY sip:O-AS	חכ				
Event:call-completion	ac				
Content-Type: appli		letion			
cc-state: queueo					
Comments:	~				
SIP 1 (Gm)		SUT		SIP 2 (ISC)	
- (-)	Invoke CCNF			- ()	
CC	NR request co				
INVITE	→	-	→	INVITE	
100 Trying	÷		+	100 Trying	
			←	180 Ringing	g 1
180 Ringing 2	+				
		Announcement that CC	NR is pos	sible	
Inband-intera	action procedui	res for the CC activatior	۱		
			→	SUBSCRIB	—
			÷	202 Accept	ed
			÷	NOTIFY	
	• •		→	200 OK NO	
	Confirm	to the caller that the inv		as successf	ul
		Apply post test	routine		

TSS	TP	Reference	Selection expression
CC/originating_AS/Operation	CC_N03_018	4.5.4.2.3.2.3	PICS 4.3.2-1/3 AND
			PICS 4.3.2-1/9
Test purpose			
	cation to the same destination B and a		ne CC service CCNL again.
The two communications are identica	al. The AS treats this as a new CC req	uest.	
	er communication to the same destina		
	all treat this as a new CC request, A S		est is sent to the terminating
	parameter set to "NL" is attached at th	e Request line.	
Preconditions:			
SIP header values:			
480 Temporarily Unavailable:			
Call-Info: <sip:ue-b>;purpose=ca</sip:ue-b>	all-completion;m=NL		
SUBSRIBE sip:T-AS;m=NL			
From: <ue-a> To:<ue-b></ue-b></ue-a>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=cal</ue-a>	Il-completion:m-NI		
P-Assertd-Identity: UE-A	n-completion, m=nE		
Expires: CC-T3			
Event:call-completion			
NOTIFY sip:O-AS			
Event:call-completion			
Content-Type: application/call-con	mpletion		
	•		
cc-state: queued			
Comments:			
Comments:	SUT	SIP 2 (ISC	2)
Comments: SIP 1 (Gm) Invoke C	CBS request	SIP 2 (ISC	:)
Comments: SIP 1 (Gm) Invoke C		SIP 2 (ISC	C)
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE →	CBS request	→ INVITE	
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE →	CCBS request at confirmed by AS	→ INVITE ← 100 Trying)
Comments: SIP 1 (Gm) CCBS reques INVITE → 100 Trying ←	CCBS request at confirmed by AS 480 (Temporarily Unavailable)	 → INVITE ← 100 Trying ← 480 (Tem 	
Comments: SIP 1 (Gm) CCBS reques INVITE → 100 Trying ←	480 (Temporarily Unavailable) 83 Session Progress	 → INVITE ← 100 Trying ← 480 (Tem → ACK)
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem → ACK)
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress	 → INVITE ← 100 Trying ← 480 (Tem → ACK)
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem → ACK 	g porarily Unavailable)
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem) → ACK → ASisible 	g porarily Unavailable) BE
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem → ACK ⇒ SUBSCRI ← 202 Accept 	g porarily Unavailable) BE
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem → ACK ⇒ SUBSCRI ← 202 Accept 	g porarily Unavailable) BE oted
Comments: SIP 1 (Gm) Invoke C CCBS reques INVITE → 100 Trying ← 183 Session Progress ← 1 Inband-interaction proc	480 (Temporarily Unavailable) 83 Session Progress Announcement that CCBS is pos	 → INVITE ← 100 Trying ← 480 (Tem → ACK ⇒ SUBSCRI → 202 Accep ← NOTIFY → 200 OK N 	g porarily Unavailable) BE oted

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5.3 Actions at the terminating AS

5.3.1 CC possible indication

TSS CC/terminating_AS/possibleIndication		Defer		Coloction oversector
	TP CC_N04_001	Refer 4.5.4.		Selection expression
Test purpose	CC_N04_001	4.0.4.	.3.1.1	
	in the ARC final room		aived from the t	rminating
The terminating AS inserts a Call-Info header				-
Ensure that the terminating AS inserts a Call-				
n parameter is set to BS in the 486 (Busy He	re) received from the	e callee ai	nd forwards to th	ne originating AS.
Preconditions:				
SIP header values:				
186 (Busy Here) 1:				
Call-Info: <sip:ue-b>;purpose=call-comple</sip:ue-b>	etion;m=BS			
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
NVITE →		→	INVITE	
100 Trying +		+	100 Trying	
186 (Busy Here) 1		÷	486 (Busy Her	re)
ACK →		→	ACK	
	Apply post test r	outine		
rss	TP	Refer	rence	Selection expression
CC/terminating_AS_AS/possibleIndication	CC_N04_002	4.5.4.	.3.1.1	
Test purpose	00			
The terminating AS inserts a Call-Info header	in the 486 final resp	onse in c	ase of NDUB.	
Ensure that the terminating AS in case of NDI	LIP condo o 496 (Pu		oontoining o Col	Linfo boodor and the
purpose parameter is set to call-completion a				
Preconditions: Callee is network determined			ss to the origina	ung AS.
	i user busy			
SID headar values				
SIP header values: 486 (Busy Here) 1: Call lafe: ceisid JE Baspurpage-call comple	otion-m-BS			
I86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-completerer</sip:ue-b>	etion;m=BS			
I86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments:</sip:ue-b>				
486 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SIP 1 (ISC)</sip:ue-b>	etion;m=BS SUT		SIP 2 (Gm)	
Iable (Busy Here) 1: <u>Call-Info: <sip:ue-b>;purpose=call-comple</sip:ue-b></u> Comments: SIP 1 (ISC) NVITE →			SIP 2 (Gm)	
IBG (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SIP 1 (ISC) NVITE → 100 Trying ←</sip:ue-b>			SIP 2 (Gm)	
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SiP 1 (ISC) NVITE → 00 Trying ← H86 (Busy Here) 1 ←</sip:ue-b>			SIP 2 (Gm)	
886 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SiP 1 (ISC) NVITE → 00 Trying ← 886 (Busy Here) 1 ←</sip:ue-b>	SUT		SIP 2 (Gm)	
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SiP 1 (ISC) NVITE → 00 Trying ← H86 (Busy Here) 1 ←</sip:ue-b>		outine	SIP 2 (Gm)	
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SiP 1 (ISC) NVITE → 00 Trying ← H86 (Busy Here) 1 ← ACK →</sip:ue-b>	SUT Apply post test re			Coloction errors is
86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: GIP 1 (ISC) NVITE → 00 Trying ← 86 (Busy Here) 1 ← ACK →</sip:ue-b>	SUT Apply post test re	Refer	rence	Selection expression
886 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-comple Comments: SIP 1 (ISC) NVITE → 00 Trying ← 886 (Busy Here) 1 ← ACK →</sip:ue-b>	SUT Apply post test re		rence	Selection expression
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complete Comments: SIP 1 (ISC) NVITE → 00 Trying ← H86 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose Fest purpose</sip:ue-b>	SUT Apply post test rest TP CC_N04_003	Refer 4.5.4.	rence 3.1.1	Selection expression
#86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE → 100 Trying ← #86 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header</sip:ue-b>	SUT Apply post test re TP CC_N04_003 in the 180 provision	Refer 4.5.4. al respon	rence 3.1.1 se.	
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE → 00 Trying ← H86 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Fest purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info Call-Info</sip:ue-b>	SUT Apply post test re TP CC_N04_003 in the 180 provision Info header in the 18	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-completed Comments: SIP 1 (ISC) NVITE → 00 Trying ← 86 (Busy Here) 1 ← ACK → CK → SS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header</sip:ue-b>	SUT Apply post test re TP CC_N04_003 in the 180 provision Info header in the 18	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-completed Comments: SIP 1 (ISC) NVITE → 00 Trying ← 86 (Busy Here) 1 ← ACK → CK → SS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header</sip:ue-b>	SUT Apply post test re TP CC_N04_003 in the 180 provision Info header in the 18	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
886 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complete Comments: GIP 1 (ISC) NVITE 00 Trying 486 (Busy Here) 1 40K 7SS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Preconditions:</sip:ue-b>	SUT Apply post test re TP CC_N04_003 in the 180 provision Info header in the 18	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-completion Comments: GIP 1 (ISC) NVITE 00 Trying 86 (Busy Here) 1 CK SS C2/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header SIP header values: 80 (Ringing) 1:</sip:ue-b>	SUT Apply post test re TP CC_N04_003 r in the 180 provision Info header in the 18 NR received from th	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
H86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE → 100 Trying ← 186 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Call-completion and the m parameter is set to Preconditions: SIP header values: 180 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-completion</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 r in the 180 provision Info header in the 18 NR received from th	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp	ose parameter is set to
#86 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complete Comments: SIP 1 (ISC) NVITE 00 Trying #86 (Busy Here) 1 ACK ACK FSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header SIP header values: 80 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments:</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 fin the 180 provision Info header in the 18 NR received from the etion;m=NR	Refer 4.5.4. al respon	rence 3.1.1 se. g) and the purp and forwards to	ose parameter is set to
Hase (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE → 100 Trying ← 486 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Call-completion and the m parameter is set to Preconditions: SIP header values: 180 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) SIP 1 (ISC)</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 r in the 180 provision Info header in the 18 NR received from th	Refer 4.5.4. al respon 0 (Ringin le callee a	rence 3.1.1 se. g) and the purp and forwards to SIP 2 (Gm)	ose parameter is set to
486 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE → 100 Trying ← 486 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header SIP header values: 180 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE →</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 fin the 180 provision Info header in the 18 NR received from the etion;m=NR	Refer 4.5.4. al respon 0 (Ringin le callee a	rence 3.1.1 se. g) and the purp and forwards to SIP 2 (Gm) INVITE	ose parameter is set to
486 (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE 100 Trying 486 (Busy Here) 1 ACK ACK TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info Competitions: SIP header values: 180 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE 100 Trying</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 fin the 180 provision Info header in the 18 NR received from the etion;m=NR	Refer 4.5.4. al respon 0 (Ringin e callee a	rence 3.1.1 se. g) and the purp and forwards to SIP 2 (Gm) INVITE 100 Trying	ose parameter is set to
Hase (Busy Here) 1: Call-Info: <sip:ue-b>;purpose=call-complete Comments: SIP 1 (ISC) NVITE → 100 Trying ← 486 (Busy Here) 1 ← ACK → TSS CC/terminating_AS_AS/possibleIndication Test purpose The terminating AS inserts a Call-Info header Ensure that the terminating AS inserts a Call-Info header Call-completion and the m parameter is set to Preconditions: SIP header values: 180 (Ringing) 1: Call-Info: <sip:ue-b>;purpose=call-complet Comments: SIP 1 (ISC) NVITE →</sip:ue-b></sip:ue-b>	SUT Apply post test re TP CC_N04_003 fin the 180 provision Info header in the 18 NR received from the etion;m=NR	Refer 4.5.4. al respon 0 (Ringin e callee a	rence 3.1.1 se. g) and the purp and forwards to SIP 2 (Gm) INVITE	ose parameter is set to

TSS	TP	Reference	Selection expression
CC/terminating_AS/possibleIndication	CC_N04_004	4.5.4.3.1.1	PICS 4.3.2-1/9
Test purpose			
The terminating AS inserts a Call-Info hea	ader in the 480 final resp	oonse if the terminatir	ng user is not logged-in.
Ensure that the terminating AS inserts a C	Call-Info header and the	purpose parameter is	s set to call-completion and the
m parameter is set to NL in the 480 (Tem			
the originating AS.		C C	
Preconditions:			
SIP header values:			
480 Temporarily Unavailable:			
Call-Info: <sip:ue-b>;purpose=call-co</sip:ue-b>	mpletion;m=NL		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gn	n)
INVITE	→		
100 Trying	+		
480 (Temporarily Unavailable)	+		
ACK	→		
	Apply post test r	outine	

TSS	TP	Reference	Selection expression
CC/terminating_AS_AS/possibleIndication	CC_N04_005	4.5.4.3.1.1	
Test purpose			· · · · · · · · · · · · · · · · · · ·
Terminating user does not subscribe to the C	CBS service. No Cal	l-Info header field	included.
Ensure that no Call-Info header is included in possible on destination B (callee).	the 486 (Busy Here)	If the terminating	AS knows that the CC is not
Preconditions: Terminating user does not su	ubscribe to the CC se	rvice	
SIP header values:			
486 (Busy Here) 1:			
Call-Info not included			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (0	Sm)
INVITÉ		→ INVITÈ	-
100 Trying +		← 100 Try	ing
486 (Busy Here) 1		← 486 (Bu	sy Here)
		→ ACK [`]	
ACK 🗕			

TSS		TP	Ref	erence	Selection expression
CC/terminating_AS_AS/possibleIndic	ation	CC_N04_006	4.5.	4.3.1.1	
Test purpose					
Terminating user does not subscribe	to the CCN	R service. No Cal	l-Info h	eader field in	cluded.
Ensure that no Call-Info header is inc	luded in the	180 (Ringing) If t	he term	ninating AS k	nows that the CC is not possible
on destination B (callee).				C C	
Preconditions: Terminating user doe	es not subsc	ribe to the CC se	rvice		
SIP header values:					
180 (Ringing) 1:					
Call-Info not included					
Comments:					
SIP 1 (ISC)		SUT		SIP 2 (Gn	n)
INVITE	→		→	INVITE	
100 Trying	÷		÷	100 Trying	n
180 (Ringing) 1	, ←		÷	180 (Ring	
	-	pply post test ro	-	.00 (Ring	

TSS	Т	P	Reference	Selection expression
CC/terminating_AS_AS/possibleIndication	n C	C_N04_007	4.5.4.3.1.1	PICS 4.3.2-1/9
Test purpose			•	·
Terminating user does not subscribe to the	ne CCNL s	service. No Call	-Info header field inc	luded.
Ensure that no Call-Info header is include	d in the 4	80 (Temporarily	Unavailable) If the t	erminating AS knows that the
CC is not possible on destination B (calle				3
Preconditions: Terminating user does not				
SIP header values:				
480 Temporarily Unavailable:				
Call-Info not included				
Comments:				
SIP 1 (ISC)		SUT	SIP 2 (Gm	a)
INVITE	→		•	
100 Trying	←			
480 (Temporarily Unavailable)	←			
ACK	→			
	Арр	oly post test ro	outine	

5.3.2 CC Invocation

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_001	4.5.4.3.2.1	
Test purpose			
CCBS service invocation successful at th	e terminating AS.		
	· ·		
Ensure that the terminating AS is able to			
originating AS and responds with a NOTI	FY request. In the NOTI	FY request the state	header of the call-completion
MIME body is set to queued.			
Preconditions:			
SIP header values:			
486 (Busy Here) 1:			
Call-Info: <sip:ue-b>;purpose=call-co</sip:ue-b>	mpletion;m=BS		
SUBSRIBE sip:T-AS;m=BS			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-comp</ue-a>	letion;m=BS		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion			
202 Accepted	-		
Expires: ≤ value received in SUBSRIE	E		
NOTIFY sip:O-AS			
From: <ue-b> To:<ue-a></ue-a></ue-b>			
Event:call-completion Subscription-State: active;expires=			
Content-Type: application/call-com			
cc-state: queued	pietion		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (G	m)
INVITE	→	→ INVITE	,
100 Trying	÷	← 100 Tryir	na
486 (Busy Here) 1	÷	← 486 (Bus	
ACK	÷	→ ACK	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	-		
SUBSCRIBE	→		
202 Accepted	←		
NOTIFY	+		
200 OK NOTIFY	→		
	Apply post test r	outine	

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_002	4.5.4.3.2.1	
Test purpose			
CCNR service invocation successful at the	ne terminating AS.		
	· ·		
Ensure that the terminating AS is able to			
originating AS and responds with a NOTI	FY request. In the NOTI	FY request the s	tate header of the call-completion
MIME body is set to queued.			
Preconditions:			
SIP header values:			
180 Ringing 1:			
Call-Info: <sip:ue-b>;purpose=call-co</sip:ue-b>	ompletion;m=NR		
SUBSRIBE sip:T-AS;m=NR			
From: <ue-a> To:<ue-b></ue-b></ue-a>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-comp</ue-a>	letion·m-NR		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion			
202 Accepted			
Expires: ≤ value received in SUBSRIE	3E		
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires=			
Content-Type: application/call-com	pletion		
cc-state: queued			
Comments:	CUT		
SIP 1 (ISC) INVITE	SUT		c (Gm)
100 Trying	→ ←	→ INVIT ← 100 T	-
180 Ringing 1	-		Ringing
	•	■ 100 F	<u>zinālinā</u>
SUBSCRIBE	→		
202 Accepted	÷		
NOTIFY	÷		
200 OK NOTIFY	→		
	Apply post test r	outine	

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_003	4.5.4.3.2.1	PICS 4.3.2-1/9
Test purpose			
CCNL service invocation successful at th	e terminating AS.		
Ensure that the terminating AS is able to			
originating AS and responds with a NOTI	FY request. In the NOTI	- Y request the state	neader of the call-completion
MIME body is set to queued.			
Preconditions: SIP header values:			
480 (Temporarily Unavailable) 1:	molation MI		
Call-Info: <sip:ue-b>;purpose=call-cc SUBSRIBE sip:T-AS;m=NL</sip:ue-b>	impletion,m=nL		
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-comp</ue-a>	letion:m-NI		
P-Assertd-Identity: UE-A	Netion, m=NE		
Expires: CC-T3			
Event:call-completion			
202 Accepted			
Expires: ≤ value received in SUBSRIE	3E		
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires=	< any value >		
Content-Type: application/call-com			
cc-state: queued			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gn	n)
NVITE	→	→ INVITE	
100 Trying	+	← 100 Trying	
480 (Temporarily Unavailable) 1	+		porarily Unavailable)
ACK	→	→ ACK	
SUBSCRIBE	→		
202 Accepted	•		
	•		
NOTIFY	+		
200 OK NOTIFY	→		
-	Apply post test r	outine	

TSS	TD	Defe		
CC/terminating_AS/Invocation	TP CC_N05_00		rence .3.2.2	Selection expression
Test purpose		4.5.4	.3.2.2	
CCBS service invocation unsuccessful	Il at the terminating AS.	Maximum nu	ımber of aueue ei	ntries is reached.
Ensure that the terminating AS respor				nvoke received from the
originating AS with a 480 (Temporarily	/ Unavailable) if the calle	e's B queue	limit is reached.	
Preconditions:				
SIP header values: SUBSRIBE sip:T-AS;m=BS				
From: <ue-a></ue-a>				
To: <ue-b></ue-b>				
Call.Info: <ue-a>; purpose=call-co</ue-a>	ompletion;m=BS			
P-Assertd-Identity: UE-A				
Expires: CC-T3				
Contact: <o-as></o-as>				
Event:call-completion Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
, , , , , , , , , , , , , , , , , , ,				
	Set the B que	ue to limit		
INVITE	→	→	INVITE	
100 Trying	+	÷	100 Trying	
486 (Busy Here)	÷	←	486 (Busy Here	e)
ACK	→	→	ACK	
	د			
SUBSCRIBE 480 Temporarily Unavailable	→ ←			
	Apply post te	st routine		
TSS	ТР	Refe	rence	Selection expression
CC/terminating_AS/Invocation	CC_N05_00		.3.2.2	
			-	1
Test purpose CCBS service invocation unsuccessfu	I at the terminating AS.	No CC queu	e for the terminat	n user available.
Test purpose CCBS service invocation unsuccessfu	-	-		
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor priginating AS with a 403 Forbidden if	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor originating AS with a 403 Forbidden if the terminating user.	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor originating AS with a 403 Forbidden if the terminating user. Preconditions:	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a></ue-a>	nds to the SUBSCRIBE r	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""></ue></ue-a>	nds to the SUBSCRIBE n no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co</ue-a></ue></ue-a>	nds to the SUBSCRIBE n no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A</ue-a></ue></ue-a>	nds to the SUBSCRIBE n no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3</ue-a></ue></ue-a>	nds to the SUBSCRIBE n no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as></o-as></ue-a></ue></ue-a>	nds to the SUBSCRIBE n no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments:</o-as></ue-a></ue></ue-a>	nds to the SUBSCRIBE r no CC queue is availabl	equest conta	aining the CCBS i	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC)</o-as></ue-a></ue></ue-a>	nds to the SUBSCRIBE r no CC queue is availabl ompletion;m=BS	equest conta	aining the CCBS i uested CC servic	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) INVITE</o-as></ue-a></ue></ue-a>	nds to the SUBSCRIBE r no CC queue is availabl ompletion;m=BS	equest conta le for the req	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE	nvoke received from the
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) INVITE 100 Trying</o-as></ue-a></ue></ue-a>	ompletion;m=BS	equest conta le for the req → ←	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE 100 Trying	nvoke received from the e at the terminating AS for
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respor originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) INVITE 100 Trying 486 (Busy Here)</o-as></ue-a></ue></ue-a>	ompletion;m=BS	equest conta le for the req → ← ←	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE 100 Trying 486 (Busy Here	nvoke received from the e at the terminating AS for
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) INVITE 100 Trying 486 (Busy Here)</o-as></ue-a></ue></ue-a>	ompletion;m=BS	equest conta le for the req → ←	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE 100 Trying	nvoke received from the e at the terminating AS for
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as></o-as></ue-a></ue></ue-a>	ompletion;m=BS	equest conta le for the req → ← ←	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE 100 Trying 486 (Busy Here	nvoke received from the e at the terminating AS for
Test purpose CCBS service invocation unsuccessfu Ensure that the terminating AS respon- originating AS with a 403 Forbidden if the terminating user. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-co P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) INVITE 100 Trying 486 (Busy Here) ACK</o-as></ue-a></ue></ue-a>	ompletion;m=BS	equest conta le for the req → ← ←	aining the CCBS i uested CC servic SIP 2 (Gm) INVITE 100 Trying 486 (Busy Here	nvoke received from the e at the terminating AS for

TSS	TP	Reference	е	Selection expression
CC/terminating_AS/Invocation	CC_N05_006	4.5.4.3.2.2	2	•
Fest purpose	•	•		
CCNR service invocation unsuccessful at the	e terminating AS. Max	imum numbe	r of queue	entries is reached.
Ensure that the terminating AS responds to t				
originating AS with a 480 (Temporarily Unav	ailable) if the callee's	B queue limit	is reached.	
Preconditions:				
SIP header values:				
SUBSRIBE sip:T-AS;m=NR				
From: <ue-a></ue-a>				
To: <ue-b></ue-b>				
Call.Info: <ue-a>; purpose=call-completi</ue-a>	ion;m=BS			
P-Assertd-Identity: UE-A Expires: CC-T3				
Contact: <o-as></o-as>				
Event:call-completion				
Comments:				
SIP 1 (ISC)	SUT	SIE	2 (Gm)	
	001	0.1	2 (011)	
	Set the B queue to	o limit		
	•			
INVITE -	•	→ IN\	/ITE	
	·		0 Trying	
100 Trying + 180 Ringing 1 +			0 Trying 0 Ringing	
180 Ringing 1	-			
180 Ringing 1 ϵ	- •			
180 Ringing 1	- -	← 180		
180 Ringing 1 ϵ	- •	← 180		
180 Ringing 1 ϵ	- -	← 180		
180 Ringing 1 € SUBSCRIBE € 480 Temporarily Unavailable €	Apply post test ro	← 180	0 Ringing	Selection expression
180 Ringing 1 ← SUBSCRIBE → 480 Temporarily Unavailable ←	Apply post test ro	← 180 putine Reference	0 Ringing	Selection expression
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation	Apply post test ro	← 180	0 Ringing	Selection expression
180 Ringing 1 ϵ	Apply post test ro	← 180 putine Reference 4.5.4.3.2.2	0 Ringing e 2	
180 Ringing 1 € SUBSCRIBE € 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose €	Apply post test ro	← 180 putine Reference 4.5.4.3.2.2	0 Ringing e 2	
180 Ringing 1 Image: Subscript of the second state of the se	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 Image: Subscript of the system SUBSCRIBE Image: Subscript of the system 480 Temporarily Unavailable Image: Subscript of the system TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the system Ensure that the terminating AS responds to the system priginating AS with a 403 Forbidden if no CC	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE ₽ 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to to to originating AS with a 403 Forbidden if no CC Preconditions:	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE ₽ 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t t originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SIP header values:	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1	Apply post test ro TP CC_N05_007 e terminating AS. No o	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi</ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A VE-A</ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A Expires: CC-T3</ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as></o-as></ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion</o-as></ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requires queue is available for	← 180 Dutine Reference 4.5.4.3.2.2 CC queue for est containing	0 Ringing e 2 the termina g the CCNF	atin user available.
180 Ringing 1 € SUBSCRIBE 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t 6 originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: Event:call-completion</o-as></ue-a></ue></ue-a>	TP CC_N05_007 e terminating AS. No of the SUBSCRIBE requines available for tion;m=BS	 ← 180 putine Reference (4.5.4.3.2.2) CC queue for est containing r the requested 	0 Ringing e 2 the termina g the CCNF ed CC servi	atin user available.
180 Ringing 1 Image: Subscript of the system of the sy	Apply post test ro TP CC_N05_007 e terminating AS. No d the SUBSCRIBE reque queue is available fo tion;m=BS	← 180 outine Reference 4.5.4.3.2.2 CC queue for est containing r the requester	0 Ringing e 2 the termina g the CCNF ed CC servi	atin user available.
180 Ringing 1 € SUBSCRIBE → 480 Temporarily Unavailable € TSS CC/terminating_AS/Invocation Test purpose CCNR service invocation unsuccessful at the Ensure that the terminating AS responds to t to originating AS with a 403 Forbidden if no CC Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-completi P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion</o-as></ue-a></ue></ue-a>	Apply post test ro TP CC_N05_007 e terminating AS. No of the SUBSCRIBE reque queue is available fo tion;m=BS	 ← 180 putine Reference (4.5.4.3.2.2) CC queue for est containing r the requested SIF NN 	0 Ringing e 2 the termina g the CCNF ed CC servi	atin user available.

Apply post test routine

→ ←

SUBSCRIBE 403 Forbidden

TSS	ТР	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_0	008 4.5.4.3.2.2	PICS 4.3.2-1/9
Test purpose			
CCNL service invocation unsuccess	ul at the terminating AS.	. Maximum number of q	ueue entries is reached.
Ensure that the terminating AS respo	ande to the SUBSCRIBE	request containing the	CCNL invoke received from the
priginating AS with a 480 (Temporari			
Preconditions:	Ty Offavallable) if the call		
SIP header values:			
SUBSRIBE sip:T-AS;m=NL			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Call.Info: <ue-a>; purpose=call-c</ue-a>	completion;m=NL		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Contact: <o-as></o-as>			
Event:call-completion			
Comments:	OUT		•••••
SIP 1 (ISC)	SUT	SIP 2 (0	sm)
	Set the B que	eue to limit	
	•		
INVITE 100 Trying	→ ←	→ INVITE ← 100 Tryi	22
486 (Busy Here)	~		sy Here)
ACK	→	→ ACK	sy here)
SUBSCRIBE	→		
480 Temporarily Unavailable	+		
. ,	Apply post to	est routine	
TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_0	4.5.4.3.2.2	PICS 4.3.2-1/9
Test purpose	ful at the terminating AC	No CC quaya far tha t	rminatin upor available
CCNL service invocation unsuccess	ui al the terminating AS.	. No CC queue for the te	erminaun user avallable.
Ensure that the terminating AS respo	onds to the SUBSCRIBE	request containing the	CCNL invoke received from the
priginating AS with a 403 Forbidden i			
he terminating user.			
<u> </u>			
Preconditions:			
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS			
Preconditions: SIP header values:			
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""></ue></ue-a>			
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o</ue-a></ue></ue-a>	:ompletion;m=BS		
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A</ue-a></ue></ue-a>	completion;m=BS		
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3</ue-a></ue></ue-a>	completion;m=BS		
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as></o-as></ue-a></ue></ue-a>	completion;m=BS		
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion</o-as></ue-a></ue></ue-a>	completion;m=BS		
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments:</o-as></ue-a></ue></ue-a>	• · ·	SID 2 /0	;m)
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC)</o-as></ue-a></ue></ue-a>	SUT	SIP 2 (G	ŝm)
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) NVITE</o-as></ue-a></ue></ue-a>	SUT →	→ INVITE	-
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) NVITE 100 Trying</o-as></ue-a></ue></ue-a>	SUT → ←	 → INVITĚ ← 100 Tryi 	ng
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-c P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) NVITE 100 Trying 486 (Busy Here)</o-as></ue-a></ue></ue-a>	SUT →	 → INVITÉ ← 100 Tryi ← 486 (Bu 	-
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments:</o-as></ue-a></ue></ue-a>	SUT → ←	 → INVITÉ ← 100 Tryi ← 486 (Bu 	ng
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-c P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) NVITE 100 Trying 486 (Busy Here)</o-as></ue-a></ue></ue-a>	SUT → ← ← →	 → INVITÉ ← 100 Tryi ← 486 (Bu 	ng
Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=BS From: <ue-a> To:<ue b=""> Call.Info: <ue-a>; purpose=call-o P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion Comments: SIP 1 (ISC) NVITE 100 Trying 486 (Busy Here) ACK</o-as></ue-a></ue></ue-a>	SUT → ← ← →	 → INVITÉ ← 100 Tryi ← 486 (Bu → ACK 	ng

TSS	TP	Refer	ence	Selection expression
CC/terminating_AS/Invocation	CC_N05_010	4.5.4.3	3.2.1	PICS 4.3.2-1/2
Test purpose	•			
CCBS service invocation successful at the term	inating AS. Retain	option su	pported.	
Ensure that the terminating AS is able to queue				
originating AS and responds with a NOTIFY rec MIME body is set to queued and the service-ret				er of the call-completion
Preconditions:	ention neader is pro	esent and	sel lo liue.	
SIP header values:				
486 (Busy Here) 1:				
Call-Info: <sip:ue-b>;purpose=call-completi</sip:ue-b>	on·m=BS			
SUBSRIBE sip:T-AS;m=BS	011,111-20			
From: <ue-a></ue-a>				
To: <ue-b></ue-b>				
Call.Info: <ue-a>; purpose=call-completion;</ue-a>	;m=BS			
P-Assertd-Identity: UE-A				
Expires: CC-T3				
Contact: <o-as></o-as>				
Event:call-completion				
NOTIFY sip:O-AS				
From: <ue-b></ue-b>				
To: <ue-a></ue-a>				
Event:call-completion	velue :			
Subscription-State: active;expires=< any	value >			
Event:call-completion Content-Type: application/call-completion				
cc-state: queued				
cc-service-retention: true				
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
INVITE -		→	INVITE	
100 Trying +		←	100 Trying	
486 (Busy Here) 1		←	486 (Busy Here	e)
ACK 🔶 🤺		→	ACK	,
SUBSCRIBE -				
202 Accepted				
NOTIFY ← 200 OK NOTIFY →				
	Apply post test ro	utino		
	Apply post test ro	utine		

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_0011	4.5.4.3.2.1	NOT PICS 4.3.2-1/2
Test purpose		·	
CCNR service invocation successful at the	terminating AS. Retain	option not supporte	d.
Ensure that the terminating AS is able to qu			
originating AS and responds with a NOTIF			header of the call-completion
MIME body is set to queued and the servic	e-retention header is no	t present.	
Preconditions:			
SIP header values:			
486 Busy Here 1:			
Call-Info: <sip:ue-b>;purpose=call-con</sip:ue-b>	npletion;m=BS		
SUBSRIBE sip:T-AS;m=BS			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Call.Info: <ue-a>; purpose=call-comple</ue-a>	etion;m=BS		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Contact: <o-as></o-as>			
Event:call-completion			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires=<	any value >		
Event:call-completion			
Content-Type: application/call-completi	on		
cc-state: queued			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gr	n)
INVITE	→	→ INVITE	
100 Trying	+	← 100 Tryin	
486 (Busy Here) 1	÷		/ Here)
ACK	→	→ ACK	
SUBSCRIBE	→		
202 Accepted	≁		
zuz nucepieu			
NOTIFY	÷		
	•		
200 OK NOTIFY	→		

CC/terminating_AS/Invocation CC_N05_012 4.5.4.3.2.1 PICS 4.3.2.1/2 Fest purpose CC/N05_012 4.5.4.3.2.1 PICS 4.3.2.1/2 CC/R service invocation successful at the terminating AS. Retain option supported. Ensure that the terminating AS is able to queue the CCNR request received in a SUBSCRIBE request from the originating AS and responds with a NOTIFY request. In the NOTIFY request the state header of the call-completion MIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: BiP header values: 180 Ringing 1: Call-Info: <sip:ue-b>; purpose=call-completion;m=NR Call-Info: <sip:ue-a>; purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-a> Call.Info: <ue-a>; purpose=call-completion;m=NR Contact: Contact: COTIFY sip:O-AS From: From: VITE To:< Content-Type: application/call-completion corstate: queued corsta</ue-a></ue-a></sip:ue-a></sip:ue-b>	TSS	TP	Refe	rence	Selection expression
CCNR service invocation successful at the terminating AS. Retain option supported. Ensure that the terminating AS is able to queue the CCNR request received in a SUBSCRIBE request from the originating AS and responds with a NOTIFY request. In the NOTIFY request the state header of the call-completion AIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: Image: Subscription State: State header of the call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:-UE-A> From:-UE-A> To:- Call-Info: <sip:ue-a>; purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:-UE-A> To:- VE-A> Call-Info: <sip:ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:-CO-AS> Event:call-completion soute:-A> To:- VE-A> From:-UE-B> To:- VE-A> Event:call-completion Subscription-State: active; expires= Subscription-State: active; expires= any value > Event:call-completion co-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE + + 180 Ringing</sip:ue-a></sip:ue-a>	CC/terminating_AS/Invocation	CC_N05_012	4.5.4	.3.2.1	
Ensure that the terminating AS is able to queue the CCNR request received in a SUBSCRIBE request from the originating AS and responds with a NOTIFY request. In the NOTIFY request the state header of the call-completion MIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: BY header values: By header values: By header	Test purpose	•			·
viginating AS and responds with a NOTIFY request. In the NOTIFY request the state header of the call-completion dIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sp:ue-b-s: Call.Info: <ue-a>; purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-b> Call.Info: <ue-a>; purpose=call-completion;m=NR P-Assentd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion SUDSCription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → A SUBSCRIBE → SUBSCRIBE → SUBSCRIBE → SUBSCRIBE → SUD COTIFY ←</o-as></ue-a></ue-b></ue-a></sp:ue-b-s: 	CCNR service invocation successful at the term	ninating AS. Retain	option s	upported.	
viginating AS and responds with a NOTIFY request. In the NOTIFY request the state header of the call-completion dIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sp:ue-b-s: Call.Info: <ue-a>; purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-b> Call.Info: <ue-a>; purpose=call-completion;m=NR P-Assentd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion SUDSCription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → A SUBSCRIBE → SUBSCRIBE → SUBSCRIBE → SUBSCRIBE → SUD COTIFY ←</o-as></ue-a></ue-b></ue-a></sp:ue-b-s: 					
MIME body is set to queued and the service-retention header is present and set to 'true'. Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>:purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:UE-A> To:<ue-b> Call.Info: <le-a>; purpose=call-completion;m=NR P-Assentd-Identity: UE-A Expires: CC-T3 Contact: Contact: Contact: NOTIFY sip:O-AS From: From: Event: Subscription-State: active; Content-Type: application/call-completion cc-state: queued cc-state: queued cc-state: queued cc-state: queued subscription SUBSCRIBE SUBSCRIBE SUBSCRIBE COULY SUBSCRIBE COULY COULY</le-a></ue-b></sip:ue-b>					
Preconditions: SIP feader values: 180 Ringing 1: Call-Info: <sip:ue-b>:purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-b> Call.Info: <ue-a>: purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion VOTIFY sip:O-AS From:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> To:<ue-b> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE D0 Trying SUBSCRIBE D0 CK NOTIFY CMUTEY CMUTEY CMUTEY CMUTEY CMUTEY CMUTEY CMUTEY Call-AS; Call-AS; Call-AS; Comparing CMUTEY CMUTEY CMUTEY CMUTEY Call-AS; Call-AS; Call-AS; Call-AS; Comments: CMUTES CM</ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></ue-b></o-as></ue-a></ue-b></sip:ue-b>					ader of the call-completion
SIP header values: 180 Ringing 1: Call-Info: <sip:ue-b>;purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-a> To:<ue-b> Call.Info: Call.Info: Call.Info: Call.Info: Call.Info: P-Assertd-Identity: UE-A Expires: CC-T3 Contact: Contact: Contact: Constact: From: Contact: Constact: Contact: Contact: Contact: Contact: Event:<call-completion< td=""> SUbscription-State: actil-completion Subscription-State: content-Type: application/call-completion content: Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → H 100 Trying E E 202 Accepted € VOTIFY (MOTIFY</call-completion<></ue-b></ue-a></sip:ue-b>		ention header is pi	resent an	nd set to 'true'.	
180 Ringing 1: Call-Info: <sip:ue-b>:purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From:<ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<q-as> Event:call-completion VOTIFY sip:O-AS From:<ue-b> To::UE-B> To::UE-B> To::UE-B> To::UE-B> To::UE-B> To::UE-B> To::UE-B> To::UE-B> To::UE-A> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion content-Type: application/call-completion cc-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE INVITE INVITE IOO Trying 80 Ringing 1 E SUBSCRIBE 202 Accepted E 200 OK NOTIFY</ue-b></q-as></ue-a></ue-b></ue-a></sip:ue-b>					
Call-Info: <sip:ue-b>;purpose=call-completion;m=NR SUBSRIBE sip:T-AS;m=NR From: From: From: Call.Info: <sip:ue-a>; Call.Info: <sip:ue-a>; Call.Info: <sip:ue-a>; Call.Info: <sip:ue-a>; Call.Info: <sip:ue-a>; Call.Info: <sip:ue-a>; Contact: CO-AS> Event: <sip:ue-b> To: Contact: Yor: NOTIFY sip:O-AS From: <sip:ue-b> To: <sip:ue-b> To: To: From: <sip:ue-b> To: To: Event: <sip:ue-b> To: Event: Content-Type: <spp:ioinon call-completion<="" td=""> cc-service-retention: <tspp:ioinon call-completion<="" td=""> cc-service-retention: <tspp:ioinon call-completion<="" td="" tspice<=""> SUB SU ISU <</tspp:ioinon></tspp:ioinon></spp:ioinon></sip:ue-b></sip:ue-b></sip:ue-b></sip:ue-b></sip:ue-b></sip:ue-a></sip:ue-a></sip:ue-a></sip:ue-a></sip:ue-a></sip:ue-a></sip:ue-b>					
SUBSRIBE sip:T-AS;m=NR From: <ue-a> To:<ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<q-as> Event:call-completion NOTIFY sip:O-AS From:<ue-a> Event:call-completion NOTIFY sip:O-AS From:<ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-service-retention: true Comments: SIP1 (ISC) SUT SIP 1 (ISC) SUT NVITE → INVITE → INVITE</ue-a></ue-b></ue-a></q-as></ue-a></ue-a>		on-m_ND			
From: <ue-a> To:<ue-b> Call.Info:<ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<d-as> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE \rightarrow \rightarrow INVITE 100 Trying \leftarrow \leftarrow 100 Trying 180 Ringing 1 \leftarrow \leftarrow 180 Ringing SUBSCRIBE \rightarrow 202 Accepted \leftarrow NOTIFY \leftarrow</d-as></ue-a></ue-b></ue-a>					
To: <ue-b> Call.Info: <ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<o-as> Event:call-completion VOTIFY sip:O-AS From::-UE-B> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SiP 1 (ISC) NVITE 100 Trying EVEN: SUBSCRIBE SUBSCRIBE ACCENT SUBSCRIBE CONCENT CONCENT SUBSCRIBE CONCENT CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT SUBSCRIBE CONCENT</ue-a></o-as></ue-a></ue-b>					
Call.Info: <ue-a>; purpose=call-completion;m=NR P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<d-as> Event:call-completion NOTIFY sip:O-AS From:-UE-B> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE \Rightarrow \Rightarrow INVITE IO0 Trying \leftarrow \leftarrow 100 Trying I80 Ringing 1 \leftarrow \leftarrow 180 Ringing SUBSCRIBE \Rightarrow 202 Accepted \leftarrow NOTIFY \leftarrow</ue-a></d-as></ue-a>					
P-Assertd-Identity: UE-A Expires: CC-T3 Contact:<0-AS> Event:call-completion NOTIFY sip:0-AS From: <ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE → → INVITE IO0 Trying ← ← 100 Trying I80 Ringing 1 ← ↓ 180 Ringing SUBSCRIBE → 202 Accepted ← NOTIFY ←</ue-a></ue-b>		m=NR			
Expires: CC-T3 Contact: <o-as> Event:call-completion VOTIFY sip:O-AS From:<ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE \rightarrow \rightarrow INVITE 100 Trying \leftarrow \leftarrow 100 Trying 80 Ringing 1 \leftarrow \leftarrow 180 Ringing SUBSCRIBE \rightarrow 202 Accepted \leftarrow NOTIFY \leftarrow</ue-a></ue-b></o-as>					
Event:call-completion NOTIFY sip:O-AS From: <ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE 100 Trying 180 Ringing 1 SUBSCRIBE Accepted NOTIFY Comments: SUBSCRIBE SUBSCRIBE Accepted SUBSCRIPE COMMENT SUBSCRIPE SUB</ue-a></ue-b>					
NOTIFY sip:O-AS From: <ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-setre: queued cc-service-retention: true Comments: SIP 1 (ISC) NVITE → INVITE A NVITE Consents: SUBSCRIBE Accepted EVENCENTER Accepted COULD CONTRINC Consents: SUBSCRIBE Accepted COULD CONTRIPY Event Contract Could Contry Contract Could Contry Contract Contry Contry Contract Contry Con</ue-a></ue-b>	Contact: <o-as></o-as>				
From: <ue-b> To:<ue-a> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) SUT NVITE > 100 Trying € 80 Ringing 1 € SUBSCRIBE > 202 Accepted € NOTIFY €</ue-a></ue-b>	Event:call-completion				
To:: UE-A> Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SUT SIP 2 (Gm) NVITE → → 100 Trying ← ← 808 Ringing 1 ← ← SUBSCRIBE → 202 Accepted ← NOTIFY ← 200 OK NOTIFY →	NOTIFY sip:O-AS				
Event:call-completion Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-service-retention: true Comments: SIP 1 (ISC) NVITE 100 Trying 4 4 100 Trying 80 Ringing 1 500 Accepted Accepted Accepted Accepted Comments: SUT SIP 2 (Gm) NVITE Accepted Accepted <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Subscription-State: active;expires=< any value > Event:call-completion Content-Type: application/call-completion cc-service-retention: true Comments: SIP 1 (ISC) NVITE > INVITE					
Event:call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → INVITE 100 Trying ← ← 100 Trying 180 Ringing 1 ← 180 Ringing SUBSCRIBE → 202 Accepted ←					
Content-Type: application/call-completion cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) SUT NVITE → 100 Trying ← 180 Ringing 1 ← SUBSCRIBE → 202 Accepted ← NOTIFY ← 200 OK NOTIFY →		value >			
cc-state: queued cc-service-retention: true Comments: SIP 1 (ISC) SUP 1 (ISC) NVITE 100 Trying (a) Ringing 1 (b) BSCRIBE (c) Accepted (c) WOTIFY					
cc-service-retention: true SUF Comments: SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → INVITE 100 Trying ← ← 100 Trying 180 Ringing 1 ← ← 180 Ringing SUBSCRIBE → ← 180 Ringing 202 Accepted ← ← ↓ NOTIFY ← ← ↓					
SiP 1 (ISC) SUT SIP 2 (Gm) NVITE → → INVITE 100 Trying ← ← 100 Trying 180 Ringing 1 ← ← 180 Ringing SUBSCRIBE → ← 180 Ringing 202 Accepted ← ← NOTIFY ← ← 200 OK NOTIFY →					
SIP 1 (ISC) SUT SIP 2 (Gm) NVITE → → INVITE 100 Trying ← ← 100 Trying 180 Ringing 1 ← ← 180 Ringing SUBSCRIBE → ← 180 Ringing 202 Accepted ← ← ↓	Comments:				
NVITÉ → → INVITÉ 100 Trying ← ← 100 Trying 180 Ringing 1 ← ← 180 Ringing SUBSCRIBE → ← 180 Ringing 202 Accepted ← ← NOTIFY ← → 200 OK NOTIFY →	SIP 1 (ISC)	SUT		SIP 2 (Gm)	
180 Ringing 1 € € 180 Ringing SUBSCRIBE > 202 Accepted € NOTIFY € 200 OK NOTIFY >			→		
SUBSCRIBE → 202 Accepted ← NOTIFY ← 200 OK NOTIFY →	100 Trying 🗧 🗧		←	100 Trying	
202 Accepted ← NOTIFY ← 200 OK NOTIFY →	180 Ringing 1		←	180 Ringing	
202 Accepted ← NOTIFY ← 200 OK NOTIFY →					
NOTIFY C					
200 OK NOTIFY	202 Accepted				
200 OK NOTIFY					
Apply post test routine		Apply post test r	outine		

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_0013	4.5.4.3.2.1	NOT PICS 4.3.2-1/2
Fest purpose		•	·
CCNR service invocation successful at th	e terminating AS. Retain	option not suppor	rted.
Ensure that the terminating AS is able to			
priginating AS and responds with a NOTI			te header of the call-completion
MIME body is set to queued and the serv	ce-retention header is no	ot present.	
Preconditions:			
SIP header values:			
180 Ringing 1:			
Call-Info: <sip:ue-b>;purpose=call-co</sip:ue-b>	mpletion;m=NR		
SUBSRIBE sip:T-AS;m=NR			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Call.Info: <ue-a>; purpose=call-comp</ue-a>	letion;m=NR		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Contact: <o-as></o-as>			
Event:call-completion			
NOTIFY sip:O-AS From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires=	< any value >		
Event:call-completion			
Content-Type: application/call-comple	tion		
cc-state: queued			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (0	Gm)
INVITE	→	→ INVITE	
100 Trying	÷	← 100 Try	
180 Ringing 1	+	← 180 Rin	
3 3 3			5 5
SUBSCRIBE	→		
202 Accepted	+		
·			
NOTIFY	+		
200 OK NOTIFY	→		
	Apply post test ro	outine	

TSS	TP	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_014	4.5.4.3.2.1	PICS 4.3.2-1/2 AND PICS 4.3.2-1/9
Test purpose			•
CCNL service invocation successful at the	terminating AS. Retain	option supported.	
Ensure that the terminating AS is able to q	ueue the CCNL request	received in a SUBS	SCRIBE request from the
originating AS and responds with a NOTIF	Y request. In the NOTIF	Y request the state	header of the call-completion
MIME body is set to queued and the service	e-retention header is pr	esent and set to 'tru	e'.
Preconditions:			
SIP header values:			
480 Temporarily Unavailable 1:			
Call-Info: <sip:ue-b>;purpose=call-con</sip:ue-b>	npletion;m=NL		
SUBSRIBE sip:T-AS;m=NL			
From: <ue-a> To:<ue-b></ue-b></ue-a>			
Call.Info: <ue-a>; purpose=call-comple</ue-a>	etion:m-NI		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Contact: <o-as></o-as>			
Event:call-completion			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires=<	<pre>c any value ></pre>		
Event:call-completion			
Content-Type: application/call-completi	on		
cc-state: queued			
cc-service-retention: true Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gr	m)
INVITE	→	→ INVITE	
100 Trying	(← 100 Tryin	a
480 (Temporarily Unavailable) 1	÷		9 Iporarily Unavailable)
ACK	→	→ ACK	
SUBSCRIBE	→		
202 Accepted	÷		
NOTIFY	÷		
200 OK NOTIFY	→		
	Apply post test ro	outine	

TSS	ТР	Reference	Selection expression
CC/terminating_AS/Invocation	CC_N05_001		NOT PICS 4.3.2-1/2 AND PICS 4.3.2-1/9
Test purpose			
CCNL service invocation successful at the	he terminating AS. Reta	ain option not support	ed.
Ensure that the terminating AS is able to			
originating AS and responds with a NOT			e header of the call-completion
MIME body is set to queued and the service	vice-retention neader is	not present.	
Preconditions:			
SIP header values:			
480 Temporarily Unavailable 1:			
Call-Info: <sip:ue-b>;purpose=call-c</sip:ue-b>	ompletion;m=NL		
SUBSRIBE sip:T-AS;m=NL			
From: <ue-a></ue-a>			
To: <ue-b> Call.Info: <ue-a>; purpose=call-com</ue-a></ue-b>	plotion:m_NI		
P-Assertd-Identity: UE-A	pietion,m=inL		
Expires: CC-T3			
Contact: <o-as></o-as>			
Event:call-completion			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: active;expires	=< any value >		
Event:call-completion	-		
Content-Type: application/call-compl	etion		
cc-state: queued			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (G	im)
INVITE	→	→ INVITE	
100 Trying	÷	🗲 100 Tryi	
480 (Temporarily Unavailable) 1	+		mporarily Unavailable)
ACK	→	→ ACK	
	、		
SUBSCRIBE	→ ←		
202 Accepted	~		
NOTIFY	+		
200 OK NOTIFY	← →		
	Apply post test	routine	
	Apply post lesi		

5.3.3 CC Revocation

TSS	ТР	Reference	Selection expression
CC/terminating_AS/Revocation	CC_N06_001	4.5.4.3.3.1	
Test purpose			
CCBS service revocation successful at the termin	nating AS.		
Ensure that the terminating AS is able to respond			
terminated and the reason parameter is set to tim	eout for a CCBS o	ueue entry if a SUBSCR	IBE request is received
and the Expires header is set to '0'.			
Preconditions:			
SIP header values:			
SUBSRIBE sip:T-AS;m=BS			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Contact: <o-as></o-as>			
Call.Info: <ue-a>; purpose=call-completion;m</ue-a>	1=BS		
P-Assertd-Identity: UE-A			
Expires: CC-T3			
Event:call-completion			
Expires=0			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: terminated; reason=tin	neout		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCBS request			
202 Accepted			
200 OK NOTIFY →			
ΑΑ	pply post test rou	utine	

TSS	TP	Reference	Selection expression
CC/terminating_AS/Revocation	CC_N06_002	4.5.4.3.3.1	
Test purpose			
CCNR service revocation successful at the terr	minating AS.		
Ensure that the terminating AS is able to respo	nd a NOTIFY reques	t and the Subscription-	State header is set to
terminated and the reason parameter is set to t			
and the Expires header is set to '0'.			
Preconditions: SIP header values:			
SUBSRIBE sip:T-AS;m=NR			
From: <ue-a></ue-a>			
To: <ue-b></ue-b>			
Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A</ue-a>	;m=NR		
Expires: CC-T3			
Event:call-completion			
Expires=0			
NOTIFY sip:O-AS Event:call-completion			
Subscription-State: terminated; reason=time	eout		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCBS request			
202 Accepted +			
NOTIFY 🗧			
200 OK NOTIFY			
	Apply post test rou	Itine	
	<u>, , , , , , , , , , , , , , , , , , , </u>		
TSS	TP	Reference	Selection expression
CC/terminating_AS/Revocation			Selection expression PICS 4.3.2-1/9
CC/terminating_AS/Revocation Test purpose	TP CC_N06_003	Reference	
CC/terminating_AS/Revocation	TP CC_N06_003	Reference	
CC/terminating_AS/Revocation Test purpose	TP CC_N06_003 ninating AS.	Reference 4.5.4.3.3.1	PICS 4.3.2-1/9
CC/terminating_AS/Revocation Test purpose <i>CCNL service revocation successful at the term</i> Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t	TP CC_N06_003 ninating AS. nd a NOTIFY reques	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose <i>CCNL service revocation successful at the term</i> Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'.	TP CC_N06_003 ninating AS. nd a NOTIFY reques	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose <i>CCNL service revocation successful at the term</i> Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions:	TP CC_N06_003 ninating AS. nd a NOTIFY reques	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose <i>CCNL service revocation successful at the term</i> Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values:	TP CC_N06_003 ninating AS. nd a NOTIFY reques	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques imeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments:</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments: SIP 1 (ISC)</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL o	Reference 4.5.4.3.3.1 t and the Subscription-	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments: SIP 1 (ISC) Invoke CCBS request</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to ta and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments: SIP 1 (ISC) Invoke CCBS request</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to t and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments: SIP 1 (ISC) Invoke CCBS request</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to to and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: <ue-a>; purpose=call-completion P-Assertd-Identity: UE-A Expires: CC-T3 Event:call-completion Expires=0 NOTIFY sip:O-AS Event:call-completion Subscription-State: terminated; reason=time Comments: SIP 1 (ISC) Invoke CCBS request</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to
CC/terminating_AS/Revocation Test purpose CCNL service revocation successful at the term Ensure that the terminating AS is able to respo terminated and the reason parameter is set to ta and the Expires header is set to '0'. Preconditions: SIP header values: SUBSRIBE sip:T-AS;m=NL From: <ue-a> To:<ue-b> Call.Info: Call.Info: Presendentity: UE-A> To:<ue-a> Call.Info: Subscription-State: terminated; reason=time Comments: SIP 1 (ISC) Invoke CCBS request SUBSCRIBE 202 Accepted</ue-a></ue-b></ue-a>	TP CC_N06_003 ninating AS. nd a NOTIFY reques timeout for a CCNL of timeout for a CCNL of timeout for a CCNL of	Reference 4.5.4.3.3.1 t and the Subscription- ueue entry if a SUBSC	PICS 4.3.2-1/9 State header is set to

TSS	ТР	Reference	Selection expression
CC/terminating_AS/Revocation	CC_N06_004	4.5.4.3.3.2	•
est purpose		•	•
CCBS service revocation at the terminat	ing AS. CC-T7 expires.		
			·· ·· 00 T7 ·
Ensure that the terminating AS is able to			
NOTIFY request is sent to the originating neader is set to "noresource".	JAS and the Subscription-	State neader is set to the	erminated and the reason
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
Event:call-completion			
Subscription-State: terminated; reaso			
Comments:	n=noresource		
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCBS requ			
	Start CC-T7		
	CC-T7 expires		
NOTIFY	←		
200 OK NOTIFY	→		
	Apply post test ro	utine	
rss		Reference	Selection expression
CC/terminating_AS/Revocation	CC_N06_005	4.5.4.3.3.2	
Test purpose	·		
CCNR service revocation at the terminat	ting AS. CC-17 expires.		
Ensure that the terminating AS is able to	roveka a CCNP queue an	try if the CC convice du	ration timer CC TZ avairag
NOTIFY request is sent to the originating			
neader is set to "noresource".			enninated and the reason
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
Event:call-completion			
	on=noresource		
Subscription-State: terminated: reaso			
Subscription-State: terminated; reaso			
Comments:	SUT	SIP 2 (Gm)	
Comments: SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Comments:		SIP 2 (Gm)	
Comments: SIP 1 (ISC)	uest Start CC-T7 ↓	SIP 2 (Gm)	
Comments: SIP 1 (ISC)	uest	SIP 2 (Gm)	

Apply post test routine

← →

NOTIFY 200 OK NOTIFY

TSS	TP		Reference	Selection expression
CC/terminating_AS/Revocation	CC_N	006_006	4.5.4.3.3.2	PICS 4.3.2-1/9
Test purpose				
CCNL service revocation at the term	ninating AS. CC-T7 e	xpires.		
Ensure that the terminating AS is at	le to revoke a CCNL	queue entry	if the CC service	duration timer CC-T7 expires. A
NOTIFY request is sent to the origin	ating AS and the Sul	oscription-St	ate header is set t	to "terminated" and the reason
header is set to "noresource".	-			
Preconditions:				
SIP header values:				
NOTIFY sip:O-AS				
Event:call-completion				
Subscription-State: terminated; i	eason=noresource			
Comments:				
SIP 1 (ISC)	5	UT	SIP 2 (Gm	1)
Invoke CCNR	request			
	Star	t CC-T7		
		\downarrow		
	CC-T	7 expires		
NOTIFY	+	-		
200 OK NOTIFY	→			
	A I			

Apply post test routine

5.3.4 CC Operation

TSS	TP	Refere	ence	Selection expression
CC/terminating_AS/CCOperation	CC_N07_001		3.4.1.1.	ocleation expression
		4.5.4.3	- ,	
Test purpose				
Callee becomes not busy, CCBS recall	procedure performed.			
Ensure that the terminating AS starts the	e call completion recall pro	cedure if	the callee be	ecomes not busy. The
terminating AS starts the Destination B i	dle guard timer CC-T8. W	nen the tir	ner CC-T8 e	expires, a NOTIFY request is
sent to the originating AS. The state hea	ader in the call-completion	MIME boo	dy is set to "r	ready".
Preconditions:				
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Event:call-completion				
Subscription-State: active; expires=<				
Content-Type: application/call-compl	letion			
cc-state: ready				
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
Invoke CCBS req				
	Callee is bus		DVE	
	+	÷	BYE	F
200 OK BYE	→ Start CC-T8	→	200 OK BYI	E
	Start CC-16			
	↓ CC-T8 expires			
NOTIFY	-			
200 OK NOTIFY	← →			
	Apply post test ro	utino		
	Apply post lest it	uune		

TSS	ТР	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_002	4.5.4.3.4.1.1,	
		4.5.4.3.4.1.2	
Test purpose			
Callee becomes not busy after having initiate	d an activity, CCNR r	ecall procedure perform	ed.
Ensure that the terminating AS starts the call			
terminating AS starts the Destination B idle g			
sent to the originating AS. The state header in	n the call-completion	VIIVE body is set to "rea	ady".
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
From: UE B			
To: UE A			
Event:call-completion	velue :		
Subscription-State: active; expires=< any			
Content-Type: application/call-completion			
cc-state: ready Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
	301	31F 2 (GIII)	
Invoke CCNR request	Callee is idle		
INVITE +			
486 Busy Here		 → 486 Busy Her 	8
ACK		← ACK	c
	Start CC-T8		
	CC-T8 expires		
NOTIFY 🗲	-		
200 OK NOTIFY			
	Apply post test ro	utine	
TSS	TP	Reference	Selection expression
TSS CC/terminating_AS/CCOperation	TP CC_N07_003	4.5.4.3.4.1.1,	Selection expression PICS 4.3.2-1/9
CC/terminating_AS/CCOperation Test purpose	CC_N07_003	4.5.4.3.4.1.1, 4.5.4.3.4.1.2	
CC/terminating_AS/CCOperation	CC_N07_003	4.5.4.3.4.1.1, 4.5.4.3.4.1.2	
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i>	CC_N07_003	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed.	PICS 4.3.2-1/9
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call	CC_N07_003	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is ha	PICS 4.3.2-1/9
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions:	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values:	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose <i>Callee becomes not busy after is logged-in, C</i> Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments:	CC_N07_003	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "rea	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC)	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion value > SUT	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC)	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion value > SUT Callee is logged	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC)	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. WI n the call-completion value > SUT Callee is logged Start CC-T8	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC)	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. Wi n the call-completion value > SUT Callee is logged Start CC-T8 ↓	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC) Invoke CCNL request	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. Wi n the call-completion value > SUT Callee is logged Start CC-T8 ↓ CC-T8 expires	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC) NOTIFY	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. Wi in the call-completion value > SUT Callee is logged Start CC-T8 ↓ CC-T8 expires	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm)	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is
CC/terminating_AS/CCOperation Test purpose Callee becomes not busy after is logged-in, C Ensure that the terminating AS starts the call terminating AS starts the Destination B idle g sent to the originating AS. The state header in Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Event:call-completion Subscription-State: active; expires=< any Content-Type: application/call-completion cc-state: ready Comments: SIP 1 (ISC) Invoke CCNL request	CC_N07_003 CCNL recall procedure completion recall pro uard timer CC-T8. Wi in the call-completion value > SUT Callee is logged Start CC-T8 ↓ CC-T8 expires	4.5.4.3.4.1.1, 4.5.4.3.4.1.2 e performed. cedure if the callee is hat then the timer CC-T8 exp MIME body is set to "read SIP 2 (Gm) I-in	PICS 4.3.2-1/9 aving initiated an activity. The pires, a NOTIFY request is

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TSS		TP		rence	Selection expression
CC/terminating_AS/CCOperation		CC_N07_004		.3.4.1.3,	
			4.5.4	.3.4.1.4	
CCBS: An INVITE request received	while a CC i	recall is processed	a. CC ca	li indicator presei	nt in the Request line.
Ensure that when an INIV/ITE reques	tic received	from the origination			ning and in the Deguast line
Ensure that when an INVITE reques					
the m parameter is present set to "B processed to the callee. An INVITE is					
a 180 (Ringing) is received from the					
header is set to "terminated" and the					and Subscription-State
Preconditions:	reasonnea		source.		
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE B					
To: UE A					
Subscription-State: active; expire	e any val				
Event:call-completion	s=< any var				
Content-Type: application/call-co	moletion				
cc-state: ready	mpleaon				
INVITE 1: sip: UE B; m=BS					
Call-Info: <sip:ue-a>;purpose=c</sip:ue-a>	all-completic	on:m=BS			
NOTIFY 2 sip:O-AS		,			
Event:call-completion					
Subscription-State: terminated	l; reason=n	oresource			
Comments:					
SIP 1 (ISC)		SUT		SIP 2 (Gm)	
Invoke CCBS	request			. ,	
		Callee is bus	у		
BYE	+		←	BYE	
200 OK BYE	→		→	200 OK BYE	
NOTIFY 1	+				
200 OK NOTIFY	→				
	_		_		
INVITE 1	→		→	INVITE	
180 Ringing	+		←	180 Ringing	
	-				
NOTIFY 2	÷				
200 OK NOTIFY	→				
			_		
200 OK INVITE	+ →		← →	200 OK INVITI	=
ACK	-	nnly nost tost r		ACK	
	F	Apply post test ro	Juline		

TSS CC/terminating_AS/CCOperat	ion	TP CC_N07_005	4.5.4	rence .3.4.1.3, .3.4.1.4	Selection expression
Test purpose CCNR: An INVITE request red	ceived while a CC i	recall is processed	d. CC ca	ll indicator preser	nt in the Request line.
Ensure that when an INVITE r the m parameter is present se processed to the callee. An IN a 180 (Ringing) is received fro header is set to "terminated" a	t to "NR" and a Ca VITE is sent to the m the callee a NO	II-Info header is p callee and the m TIFY request is se	resent th paramet ent to the	e m parameter is ter is not present	set to 'NR', this INVITE is in the Request line. When
Preconditions:					
SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; Event:call-completion Content-Type: application/ cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:u NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: term Comments: SIP 1 (ISC)</sip:u 	call-completion IE-A>;purpose=cal	I-completion;m=N	R	SIP 2 (Gm)	
Invoke (CNR request				
INVITE	←	Callee is idle	, ←	INVITE	
486 Busy Here ACK	÷ + +		< → ←	486 Busy Here ACK	
NOTIFY 1 200 OK NOTIFY	← →				
INVITE 1 180 Ringing	→ ←		→ ←	INVITE 180 Ringing	
NOTIFY 2 200 OK NOTIFY	← →				
200 OK INVITE ACK	← →	apply post test ro	← → outine	200 OK INVITE ACK	

TSS		TP	Refer		Selection expression
CC/terminating_AS/CCOperation		CC_N07_006		3.4.1.3,	PICS 4.3.2-1/9
			4.5.4.	3.4.1.4	
Test purpose					
CCNL: An INVITE request received	while a CC	recall is processed	l. CC call	indicator prese	ent in the Request line.
Ensure that when an INVITE reques					
the m parameter is present set to "N					
processed to the callee. An INVITE i					
a 180 (Ringing) is received from the	callee a NC	TIFY request is se	ent to the	originating AS	and Subscription-State
header is set to "terminated" and the	e reason hea	ader is set to "nore	source".		
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE B					
To: UE A					
Subscription-State: active; expire	es=< any va	lue >			
Event:call-completion					
Content-Type: application/call-co	mpletion				
cc-state: ready					
INVITE 1: sip: UE B; m=NL					
Call-Info: <sip:ue-a>;</sip:ue-a>	purpose=ca	III-completion;m=N	L		
NOTIFY 2 sip:O-AS					
Event:call-completion					
Subscription-State: terminated	l; reason=n	oresource			
Comments:					
SIP 1 (ISC)		SUT		SIP 2 (Gm)	
Invoke CCNL	request				
	-	Callee is logged	l-in		
NOTIFY 1	÷				
200 OK NOTIFY	→				
INVITE 1	→		→	INVITE	
180 Ringing	÷		←	180 Ringing	
0.0				00	
	+				
NOTIFY 2	_				
200 OK NOTIFY	→				
	→				
	→ ←		←	200 OK INVI	ſE
200 OK NOTIFY	-		← →	200 OK INVIT ACK	ſE

TSS	TP	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_007	4.5.4.3.4.1.3,	• • • • •
01		4.5.4.3.4.1.4	
Test purpose		•	· ·
CCBS: An INVITE request received while a	a CC recall is processed	d. CC call indicator no	t present in the Request line.
Service requirements and destination sele	ction information are no	t identical to the store	d values. The call is rejected.
Ensure that the terminating AS has sent a			
call-completion MIME body was set to "rea			
parameter in the Request line and no Call-	Info header is present t	he m parameter set to	o 'NL', the terminating AS rejects
the call.			
Preconditions: SIP header values:			
NOTIFY sip:O-AS From: UE B			
To: UE A			
Subscription-State: active; expires=< a			
Event:call-completion			
Content-Type: application/call-completi	on		
cc-state: ready			
INVITE: sip: UE B			
destination selection information and	d Service requirement	s not identical as use	d in the dialogue as CCBS was
requested			
486 Busy Here			
Call-Info: <sip:ue-b>;purpose=call-con</sip:ue-b>	npletion;m=BS		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)
Invoke CCBS reque			
BYE	Callee is bus		
200 OK BYE	← →	 ← BYE → 200 OK BY 	
200 OK BTE	7	- 200 OK BY	E
NOTIFY 1	÷		
200 OK NOTIFY	→		
	-		
INVITE	→		
486 (Busy Here)	+		
ACK	→		
	Apply post test re	outine	

TSS	TP	Refere	nce	Selection expression
CC/terminating_AS/CCOperation	CC_N07_008	4.5.4.3	.4.1.3,	-
		4.5.4.3	.4.1.4	
Test purpose				
CCNR: An INVITE request received while	a CC recall is processe	d. CC call i	indicator not	present in the Request line.
Service requirements and destination sele	ection information are no	t identical t	to the stored	values. The call is rejected.
Ensure that the terminating AS has sent a				
call-completion MIME body was set to "re-		g AS receiv	es an INVIT	E request and there is no 'm'
parameter in the Request line the termina	ting AS rejects the call.			
Preconditions:				
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Subscription-State: active; expires=< a	any value >			
Event:call-completion				
Content-Type: application/call-comple	tion			
cc-state: ready	tion			
cc-state: ready INVITE: sip: UE B		e not ident	ical as used	in the dialogue of CCNP
cc-state: ready INVITE: sip: UE B destination selection information ar		s not ident	ical as used	in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested		s not ident	ical as used	in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here	nd Service requirement	: s not ident	ical as used	in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co</sip:ue-b>	nd Service requirement	s not ident	ical as used	in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments:</sip:ue-b>	nd Service requirement			in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC)</sip:ue-b>	nd Service requirement mpletion;m=BS SUT		ical as used SIP 2 (Gm)	in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments:</sip:ue-b>	nd Service requirement mpletion;m=BS SUT			in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est	e		in the dialogue as CCNR
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idle	e €	SIP 2 (Gm)	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idle	e ← →	SIP 2 (Gm) INVITE	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl ← → ←	e ← →	SIP 2 (Gm) INVITE 486 Busy He	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK NOTIFY 1</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl ← → ←	e ← →	SIP 2 (Gm) INVITE 486 Busy He	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl ← → ←	e ← →	SIP 2 (Gm) INVITE 486 Busy He	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK NOTIFY 1 200 OK NOTIFY</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl 	e ← →	SIP 2 (Gm) INVITE 486 Busy He	-
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK NOTIFY 1 200 OK NOTIFY INVITE</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl ← → ← → ←	e ← →	SIP 2 (Gm) INVITE 486 Busy He	
cc-state: ready INVITE: sip: UE B destination selection information ar was requested 486 Busy Here Call-Info: <sip:ue-b>;purpose=call-co Comments: SIP 1 (ISC) Invoke CCNR reque INVITE 486 Busy Here ACK NOTIFY 1 200 OK NOTIFY</sip:ue-b>	nd Service requirement mpletion;m=BS SUT est Callee is idl 	e ← →	SIP 2 (Gm) INVITE 486 Busy He	-

TSS		ТР	Reference	Selection expression			
CC/terminating_AS/CCOperation		CC_N07_009	4.5.4.3.4.1.3,	PICS 4.3.2-1/9			
-			4.5.4.3.4.1.4				
Test purpose							
CCNL: An INVITE request receive							
Service requirements and destina	tion selection in	formation are not	identical to the store	d values. The call is rejected.			
Ensure that the terminating AS ha	s sent a NOTIE	Y request to a CO	NI entry and the star	te parameter in the			
call-completion MIME body was s							
parameter in the Request line the							
Preconditions:							
SIP header values:							
NOTIFY sip:O-AS							
From: UE B							
To: UE A							
Subscription-State: active; exp	pires=< any valu	ie >					
Event:call-completion							
Content-Type: application/call-	-completion						
cc-state: ready							
INVITE: sip: UE B							
destination selection inform	ation and Serv	ice requirements	s not identical as used	in the dialogue as CCNL			
was requested							
486 Busy Here		50					
Call-Info: <sip:ue-b>;purpose</sip:ue-b>	=call-completion	n;m=BS					
Comments:		SUT					
SIP 1 (ISC)	ID request	301	SIP 2 (Gm)				
Invoke CCN	ik request	Callee is logged	l-in				
		Callee to logget	•				
NOTIFY 1	←						
200 OK NOTIFY	→						
INVITE	→						
486 (Busy Here)	÷						
ACK	→	-					
	Α	pply post test ro	utine				

TSS	TP	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_010	4.5.4.3.4.2 a)	
Test purpose			
CCBS: Terminating user becomes bu	sy while CC-T8 is running.		
If in case of CCBS, upon expiry of the			
initiated an outgoing communication),			
the callee becomes not busy again. A	fter the callee is not busy, th	e terminating AS sta	arts the recall procedure again.
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
From: UE B			
To: UE A (S2)			
Subscription-State: active; expires	s=< any value >		
Event:call-completion	nolation		
Content-Type: application/call-cor cc-state: ready	npietion		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gr	m)
Invoke CCBS r		51F 2 (61	11)
	Callee is bus	v	
BYE	←	, ← BYE	
200 OK BYE	÷ +	→ 200 OK E	BYE
	Start CC-T8	2000112	
	Ļ		
INVITE (S1)	+	← INVITE	
200 OK INVITE	→	→ 200 OK II	NVITE
ACK	+	← ACK	
	CC-T8 expires	6	
BYE	÷	← BYE	
200 OK BYE	→	→ 200 OK E	BYE
	Start CC-T8		
	↓		
	CC-T8 expires	5	
	÷		
200 OK NOTIFY	→		
	Apply post test re	outine	

TSS		TP	Ref	erence	Selection expression
CC/terminating_AS/CCOperation		CC_N07_011	4.5	.4.3.4.2 a)	-
Test purpose					
CCNR: Terminating user becomes bu	sy while (CC-T8 is running.			
If in case of CCNR, upon expiry of the					
initiated an outgoing communication),					
the callee becomes not busy again. A	fter the ca	allee is not busy, the	termi	nating AS starts	the recall procedure again.
Preconditions:					
SIP header values:					
NOTIFY sip:O-AS					
From: UE B					
To: UE A (S2)					
Subscription-State: active; expires	=< any va	alue >			
Event:call-completion					
Content-Type: application/call-com	pletion				
cc-state: ready Comments:					
SIP 1 (ISC)		SUT		SIP 2 (Gm)	
Invoke CCNR re	anost	301		31F 2 (GIII)	
	quest	Callee is idle			
INVITE	←		←	INVITE	
486 Busy Here	÷		÷	486 Busy He	re
ACK	÷		÷	ACK	
		Start CC-T8		-	
		\downarrow			
INVITE (S1)	←		←	INVITE	
200 OK INVITE	→		→	200 OK INVI	TE
ACK	←		←	ACK	
		CC-T8 expires			
BYE	÷		←	BYE	
200 OK BYE	→		→	200 OK BYE	
		Start CC-T8			
		\downarrow			
		CC-T8 expires			
NOTIFY	+				
200 OK NOTIFY	→				
		Apply post test ro	utine		

TSS	TP	Ref	erence	Selection expression
CC/terminating_AS/CCOperation	CC_N07_012		.4.3.4.2 a)	PICS 4.3.2-1/9
Test purpose				
CCNL: Terminating user becomes busy wh	ile CC-T8 is running.			
-				
If in case of CCNL, upon expiry of the desti				
initiated an outgoing communication), then				
the callee becomes not busy again. After th	e callee is not busy, the	e termi	nating AS start	s the recall procedure again.
Preconditions:				
SIP header values:				
NOTIFY 1 sip:O-AS				
From: UE B				
To: UE A (S2)				
Subscription-State: active; expires=< an	iy value >			
Event:call-completion				
Content-Type: application/call-completic cc-state: ready	n			
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
Invoke CCNL reques				•
	Callee is logged	l-in		
	Start CC-T8			
	\downarrow			
INVITE (S1)	÷	←	INVITE	
200 OK INVITE	→	→	200 OK IN	VITE
ACK	+	←	ACK	
	CC-T8 expires			
	÷	←	BYE	
200 OK BYE	>	→	200 OK BY	Έ
	Start CC-T8			
	CC-T8 expires			
	← →			
	Apply post test ro	utino		
	Apply host lest to	unne		

TSS		TP	Pofe	rence	Selection expression				
CC/terminating_AS/0	COncration	CC_N07_013		.3.4.2 c)	NOT PICS 4.3.2-1/2				
Test purpose		CC_N07_013	4.5.4	.3.4.2 0)	NOT FICS 4.3.2-1/2				
	busy upon arrival of the CO	C call Retain option r	not sur	ported					
			iot oup	ponou.					
Ensure that if the cal	lee is busy upon arrival of t	he CC call and the re	etain o	ption is not suppo	orted at the terminating AS,				
	hall cancel the corresponding								
	II-Info header field with a			meter set to "call	-completion" and a m				
	" to the originating AS. The	CC request is cance	elled.						
Preconditions:									
SIP header values:									
NOTIFY sip:O-AS									
From: UE B									
	To: UE A Subscription-State: active; expires=< any value >								
Event:call-comple									
Content-Type: an	Event:call-completion Content-Type: application/call-completion								
cc-state: read									
INVITE 1: sip: UE B;									
Call-Info: <sip:ue< td=""><td>-A>;purpose=call-completi</td><td>on;m=BS</td><td></td><td></td><td></td></sip:ue<>	-A>;purpose=call-completi	on;m=BS							
486 (Busy Here):									
	-B>;purpose=call-completi	on;m=BS							
NOTIFY 2 sip:O-AS									
Event:call-comp	ate: terminated; reason=r	orocouroo							
Comments:		loresource							
SIP 1 (ISC)		SUT		SIP 2 (Gm)					
	Invoke CCBS request	•••		• (•,					
	•	Callee is busy							
BYE	+		←	BYE					
200 OK BYE	→		→	200 OK BYE					
	~								
NOTIFY 1	+								
200 OK NOTIFY	→								
INVITE	+		←	INVITE (S1)					
200 OK INVITE	÷		À	200 OK INVITE	-				
ACK	÷		÷	ACK	-				
INVITE 1 (S2)	→		→						
486 (Busy Here)	+			486 (Busy Here	e)				
ACK	→		→	ACK					
	-								
NOTIFY 2	÷								
200 OK NOTIFY	→								
BYE	←		4	BYE					
200 OK BYE			÷	200 OK BYE					
	7			200 01 01 0					

TSS TP Reference Selection express CC/terminating_AS/CCOperation CC_N07_014 4.5.4.3.4.2 c) NOT PICS 4.3.2-1/ Test purpose CCNR: The callee is busy upon arrival of the CC call. Retain option not supported. Image: Constraint of the CC call. Retain option not supported. Ensure that if the callee is busy upon arrival of the CC call and the retain option is not supported at the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a reparameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource Comments:</sip:ue-b></sip:ue-a>	′ <u>2</u> ng AS, Here)
Test purpose CCNR: The callee is busy upon arrival of the CC call. Retain option not supported. Ensure that if the callee is busy upon arrival of the CC call and the retain option is not supported at the terminati the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-a>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-a></sip:ue-a>	ng AS, Here)
CCNR: The callee is busy upon arrival of the CC call. Retain option not supported. Ensure that if the callee is busy upon arrival of the CC call and the retain option is not supported at the terminati the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-a>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-a></sip:ue-a>	Here)
Ensure that if the callee is busy upon arrival of the CC call and the retain option is not supported at the terminati the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	Here)
the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	Here)
the terminating AS shall cancel the corresponding CCNR request; the terminating AS shall send a 486 (Busy response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	Here)
response with a Call-Info header field with a "purpose" header field parameter set to "call-completion" and a r parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	m
parameter set to "BS" to the originating AS. The CC request is cancelled. Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
Preconditions: SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
SIP header values: NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
NOTIFY sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
Event:call-completion Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
Content-Type: application/call-completion cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
cc-state: ready INVITE 1: sip: UE B; m=NR Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
Call-Info: <sip:ue-a>;purpose=call-completion;m=NR 486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b></sip:ue-a>	
486 (Busy Here): Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b>	
Call-Info: <sip:ue-b>;purpose=call-completion;m=BS NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource</sip:ue-b>	
NOTIFY 2 sip:O-AS Event:call-completion Subscription-State: terminated; reason=noresource	
Event:call-completion Subscription-State: terminated; reason=noresource	
Subscription-State: terminated; reason=noresource	
Comments:	
SIP 1 (ISC) SUT SIP 2 (Gm) Invoke CCNR request	
Callee is idle	
486 Busy Here → 486 Busy Here	
ACK	
NOTIFY 1	
200 OK NOTIFY →	
INVITE 🗲 🗲 INVITE (S1)	
200 OK INVITE → 200 OK INVITE	
$ \text{INVITE 1 (S2)} \rightarrow \text{INVITE}$	
486 (Busy Here) ← 486 (Busy Here)	
ACK	
NOTIFY 2	
200 OK NOTIFY	
BYE 🗲 🗲 BYE	
200 OK BYE → 200 OK BYE	

TSS		TP	Refer	onco	Selection expression
CC/terminating_AS/0	COperation	CC_N07_015		3.4.2 c)	NOT PICS 4.3.2-1/2 AND PICS 4.3.2-1/9
Test purpose			•		
CCNL: The callee is	busy upon arrival of the Co	C call. Retain optio	n not sup	ported.	
					pported at the terminating AS, shall send a 486 (Busy Here)
	II-Info header field with a				
	S" to the originating AS. The				
Preconditions:					
SIP header values:					
NOTIFY sip:O-AS					
From: UE B					
To: UE A					
	te: active; expires=< any va	alue >			
Event:call-comple					
	pplication/call-completion				
cc-state: read INVITE 1: sip: UE B;					
	E-A>;purpose=call-complet	ion·m-NI			
486 (Busy Here):					
	E-B>;purpose=call-complet	ion:m=BS			
NOTIFY 2 sip:O-AS		-, -			
Event:call-comp					
	ate: terminated; reason=	noresource			
Comments:					
SIP 1 (ISC)		SUT		SIP 2 (Gm)	
	Invoke CCNL request				
1	-	Collegia la lagraga	ما ام		
		Callee is logge	d-in		
NOTIFY 1	4	Callee is logge	d-in		
NOTIFY 1 200 OK NOTIFY	← →	Callee is logge	d-in		
NOTIFY 1 200 OK NOTIFY		Callee is logge	d-in		
		Callee is logge		INVITE (S1)
200 OK NOTIFY	→	Callee is logge		INVITE (S1) 200 OK INV	
200 OK NOTIFY	→ +	Callee is logge	÷	· · ·	
200 OK NOTIFY INVITE 200 OK INVITE ACK	→ ← → ←	Callee is logge	← → ←	200 OK ÌNV ACK	
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2)	→ + + +	Callee is logge	+ + +	200 OK INV ACK INVITE	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2) 486 (Busy Here)	→ + + + + +	Callee is logge	+++ ++	200 OK INV ACK INVITE 486 (Busy F	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2)	→ + + +	Callee is logge	+ + +	200 OK INV ACK INVITE	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2) 486 (Busy Here) ACK	→ + + + + +	Callee is logge	+++ ++	200 OK INV ACK INVITE 486 (Busy F	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2) 486 (Busy Here) ACK NOTIFY 2	→ + + + + + + +	Callee is logge	+++ ++	200 OK INV ACK INVITE 486 (Busy F	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2) 486 (Busy Here) ACK	→ + + + + + +	Callee is logge	+++ ++	200 OK INV ACK INVITE 486 (Busy F	ΊΤΕ
200 OK NOTIFY INVITE 200 OK INVITE ACK INVITE 1 (S2) 486 (Busy Here) ACK NOTIFY 2	→ + + + + + +	Callee is logge	+++ ++	200 OK INV ACK INVITE 486 (Busy F	ΊΤΕ

700				
TSS	TP		rence	Selection expression
CC/terminating_AS/CCOperation	CC_N07_016	4.5.4	.3.4.2 c)	PICS 4.3.2-1/2
Test purpose				
CCBS: The callee is busy upon arrival of the CC	call. Retain option s	uppor	ted.	
			<i>.</i>	
Ensure that if the callee is busy upon arrival of th				
terminating AS shall retain the original CCBS re				
monitor destination B, shall not restart the timer (
response with a Call-Info header field with a "p				
parameter set to "BS" to the originating AS. After	the callee becomes	not b	usy, the recall pro	ocedure is started again.
Preconditions:				
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Subscription-State: active; expires=< any value	re >			
Event:call-completion				
Content-Type: application/call-completion				
cc-state: ready				
INVITE 1: sip: UE B; m=BS				
Call-Info: <sip:ue-a>;purpose=call-completio</sip:ue-a>	n;m=BS			
486 (Busy Here):				
Call-Info: <sip:ue-b>;purpose=call-completio</sip:ue-b>	n;m=BS			
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
Invoke CCBS request				
	Callee is busy			
BYE 🗲		+	BYE	
200 OK BYE →		→	200 OK BYE	
NOTIFY 1				
200 OK NOTIFY →				
INVITE +		←	INVITE (S1)	
200 OK INVITE →		→	200 OK INVITE	
ACK 🗧		←	ACK	
INVITE 1 (S2) →		→	INVITE	
486 (Busy Here)		←	486 (Busy Here	e)
ACK →		→	ACK	
BYE 🗲		←	BYE	
200 OK BYE →		→	200 OK BYE	
	Start CC-T8			
	\downarrow			
	CC-T8 expires			
NOTIFY 1	-			
200 OK NOTIFY →				
	pply post test rout	ine		

TSS	TP	Refe	rence	Selection expression
CC/terminating_AS/CCOperation	CC_N07_017		.3.4.2 c)	PICS 4.3.2-1/2
Test purpose	00_107_017	1.0.1	.0. 1.2 0)	1100 1.0.2 1/2
CCNR: The callee is busy upon arrival of the CC	C call. Retain option	suppor	ted.	
Ensure that if the callee is busy upon arrival of the	he CC call and the r	etain op	otion is support	ed at the terminating AS, the
terminating AS shall retain the original CCNR	request in the queue	e; in this	s case the term	inating AS shall continue to
monitor destination B, shall not restart the timer	CCBS-T7, shall stop	o timer	CC-T9 and sha	all send a 486 (Busy Here)
response with a Call-Info header field with a "				
parameter set to "BS" to the originating AS. Afte	r the callee become	s not b	usy, the recall [procedure is started again.
Preconditions:			•	· · · · · · · · · · · · · · · · · · ·
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Subscription-State: active; expires=< any val	lue >			
Event:call-completion				
Content-Type: application/call-completion				
cc-state: ready				
INVITE 1: sip: UE B; m=NR				
Call-Info: <sip:ue-a>;purpose=call-completion</sip:ue-a>	on;m=NR			
486 (Busy Here):				
Call-Info: <sip:ue-b>;purpose=call-completion</sip:ue-b>	on;m=BS			
Comments:				
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
Invoke CCNR request				
	Callee is idle	-		
		÷		
486 Busy Here →		→	486 Busy He	re
ACK 🗲		÷	ACK	
NOTIFY 1				
200 OK NOTIFY				
		←	INVITE (S1)	
		À	200 OK INVI	TE
ACK		÷	ACK	I E
		•	Non	
INVITE 1 (S2) →		→	INVITE	
486 (Busy Here)			486 (Busy He	ere)
ACK +		- -	ACK	
		-		
BYE 🗲		←	BYE	
200 OK BYE →		→	200 OK BYE	
	Start CC-T8			
	Ļ			
	CC-T8 expires			
1				
NOTIFY 1				
NOTIFY 1 ← 200 OK NOTIFY →				

TSS	ТР	Refe	rence	Selection expression
CC/terminating_AS/CCOperation	CC_N07_018		.3.4.2 c)	PICS 4.3.2-1/2 AND PICS 4.3.2-1/9
Test purpose				
CCNL: The callee is busy upon arrival of the CC	C call. Retain option s	suppor	ted.	
Ensure that if the callee is busy upon arrival of t	he CC call and the re	etain o	otion is supp	orted at the terminating AS, the
terminating AS shall retain the original CCNL	request in the queue	; in this	s case the ter	minating AS shall continue to
monitor destination B, shall not restart the timer				
response with a Call-Info header field with a parameter set to "BS" to the originating AS. After				
Preconditions:	er the callee become	S NOLD	usy, the reca	in procedure is started again.
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Subscription-State: active; expires=< any va	llue >			
Event:call-completion				
Content-Type: application/call-completion cc-state: ready				
INVITE 1: sip: UE B; m=NL				
Call-Info: <sip:ue-a>;purpose=call-completi</sip:ue-a>	on;m=NL			
486 (Busy Here):				
Call-Info: <sip:ue-b>;purpose=call-completi</sip:ue-b>	on;m=BS			
Comments:	<u></u>			
SIP 1 (ISC) Invoke CCNR request	SUT		SIP 2 (Gm))
Invoke CCNR request	Callee is idle			
INVITE 🗲		←	INVITE	
486 Busy Here →		→	486 Busy H	lere
ACK 🗲		÷	ACK	
NOTIFY 1 ← 200 OK NOTIFY →				
INVITE +		←	INVITE (S1)
200 OK INVITE →		→	200 OK IN	VITE
ACK 🗲		÷	ACK	
		د	INVITE	
INVITE 1 (S2) → 486 (Busy Here) ←		→ ←	486 (Busy	Here)
ACK		÷	ACK	
BYE 🗲		←	BYE	
200 OK BYE 🔶	04amt 00 T0	→	200 OK BY	Έ
	Start CC-T8 ↓			
	↓ CC-T8 expires			
NOTIFY 1	00-10 expiles			
200 OK NOTIFY				
	Apply post test rou	tine		

TSS		ТР	Refe	rence	Selection expression
CC/terminating_AS/CCOpe	ration	CC_N07_019		.3.4.2 d)	
Test purpose				.o u)	
CCBS: Recall does not app	oly, CC-T9 expires.				
					expired. The terminating AS
	the originating AS a	nd the Subscription-	State h	neader is set to	"terminated" and the reason
header is set to "rejected".					
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE B					
To: UE A					
Subscription-State: activ	ve; expires=< any val	ue >			
Event:call-completion					
Content-Type: application	on/call-completion				
cc-state: ready					
NOTIFY 2 sip:O-AS					
From: UE B					
To: UE A					
Event:call-completion					
Subscription-State: term	ninated; reason=reject	ted			
Comments:		o=			
SIP 1 (ISC)		SUT		SIP 2 (Gm)	
Invo	oke CCBS request				
	-	Callee is busy	-		
BYE	+		÷	BYE	
200 OK BYE	→		→	200 OK BYE	
		Start CC-T8			
		••••••			
		CC-T8 expires			
NOTIFY 1	+				
200 OK NOTIFY	→				
		Start CC-T9			
	-	CC-T9 expires			
NOTIFY 2	← →				
200 OK NOTIFY	7				

TSS	TP	Pofe	rence	Selection expression
	CC_N07_020		.3.4.2 d)	Selection expression
CC/terminating_AS/CCOperation	CC_N07_020	4.0.4	.3.4.2 u)	
Test purpose				
CCNR: Recall does not apply, CC-T9 expi	res.			
Ensure that the terminating As revolves the		o Doooll	timer CC TO is	ovpired The terminating AC
Ensure that the terminating As revokes the				
sends a NOTIFY request to the originating	AS and the Subscriptio	on-State r	leader is set to	terminated and the reason
parameter is set to "rejected".				
Preconditions:				
SIP header values:				
NOTIFY sip:O-AS				
From: UE B				
To: UE A				
Subscription-State: active; expires=< a	ny value >			
Event:call-completion				
Content-Type: application/call-completi	on			
cc-state: ready				
NOTIFY 2 sip:O-AS				
From: UE B				
To: UE A				
Event:call-completion	na la ata d			
Subscription-State: terminated; reason	=rejected			
Comments:	OUT			
SIP 1 (ISC)	SUT		SIP 2 (Gm)	
Invoke CCNR requ		_		
	Callee is idle	-		
	+	÷		
486 Busy Here	→	→	486 Busy Her	e
ACK	←	+	ACK	
	Start CC-T8			
	↓ .			
	CC-T8 expires	5		
NOTIFY 1	+			
200 OK NOTIFY	→			
	Start CC-T9			
	↓ .			
	CC-T9 expires	5		
NOTIFY 2	+			
200 OK NOTIFY	→			

TSS	TP	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_021	4.5.4.3.4.2 d)	PICS 4.3.2-1/9
Test purpose			
CCNL: Recall does not apply, CC-T9) expires.		
Ensure that the terminating As revok	os the CCNIL request after th	e Recall timer CC-TC) is expired. The terminating A
sends a NOTIFY request to the origin			
parameter is set to "rejected".	lating A0 and the Subscriptic		to terminated and the reaso
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
From: UE B			
To: UE A			
Subscription-State: active; expires	s=< any value >		
Event:call-completion			
Content-Type: application/call-con	mpletion		
cc-state: ready			
NOTIFY 2 sip:O-AS			
From: UE B			
To: UE A			
Event:call-completion			
Subscription-State: terminated; re	ason=rejected		
Comments:			
SIP 1 (ISC) Invoke CCNF	SUT	SIP 2 (Gm	1)
IIIVORE CCINF	Callee is idl	0	
INVITE		€ INVITE	
486 Busy Here	→ →	→ 486 Busy	Here
ACK	÷	ACK	
	Start CC-T8		
	CC-T8 expires		
NOTIFY 1	+	-	
200 OK NOTIFY	→ →		
	Start CC-T9		
	↓		
	CC-T9 expires	6	
NOTIFY 2	←		
200 OK NOTIFY	→		
TSS	TP	Reference	Selection expression

TSS	ТР	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_022	4.5.4.3.3.2	
Test purpose			
CCBS: Service duration timer, CC-T7 expires.			
Ensure that the terminating AS revokes the CCB	S request after the	e CC service duration time	er CC-T7 expires. A
NOTIFY is sent to the originating AS and the Sul			•
is set to "noresource".			
Preconditions:			
SIP header values:			
NOTIFY 2 sip:O-AS			
From: UE B			
To: UE A			
Event:call-completion			
Subscription-State: terminated; reason= nore	esource		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCBS request			
	Start CC-T7		
	Callee is busy	у	
	\downarrow		
	CC-T7 expires		
NOTIFY 2			
200 OK NOTIFY			

TSS	TP	Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_023	4.5.4.3.3.2	
Test purpose			
CCNR: Service duration timer, CC-T7 expire	S.		
Ensure that the terminating AS revokes the C			
NOTIFY is sent to the originating AS and the	Subscription-State hea	ider is set to "terminated	" and the reason parameter
is set to "noresource".			
Preconditions:			
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE B			
To: UE A			
Event:call-completion			
Subscription-State: terminated; reason= r	oresource		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCNR reques	st		
	Start CC-T7		
	Callee is idle		
	\downarrow		
	CC-T7 expires		
NOTIFY 1			
200 OK NOTIFY →			
T00		Deference	Coloction oversocion
TSS		Reference	Selection expression
CC/terminating_AS/CCOperation	CC_N07_024	4.5.4.3.3.2	PICS 4.3.2-1/9
Test purpose			
CCNL: Service duration timer, CC-T7 expires	S.		
			00 T7
Ensure that the terminating AS revokes the C			
NOTIFY is sent to the originating AS and the	Subscription-State nea	ider is set to "terminated	and the reason parameter
is set to "noresource".			
Preconditions:			
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE B			
To: UE A			
Event:call-completion			
Subscription-State: terminated; reason= r	oresource		
Comments:	<u> </u>		
SIP 1 (ISC)	SUT	SIP 2 (ISC)	
Invoke CCNL reques			
	Start CC-T7 Callee is idle		
	1		
	↓ CC-T7 expires		
	↓ CC-T7 expires		
NOTIFY 1 ← 200 OK NOTIFY →	↓ CC-T7 expires		

TSS TP Reference Selection express CC/terminating_AS/CCOperation CC_N07_025 4.5.4.3.4.1.5 Selection express CCBS: Caller becomes busy while CC recall procedure. Ensure that the terminating AS after the originating AS has suspended the CC recall procedure sends a NOTIF request and the MIME body contains the state parameter set to 'queued'. When the originating AS resumes the procedure after expiry of the B idle guard timer CC-T8 sends again the remote user free indication after the call indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to "queued". Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion ccstate: ready Content-Type: application/call-completion ccstate: ready Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <pre>vpuBLISH 2 sip:T-AS Event: presence content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <pre>content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <pre>content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <pre>content-Type: application/pidf+xml <presence< td=""></presence<></pre></pre></pre></pre>	Υ ≥ CC call
Test purpose CCBS: Caller becomes busy while CC recall procedure. Ensure that the terminating AS after the originating AS has suspended the CC recall procedure sends a NOTIF request and the MIME body contains the state parameter set to 'queued'. When the originating AS resumes the procedure after expiry of the B idle guard timer CC-T8 sends again the remote user free indication after the call indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to "queued". Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <content-type: application="" pidf+xml<br=""><?xml version="1.0" encoding="UTF-8"?> <presence <content-type: application="" pidf+xml<br=""><?xml version="1.0" encoding="UTF-8"?> <pre> </pre></content-type:></presence </content-type:></presence </presence </status></presence 	CC call
CCBS: Caller becomes busy while CC recall procedure. Ensure that the terminating AS after the originating AS has suspended the CC recall procedure sends a NOTIF request and the MIME body contains the state parameter set to 'queued'. When the originating AS resumes the procedure after expiry of the B idle guard timer CC-T8 sends again the remote user free indication after the call indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to 'queued''. Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> <status> </status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></status></presence 	CC call
request and the MIME body contains the state parameter set to 'queued'. When the originating AS resumes the procedure after expiry of the B idle guard timer CC-T8 sends again the remote user free indication after the call indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to "queued". Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence <status> </status>	CC call
procedure after expiry of the B idle guard timer CC-T8 sends again the remote user free indication after the call indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to "queued". Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <status> <presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <status> <presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </presence </status></status></presence </presence </status></status></presence 	
indicates no longer busy. A NOTIFY is sent an den MIME body contains the state parameter set to "queued". Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> VUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <presence <status> <presence <status> <presence <status> <presence <status> <presence <status> <presence <status></status></presence </br></status></presence </br></status></presence </status></presence </status></presence </status></presence </status></presence </status></presence 	ler
Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> VBLISH 2 sip:T-AS Event: presence <status> </br></br></br></status></status></presence 	
NOTIFY 1 sip:O-AS From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <</br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></status></presence </status></presence 	
From: UE B To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <status> <status> <presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <status> <status> <status> <presence <status> <presence <status> </status></presence </status></presence </status></status></status></status></presence </presence </status></status></status></presence 	
To: UE A Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <status> <presence <status></status></presence </status></status></presence </status></presence 	
Subscription-State: active; expires=< any value > Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <presence <status> <presence <status></status></presence </status></presence </status></presence </status></presence 	
Event:call-completion Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </status></presence 	
Content-Type: application/call-completion cc-state: ready PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </status></presence 	
PUBLISH 1 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </status></presence 	
Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </status></presence 	
Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status> <basic>closed</basic> PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status></status></presence </status></presence 	
<pre><?xml version="1.0" encoding="UTF-8"?> <pre> <pre> <pre> <status></status></pre></pre></pre></pre>	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
 <pre></pre>	
PUBLISH 2 sip:T-AS Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status></status></presence 	
Event: presence Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status></status></presence 	
Content-Type: application/pidf+xml xml version="1.0" encoding="UTF-8"? <presence <status></status></presence 	
<presence <status></status></presence 	
<status></status>	
NOTIFY 2 sip:O-AS From: UE B	
To: UE A	
Subscription-State: active; expires=< any value >	
Event:call-completion Content-Type: application/call-completion	
cc-state: queued	
Comments:	
SIP 1 (ISC) SUT SIP 2 (Gm)	
Invoke CCBS request Callee is busy	
BYE	
200 OK BYE → 200 OK BYE	
NOTIFY 1 ← NOTIFY 1 200 OK NOTIFY → 200 OK NOTIFY	
PUBLISH	
200 OK PUBLISH 🗧 200 OK PUBLISH	
NOTIFY 2 ← NOTIFY 2 200 OK NOTIFY → 200 OK NOTIFY	
PUBLISH → PUBLISH	
200 OK PUBLISH ← 200 OK PUBLISH	
NOTIFY 2	
200 OK NOTIFY → 200 OK NOTIFY	
Start CC-T8	
CC-T8 expires	

TSS	S/CCOncretion		Reference 4.5.4.3.4.1.5	Selection expression
CC/terminating_/	AS/CCOperation	CC_N07_026	4.5.4.3.4.1.5	
Test purpose CCNR: Caller be	comes busy while CC red	call procedure.		
request and the I procedure after e	/IME body contains the s	tate parameter set to imer CC-T8 sends ag	'queued'. When the orig	ocedure sends a NOTIFY ginating AS resumes the CC call a indication after the caller neter set to "queued".
SIP header valu	es:			
NOTIFY 1 sip:O- From: UE B To: UE A Subscription- Event:call-cor Content-Type	AS State: active; expires=< a npletion : application/call-complet			
Ev Co </td <td>eady :T-AS ent: presence ntent-Type: application/p xml version="1.0" encodi resence <status> <basic>closed<td>ng="UTF-8"?></td><td></td><td></td></basic></status></td>	eady :T-AS ent: presence ntent-Type: application/p xml version="1.0" encodi resence <status> <basic>closed<td>ng="UTF-8"?></td><td></td><td></td></basic></status>	ng="UTF-8"?>		
Ev Co </td <td><pre>cbasic>closed:T-AS ent: presence ntent-Type: application/p xml version="1.0" encodi resence <status> <basic>open</basic></status></pre></td> <td>idf+xml ng="UTF-8"?></td> <td></td> <td></td>	<pre>cbasic>closed:T-AS ent: presence ntent-Type: application/p xml version="1.0" encodi resence <status> <basic>open</basic></status></pre>	idf+xml ng="UTF-8"?>		
Event:call-cor	AS State: active; expires=< a npletion : application/call-complet	ny value >		
Comments:				
SIP 1 (ISC)		SUT	SIP 2 (Gm)
	Invoke CCNR req			
		Callee is available f	or CC recall	
NOTIFY 1 200 OK NOTIFY		 ← NOTIFY 1 → 200 OK NOTII 	FY	
PUBLISH 200 ok publisł	1	→ PUBLISH← 200 OK PUBL	ISH	
NOTIFY 2 200 OK NOTIFY		← NOTIFY 2→ 200 OK NOTII	FY	
PUBLISH 200 OK PUBLISH	4	 → PUBLISH ← 200 OK PUBL 	ISH	
NOTIFY 2 200 OK NOTIFY		 ← NOTIFY 2 → 200 OK NOTII Start CC-Ta ↓ 		
NOTIFY 1 200 OK NOTIFY		CC-T8 expir ← NOTIFY 1 → 200 OK NOTII Apply post test	FY	

TSS CC/torminatir	ng_AS/CCOperation	TP CC_N07_027	Reference 4.5.4.3.4.1.5	Selection expression PICS 4.3.2-1/9
Test purpos		CC_N07_027	4.5.4.3.4.1.5	PICS 4.3.2-1/9
	r becomes busy while CC recall	procedure.		
Ensure that th	he terminating AS after the origi	inating AS has suspe	ended the CC recall pro	ocedure sends a NOTIFY
				inating AS resumes the CC call
	ter expiry of the B idle guard tim longer busy. A NOTIFY is sent a			
Precondition			Sintains the state paran	leter set to queded .
SIP header v	/alues:			
NOTIFY 1 sip From: UE				
To: UE A Subscript	ion-State: active; expires=< any	value >		
Event:call	I-completion Fype: application/call-completior			
cc-sta	ite: ready			
PUBLISH 1	sip:T-AS			
	Event: presence Content-Type: application/pidf xml version="1.0" encoding:</td <td></td> <td></td> <td></td>			
	<presence< td=""><td></td><td></td><td></td></presence<>			
	<status></status>			
PUBLISH 2	<basic>closed</basic> sip:T-AS			
I OBLIGITZ	Event: presence			
	Content-Type: application/pidf			
	xml version="1.0" encoding:</td <td>="UTF-8"?></td> <td></td> <td></td>	="UTF-8"?>		
	<pre><pre>cetotuos</pre></pre>			
	<status> <basic>open</basic></status>			
NOTIFY 2 sip				
From: UE				
To: UE A				
Subscript	ion-State: active; expires=< any I-completion	value >		
	Type: application/call-completior	า		
	ite: queued			
Comments:				
SIP 1 (ISC)		SUT	SIP 2 (Gm)	
	Invoke CCNL reque	st Callee is available fo	r CC recall	
NOTIFY 1				
200 OK NOT	IFY 🚽	-	Y	
PUBLISH				
200 OK PUB	LISH 🗧	200 OK PUBLIS	SH	
NOTIFY 2	•	NOTIFY 2		
200 OK NOT		-	Y	
			-	
PUBLISH	÷	PUBLISH		
200 OK PUB	LISH 🗧	200 OK PUBLIS	SH	
NOTIFY 2	÷	NOTIFY 2		
200 OK NOT			Y	
	-	Start CC-T8		
		\downarrow		
		CC-T8 expire	S	
NOTIFY 1			V	
200 OK NOT	IFY -	200 OK NOTIF Apply post test r		
			outine	

5.4 Interaction of Call-Completion with other services

5.4.1 Terminating Identification Restriction (TIR)

TSS		ТР		Referen		sion
CC/ Interaction/	ĪR	CC_N08	_001	4.6.4	PICS 4.3.2-1/4	
Test purpose						
	CNL Recall succe	ssful by using the s	special REFER int	terworkin	g. TIR settings considered in th	e CC
recall.						
Ensure that the	priginating AS start	s the CCBS recall	procedure and in t	the 200 (OK INVITE from the originating	user is
					ating user is also restricted.	
Preconditions:		•	•		ž	
SIP header valu	es:					
200 OK 1						
	ivacy: id					
	: UE B; m=BS/NR	/NL				
	om: UE A					
	: UE B Asserted-Identity:					
	ivacy: id					
	all-Info: <sip:ue-a></sip:ue-a>	;purpose=call-com	pletion;m=BS/NR	/NL		
Comments:	•	4 1	1 ,			
SIP 1 (Gm)			SUT		SIP 2 (ISC)	
		CCBS request				
	CCBS requ	est confirmed by				
			i erminating NOTIF	-	vailable for recall NOTIFY 1	
			200 OK NOTIF	-	200 OK NOTIFY	
INVITE	+	INVITE 1	200 01 11011			
180 Ringing	÷	180 Ringing				
200 OK INVITE		200 OK INVITE				
ACK	÷	ACK		→	INVITE 2	
				+	180 Ringing	
			NOTIF	Y 🗲	NOTIFY 2	
			200 OK NOTIF		200 OK NOTIFY	
				2		
				←	200 OK INVITE	
				→	ACK	
		Apply	post test routine	9		

5.4.2 Communication diversion services (CDIV)

TSS		TP	Ref	erence	Selection expression
CC/Interaction/CDIV		CC_N09_001	4.6.	.8.2	-
Test purpose					
Detecting CCBS is possible.					
Ensure that when an originatir	ig user establishe	s a session to Use	er B and	the user B ha	as activated communication
diversion unconditional to user	C, the terminatin	g user C is busy, a	a 486 (E	Busy Here) res	sponse is sent to the originating
AS and the Call-Info header co	ontains the URI of	user C or the tern	ninating	AS.	
Preconditions:					
SIP header values:					
486 Busy Here 1:					
Call-Info: <sip:ue-c or="" t-a<="" td=""><td>S>:purpose=call-</td><td>completion;m=BS</td><td></td><td></td><td></td></sip:ue-c>	S>:purpose=call-	completion;m=BS			
Comments:	· · ·	•			
SIP 1 (ISC)		SUT		SIP 2 (Gm) UE C
INVITÈ	→		→	INVITÈ	
486 (Busy Here) 1	÷		←	486 (Busy	Here)
ACK	→		→	ACK	,
		Apply post test re	outine		

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_002	4.6.8.2	
Fest purpose			
Detecting CCNR is possible.			
Ensure that when an originating use			
diversion unconditional to user C, a		t to the originating	AS and the Call-Info header
contains the URI of user C or the te	rminating AS.		
Preconditions:			
SIP header values:			
180 Ringing 1:			
Call-Info: <sip:ue-c or="" t-as="">;p</sip:ue-c>	urpose=call-completion;m=NR		
Comments:			
SIP 1 (ISC)	SUT	··· ·· ·· ··	Sm) UE C
INVITE	>	→ INVITE	
180 (Ringing) 1	~	← 180 (Ri	nging)
	Apply post test re	outine	
TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_003	4.6.8.2	PICS 4.3.2-1/9
Test purpose	00000_	1.0.0.2	
Detecting CCNL is possible.			
Ensure that when an originating use	establishes a session to Use	er B and the user B	has activated communication
diversion unconditional to user C, th			
sent to the originating AS and the C			
			×
Preconditions:			
SIP header values:			
SIP header values:	urpose=call-completion;m=NL		
SIP header values: 480 Temporarily Unavailable 1: Call-Info: <sip:ue-c or="" t-as="">;pu</sip:ue-c>	urpose=call-completion;m=NL		
SIP header values: 480 Temporarily Unavailable 1: Call-Info: <sip:ue-c or="" t-as="">;pi Comments:</sip:ue-c>	urpose=call-completion;m=NL SUT	SIP 2 (0	Gm) UE C
Preconditions: SIP header values: 480 Temporarily Unavailable 1: Call-Info: <sip:ue-c or="" t-as="">;pi Comments: SIP 1 (ISC) INVITE</sip:ue-c>	•	SIP 2 (0 → INVITE	Gm) UE C
SIP header values: 480 Temporarily Unavailable 1: Call-Info: <sip:ue-c or="" t-as="">;pi Comments: SIP 1 (ISC)</sip:ue-c>	SUT	→ INVITÈ	Gm) UE C mporarily Unavailable)
SIP header values: 480 Temporarily Unavailable 1: Call-Info: <sip:ue-c or="" t-as="">;pi Comments: SIP 1 (ISC) NVITE</sip:ue-c>	SUT	→ INVITÈ	

TSS		TP	Reference	Selection expression
CC/Interact	tion/CDIV	CC_N09_004	4.6.8.2	Selection expression
Test purpo			1.0.0.2	
		rved user after CFU was ad	ctivated.	
			A activates CFU to us	ser C. Ensure that the CCBS recall
Preconditi	ser A instead of forward	ed to user C.		
SIP heade				
NOTIFY sig				
	From: UE B			
	To: UE A			
	Event:call-completior			
		ctive; expires=< any value >	>	
	Content-Type: applic	ation/call-completion		
REFER:	cc-state: ready sip: UE A; m=BS			
	Refer-To; UE B meth	od=INVITE		
INVITE:	sip: UE A; m=BS			
		ose=call-completion;m=BS		
Comments				
SIP 1 (Gm)		SUT	SIP 2 (I	ISC)
		essful CCBS request CFU to user C		
	Activate		minating user availa	able for recall
			TIFY + NOTIFY	
		200 OK NO	TIFY → 200 OK	NOTIFY
CASE A				
REFER	+	REFER		
202 Accept	ted →	202 Accepted		
CASE B				
INVITE	+	INVITE		
180 (Ringir	ng) 🔶	180 (Ringing)	4	
		Apply post tes	st routine	

TSS		TP	Refe	erence	Selection expression
CC/Interactio	on/CDIV	CC_N09_005	4.6.		
Test purpos					
		r ved user after CFU was	activated.		
	·				
			er A activates	CFU to user	C. Ensure that the CCNR recall
	er A instead of forwarde	ed to user C.			
Precondition					
SIP header					
NOTIFY sip:0	O-AS From: UE B				
	To: UE A				
	Event:call-completion				
	•	ctive; expires=< any valu	e >		
	Content-Type: application				
	cc-state: ready				
REFER:	sip: UE A; m=NR				
	Refer-To; UE B meth	od=INVITE			
INVITE:	sip: UE A; m=NR	ose=call-completion;m=N	ID		
Comments:					
SIP 1 (Gm)		SUT		SIP 2 (ISC	3)
	Establish a succe	essful CCNR request			
	Activate C	FU to user C			
1			erminating ι		
		•	NOTIFY +	NOTIFY 1	
CASE A		200 OK 1	NOTIFY ->	200 OK N	UTIFY
REFER	←	REFER			
202 Accepted	=	202 Accepted			
	~ /	_0_ / 000prod			
CASE B					
INVITE	+	INVITE			
180 (Ringing) 🔶	180 (Ringing)			
		Apply post t	test routine		

TSS		TP		Reference	Selection expression
CC/Interactio	n/CDIV	CC_N09_00		4.6.8.2	PICS 4.3.2-1/9
Test purpos					[·····
CCNL Recall	l is given to the CC ser	r ved user after CFU v	vas activated	Ι.	
User A invok	es a CCNL request to	user B. subsequently	user A activa	ates CFU to u	user C. Ensure that the CCBS recall
	er A instead of forwarde				
Precondition	าร:				
SIP header v	/alues:				
NOTIFY sip:0					
	From: UE B				
	To: UE A				
	Event:call-completion				
	Subscription-State: a		/alue >		
	Content-Type: applica cc-state: ready	ation/call-completion			
REFER:	sip: UE A; m=NL				
	Refer-To; UE B meth	od=INVITE			
INVITE:	sip: UE A; m=NL				
	Call.Info: UE-A; purpo	ose=call-completion;n	n=NL		
Comments:					
SIP 1 (Gm)		SUT		SIP 2	(ISC)
		essful CCNL reques	t		
	Activate C	FU to user C			
				-	ilable for recall
1		200 0	NOTIFY NOTIFY	← NOTII → 200 C	FY 1 DK NOTIFY
CASE A		200 C		- 200 C	JK NOTIF I
REFER	+	REFER			
202 Accepted	=	202 Accepted			
		,			
CASE B					
INVITE	+	INVITE			
180 (Ringing)) 🔸	180 (Ringing)			
		Apply po	st test routi	ne	

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_0	07 4.6.8.2	
Test purpose			
CCBS revocation after terminating user	r has activated .		
Ensure that the terminating AS revokes after the originating user has establishe request to the originating AS and the S State header field parameter set to "no	ed CCBS on the termin ubscription-State head	ating user B. The termina	iting AS sends a NOTIFY
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: terminated; reas	son= noresource		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm	n) User B
Establish a success	ful CCBS request		
	-	Activate CFU	to user C
NOTIFY	+		
200 OK NOTIFY	→		

TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_008	4.6.8.2	
Test purpose			
CCNR revocation after terminating user has activ	ated .		
Ensure that the terminating AS revokes the outsta			
after the originating user has established CCNR of			
request to the originating AS and the Subscription		set to "terminated"; and	the "reason" Subscription-
State header field parameter set to "noresource".			
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: terminated; reason= nores	source		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) Use	er B
Establish a successful CCNR	request		
		Activate CFU to us	er C
NOTIFY +			
200 OK NOTIFY →			
TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_009	4.6.8.2	PICS 4.3.2-1/9
Test purpose			
CCNL revocation after terminating user has active	ated .		
Ensure that the termination AQ movel has the sector		- ()()) - (-)) - () - () - () - ()	
Ensure that the terminating AS revokes the outsta after the originating user has established CCNL of			
request to the originating AS and the Subscription			
State header field parameter set to "noresource".			the reason Subscription-
Preconditions:			
SIP header values:			
NOTIFY sip:O-AS			
From: <ue-b></ue-b>			
To: <ue-a></ue-a>			
Event:call-completion			
Subscription-State: terminated; reason= nores	source		
Comments:			
	CUT		
SIP 1 (ISC) Establish a successful CCNI	SUT	SIP 2 (Gm) Use	er B
Establish a successful CCNL			
		SIP 2 (Gm) Use Activate CFU to us	

TSS		Reference	Selection expression
CC/Interaction/CDIV	CC_N09_010	4.6.8.3	
Test purpose	visional and in diverted on Due		
CCBS indication is sent if the o	onginal call is diverted on Bus	у.	
The terminating user has activ	ated the CEB service. In case	of a callee is busy the comm	nunication is forwarded to User
C and the callee has subscribe			
possible at the diverted-to use			
Preconditions: Communication			
SIP header values:	in torwarding Dusy is derivat		
486 Busy Here 1:			
	>;purpose=call-completion;m	=BS	
486 Busy Here 2:	, , , , , , , , , , , , , , , , , , ,		
	3>;purpose=call-completion;m	n=BS	
Comments:	,		
SIP 1 (ISC)	SUT SIP	2 (Gm) UE B	SIP 3 (Gm) UE C
INVITÈ	→ INVI		. ,
	← 486	(Busy Here)	
	→ ACK		
		CFB applies	
CASE A			
486 (Busy Here) 1	+		486 (Busy Here)
ACK	→		ACK
CASE B			
486 (Busy Here) 2	← →		486 (Busy Here)
ACK	-		ACK
	Apply post	test routine	
		Deferrence	
TSS	ТР	Reference	Selection expression
TSS CC/Interaction/CDIV	TP CC_N09_0011	4.6.8.3	Selection expression
CC/Interaction/CDIV Test purpose	CC_N09_0011	4.6.8.3	Selection expression
CC/Interaction/CDIV	CC_N09_0011	4.6.8.3	Selection expression
CC/Interaction/CDIV Test purpose CCNR indication is sent if the	CC_N09_0011 original call was diverted on E	4.6.8.3 Busy.	
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has active	CC_N09_0011 CC_N09_0011 Criginal call was diverted on E ated the CFNR service. In ca	4.6.8.3 Busy. se of a callee is busy the com	munication is forwarded to
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has active User C and the callee has sub-	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has active User C and the callee has sub- CCNR is possible at the diverter	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has activ User C and the callee has sub CCNR is possible at the diverte Preconditions:	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has activ. User C and the callee has sub- CCNR is possible at the diverte Preconditions: SIP header values:	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the of The terminating user has activ. User C and the callee has sub- CCNR is possible at the diverte Preconditions: SIP header values: 180 Ringing 1:	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport</sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer	4.6.8.3 Busy. se of a callee is busy the corr prvice, ensure that terminating	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1</sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments:</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer ose=call-completion;m=NR urpose=call-completion;m=BS	4.6.8.3 Busy. se of a callee is busy the comprise, ensure that terminating the communication or at the	munication is forwarded to AS inform the caller that callee UE B.
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC)</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer ose=call-completion;m=NR urpose=call-completion;m=BS SUT SIP	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the S 2 (Gm) UE B	munication is forwarded to AS inform the caller that
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC)</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → INVI	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the communication or at the S 2 (Gm) UE B TE	munication is forwarded to AS inform the caller that callee UE B.
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC)</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second second Second second s	munication is forwarded to AS inform the caller that callee UE B.
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments:</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → INVI	4.6.8.3 Busy. See of a callee is busy the com- prvice, ensure that terminating the communication or at the the communication or at the Sector 2 (Gm) UE B TE (Busy Here)	munication is forwarded to AS inform the caller that callee UE B.
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486	4.6.8.3 Busy. See of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second Second Second	SIP 3 (Gm) UE C
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE CASE A</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486 → ACK	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second S 2 (Gm) UE B TE (Busy Here) CFB applies	SIP 3 (Gm) UE C
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second S 2 (Gm) UE B TE (Busy Here) CFB applies	SIP 3 (Gm) UE C
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE CASE A 180 (Ringing) 1</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486 → ACK	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second S 2 (Gm) UE B TE (Busy Here) CFB applies	SIP 3 (Gm) UE C
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purporter 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE CASE A 180 (Ringing) 1 CASE B</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on B ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer ose=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → INVI ← 486 → ACK	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second S 2 (Gm) UE B TE (Busy Here) CFB applies	SIP 3 (Gm) UE C
CC/Interaction/CDIV Test purpose CCNR indication is sent if the off The terminating user has active User C and the callee has sub- CCNR is possible at the diverter Preconditions: SIP header values: 180 Ringing 1: Call-Info: <sip:ue-c>;purport 486 Busy Here 1 Call-Info: <sip:ue-b>;p Comments: SIP 1 (ISC) INVITE CASE A 180 (Ringing) 1</sip:ue-b></sip:ue-c>	CC_N09_0011 original call was diverted on E ated the CFNR service. In ca scribed the call completion se ed-to user UE C if not answer osse=call-completion;m=NR urpose=call-completion;m=BS SUT SIP → NVI ← 486 → ACK	4.6.8.3 Busy. se of a callee is busy the com- prvice, ensure that terminating the communication or at the second second second second second S 2 (Gm) UE B TE (Busy Here) CFB applies	SIP 3 (Gm) UE C

TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_0012	4.6.8.3	PICS 4.3.2-1/9
Test purpose			
CCNL indication is sent if the origin	al call was diverted c	on Busy.	
The terminating user has activated	the CENIL service. In	case of a callee is busy the co	mmunication is forwarded to
User C and the callee has subscrib			
CCNL is possible at the diverted-to			ing AO inform the caller that
Preconditions:			
SIP header values:			
480 Temporarily Unavailable 1:			
Call-Info: <sip:ue-c>;purpose=</sip:ue-c>	call-completion·m-NI		
486 (Busy Here) 1		-	
Call-Info: <sip:ue-b>;purpo</sip:ue-b>	se=call-completion m	=BS	
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE	→ -		
		🗲 486 (Busy Here)	
		ACK Í	
		CFB applies	· .
CASE A			UE C is not logged-in
480 (Temporarily Unavailable) 1	÷		
ACK	→		
CASE B			
486 (Busy Here) 1	+		
ACK	→		
	Apply p	ost test routine	

n	^
ч	x
-	•

TSS		ТР	Reference	Selection expression
CC/Interaction/CDIV		CC_N09_013	4.6.8.3	
Test purpose CCBS recall after the	e callee activates CFB. Re	call is considered as l	beina busv.	
			sonig saby:	
		has activated CCBS	on User B. The CC reca	all from user A encounters a
busy condition at use				
 the terminat originating A 	ing AS considers a CC re	call to a busy callee a	nd the AS indicates CC	BS is possible to the
or	10			
•	ards the communication to	o User C.		
Preconditions:				
SIP header values:				
NOTIFY 1 sip:O-AS				
From: UE-B				
To: UE-A				
Event:call-comple				
	plication/call-completion			
cc-state: ready 486 Busy Here 1	У			
	-B>;purpose=call-comple	tion:m-BS		
Comments:		lion,m=00		
SIP 1 (ISC)	SUT	SIP 2 (Gm)) UE B	SIP 2 (Gm) UE C
Invoke	e CCBS request	To success in action of		
	ι	Jser B becomes ava	user activates CFB ilable	
NOTIFY 200 OK NOTIFY	 ← NOTIFY 1 → 200 OK NOTIFY 			
	2 00 OK NOTIFY			
INVITE	÷	← INVITE		
200 OK INVITE	→	→ 200 OK IN	VITE	
ACK	÷	🗲 ACK		
INVITE CASE A	→			
UAJE A		→ INVITE		
486 (Busy Here) 1	←	← 486 (Busy	Here)	
ACK	→	→ ACK		
CASE B				
				NVITE
180 (Ringing)	+		 ← [*]	180 (Ringing)

TSS		TP	NO0 014	Reference 4.6.8.3	Selection expression
CC/Interaction/CDIV			_N09_014	4.0.8.3	
Test purpose CCNR recall after the		activatos CER Pasa	Il is considered o	boing buoy	
	e callee	activates CFD. Reca	ii is considered as	s being busy.	
Ensure that User B a	ctivates	CFB after User A ha	s activated CCN	R on User B. The CC re	call from user A encounters
a busy condition at us	ser B:				
 the terminat 	ing AS d	considers a CC recal	l to a busy callee	and the AS indicates Co	CBS is possible to the
originating A	NS S				
or					
	ards the	communication to U	ser C.		
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE-B To: UE-A					
Event:call-comple	tion				
Content-Type: ap		/call-completion			
cc-state: read					
486 Busy Here 1	,				
	-B>;pur	pose=call-completior	n;m=BS		
Comments:		· ·			
SIP 1 (ISC)		SUT	SIP 2 (Gr	n) UE B	SIP 2 (Gm) UE C
Invoke	CCNR	request	Tomation		1
		Llos	r B becomes av	user activates CFB	
		056	e D Decomes av		I
NOTIFY	←	NOTIFY 1			
200 OK NOTIFY		200 OK NOTIFY			
-		-		I	
INVITE	←		← INVITE		
200 OK INVITE	→		→ 200 OK II	IVITE	
ACK	÷		← ACK		
INVITE	→				
	7				
			→ INVITE		
486 (Busy Here) 1	←		← 486 (Busy	/ Here)	
ACK	÷		→ ACK	/	
CASE B					
	_			→	INVITE
180 (Ringing)	÷			÷	180 (Ringing)
					I
		A	oply post test ro	utine	

TSS			ТР	Reference		Selection expression
CC/Interaction/CDI	/		CC_N09_015	4.6.8.3		PICS 4.3.2-1/9
Test purpose CCNL recall after th	ممالم	o optivistop CEP P	acall in considered	as being buou		
	e calle	e activates CFD. R		as being busy.		
Ensure that User B	activate	es CFB after User	A has activated CC	NL on User B. The CO	C re	call from user A encounters a
busy condition at us						
		S considers a CC re	ecall to a busy calle	ee and the AS indicate	s C	CBS is possible to the
originating or	AS					
•.	vards tl	he communication	to User C			
Preconditions:						
SIP header values:						
NOTIFY 1 sip:O-AS						
From: UE-B						
To: UE-A Event:call-compl	otion					
		on/call-completion				
cc-state: read		on/can completion				
486 Busy Here 1	,					
	E-B>;p	urpose=call-comple	etion;m=BS			
Comments:		0.17				
SIP 1 (ISC)		SUT L request	51P 2 (Gm) UE B		SIP 2 (Gm) UE C
		ie request	Terminat	ing user activates CF	в	1
			User B becomes			
NOTIFY 200 OK NOTIFY	+ →	NOTIFY 1 200 OK NOTIFY				
	7	200 OK NOTIFT		I		1
INVITE	←		← INVITE			
200 OK INVITE	→		→ 200 Ok	(INVITE		
ACK	÷		← ACK			
INVITE	→					
CASE A	7					
			→ INVITE			
486 (Busy Here) 1	←		← 486 (B	usy Here)		
ACK	→		→ ACK			
CASE B						
-				-	→	INVITE
180 (Ringing)	←			•	←	180 (Ringing)
			Apply post test	routine		
			Apply post test	rouline		

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_016	4.6.8.4	
Test purpose		1	
CCBS: indication is sent if the ori	ainal call was diverted on no Re	plv.	
	5		
In case of a diverted-to user after	CFNR was performed is busy a	nd the callee has subscri	bed the call completion
service, ensure that the terminati			·
 that CCBS is possible at 			
or			
that CCNR is possible a	t User B		
Preconditions:			
SIP header values:			
486 (Busy Here) 1:			
Call-Info: <sip:ue c="">;purpose</sip:ue>	- coll completion:m-PS		
180 (Ringing) 1	a coll completion m ND		
Call-Info: <sip:ue b="">;purpose</sip:ue>			
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE >		INVITE	
180 (Ringing) 1	÷	180 (Ringing)	
- · ·	CFNR app	lies	
CASE A			→ INVITE
486 (Busy Here) 1			
ACK →			→ ACK
CASE B			→ INVITE
			→ ACK
	Apply post test r	outine	
		1	
TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_017	4.6.8.4	
Test purpose			
CCNR: indication is sent if the or	iginal call was diverted on no Re	ply.	
In case of a diverted-to user after			
has subscribed the call completic		nating AS informs the call	er:
 that CCNR is possible a 	t User C		
or			
 that CCNR is possible a 	t User B		
Preconditions:			
SIP header values:			
180 Ringing 1:			
Call-Info: <sip:ue b="">;purpose</sip:ue>	=call-completion;m=NR		
180 Ringing 2	• *		
Call-Info: <sip:ue c="">;purpose</sip:ue>	e=call-completion;m=NR		
Comments:	, ,		
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE -		INVITE	
180 (Ringing) 1		180 (Ringing)	
	•		
	CFNR app	lies	
CASE A	5 upp		
180 (Ringing) 2			✓ 180 (Ringing)
CASE B			
			 ✓ 180 (Ringing)
	Apply post test r	outine	

TSS	TP		Reference	Selection expression
CC/Interaction/CDIV	CC_	N09_018	4.6.8.4	PICS 4.3.2-1/9
Test purpose			-	· · · · ·
CCNL: indication is sent if th	e original call w	vas diverted on	no Reply.	
In and of a diverted to user	ofter CENP we	a parformad ia	not logged in and the calle	a has subscribed the call
In case of a diverted-to user				e has subscribed the call
completion service, ensure t		ang AS informs		
 that CCNL is possible 	ble at User C			
or				
 that CCNR is possi 	ole at User B.			
Preconditions:				
SIP header values:				
480 Temporarily Unavailable				
Call-Info: <sip:ue c="">;put</sip:ue>	rpose=call-com	pletion;m=NL		
180 (Ringing 1				
Call-Info: <sip: b="" ue="">;pu</sip:>	rpose=call-com	pletion;m=NR		
Comments:				
SIP 1 (ISC)		SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE	→		→ INVITE	
180 (Ringing) 1	+		← 180 (Ringing)	
		C	FNR applies	
CASE A		·		UE C is not logged-in
480 (Temporarily Unavailabl	e)1 🗲			
ACK	→			
CASE B				
		Apply pos	t test routine	

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TSS	TP		Reference		Selection expression
CC/Interaction/CDIV	CC_N09_019		4.6.8.4		
Test purpose	·				·
CCBS: Recall after CFI	VR was activated.				
The terminating user ad	tivates CFNR after the or	iginating us	ser has requested the C	CBS	service at the terminating
user. Ensure that the C	C recall is:				
 applied as a C 	C recall				
or					
 forwarded as a 	a normal call.				
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE-B					
To: UE-A					
Event:call-completion					
	cation/call-completion				
cc-state: ready					
INVITE 1: sip: UE-B; m	=BS				
Comments:					
SIP 1 (ISC)	SUT		SIP 2 (Gm) UE B		SIP 3 (Gm) UE C
Invoke	CCBS request				
		er B becor	nes available	1	1
	÷				
200 OK NOTIFY	→				l
			Callee activates C		1
	→				
180 Ringing	←	+	180 Ringing		
CASE B		→	INVITE		
180 Ringing	←	→ ←	180 Ringing		
	•	×.	CFNR is performed	I	
			or mix is perioritieu	→	INVITE
				÷	180 Ringing
180 Ringing	←				
	-	nnly nost	test routine	1	1

TSS	TP		Reference		Selection expression
CC/Interaction/CDIV	CC_N09_020		4.6.8.4		Selection expression
Test purpose	00_1103_020		4.0.0.4		
CCNR: Recall after CFNR wa	as activated				
CONT. Recail after Of NIT wa					
The terminating user activate	s CENR after the origina	atina u	ser has requested the C	CNR	service at the terminating
user. Ensure that the CC reca		alling u			service at the terminating
 applied as a CC rect 					
or					
 forwarded as a norm 	nal call.				
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE-B					
To: UE-A					
Event:call-completion					
Content-Type: application	/call-completion				
cc-state: ready					
INVITE 1: sip: UE-B; m=NR					
Comments:					
SIP 1 (ISC)	SUT		SIP 2 (Gm) UE B		SIP 3 (Gm) UE C
Invoke CCNR					
		beco	mes available	1 1	
200 OK NOTIFY →	•		Callee activates C		
INVITE 1			Callee activates C		
	·	د	INVITE		
180 Ringing		÷	180 Ringing		
		•	100 Kinging		
CASE B		→	INVITE		
180 Ringing		÷	180 Ringing		
······································		-	CFNR is performed	'	
			· · · · · · · · · · · · · · · · · · ·	→	INVITE
180 Ringing 🗧 🗧				←	180 Ringing
5 5	Apply	y post	test routine		5 5

TOO	TD		Deferrer		
TSS	TP		Reference		Selection expression
CC/Interaction/CDIV	CC_N09_021		4.6.8.4		PICS 4.3.2-1/9
Test purpose					
CCNL: Recall after CFNR was	s activated.				
Ensure that the CC recall is:	SCENR after the orig	linating u	ser has requested the C	CNL	service at the terminating user.
 applied as a CC recall is. 	.11				
• applied as a CC reca	(11				
 forwarded as a norm 					
Preconditions:	al Call.				
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE-B					
To: UE-A					
Event:call-completion					
Content-Type: application/	call-completion				
cc-state: ready					
INVITE 1: sip: UE-B; m=NL					
Comments:					
SIP 1 (ISC)	SUT		SIP 2 (Gm) UE B		SIP 3 (Gm) UE C
Invoke CCNL					
	User	r B becoi	mes available		1
200 OK NOTIFY →			Callee activates C	CNID	
INVITE 1			Callee activates C		1
CASE A		د	INVITE		
180 Ringing			180 Ringing		
		`	100 Kinging		
CASE B		→	INVITE		
180 Ringing 🗧 🗲		÷	180 Ringing		
			CFNR is performed	•	
			•	→	INVITE
180 Ringing 🗧 🗲				←	180 Ringing
	Ар	ply post	test routine		

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_022	4.6.8.5	
Test purpose			

CCBS: indication is sent if the original call was diverted on not logged-in.

In case of a diverted-to user after CFNL was performed is busy and the diverted-to user (User C) has subscribed the call completion service, ensure that the terminating AS inform the caller:

that CCBS is possible at User	C			
or				
that CCNL is possible at User	B.			
Preconditions:				
SIP header values:				
486 Busy Here 1:				
Call-Info: <sip:ue c="">;purpose=call-</sip:ue>	completion;m=BS			
480 Temporarily Unavailable 1				
Call-Info: <sip: b="" ue="">;purpose=call-</sip:>	completion;m=NL			
Comments:				
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B		SIP 3 (Gm) UE C
INVITE -				
	CI	FNL applies		
CASE A			→	INVITE
486 (Busy Here) 1 🗧 🗲			←	486 (Busy Here)
ACK →			→	ACK
CASE B			→	INVITE
480 (Temporarily Unavailable) 1			÷	486 (Busy Here)
ACK →				ACK
	Apply post	test routine	·	

ETSI

_023 4.6.8.5
iverted on not logged-in.
formed does not answer the communication request and the diverted-
on service, ensure that the terminating AS inform the caller:
n·m_NP
II,III=INK
n·m–NI
SUT SIP 2 (Gm) UE B SIP 3 (Gm) UE C
CFNL applies
← 180 (Ringing)
→ INVITE
← 180 (Ringing)
pply post test routine
Defense and Option commencies
<u>.024 4.0.0.5 FIC3 4.3.2-1/9</u>
werted on not logged-in
vened on net logged in.
formed is not logged-in and the diverted-to user (User C) has
5
n;m=NL
on;m=NL
SUT SIP 2 (Gm) UE B SIP 3 (Gm) UE C
CENL applies UE C is not logged-in
pply post test routine
→ INVITE ← INVITE ← 180 (Ringing)

TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_025	4.6.8.6	
Test purpose			
CCBS: indication is sent if the or	iginal call was deflected.		
In case of a diverted-to user afte	r CD (alerting) was performed	d is busy and the diverted-to	user has subscribed the call
completion service, ensure that t	he terminating AS informs the	e caller that CCBS is possibl	e at User C.
Preconditions:			
SIP header values:			
486 (Busy Here) 1:			
Call-Info: <sip:ue c="">;purpos</sip:ue>	e=call-completion;m=BS		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE -		INVITE	
180 (Ringing)		180 (Ringing)	
		302 (Moved Temporarily)	
		ACK	
	CD ap	oplies	
			→ INVITE
486 (Busy Here) 1			← 486 (Busy Here)
ACK →		et reutine	→ ACK
	Apply post te	est routine	
TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_026	4.6.8.6	••••••••••••••••••••••••••••••••••••••
Test purpose			
CCNR: indication is sent if the or	riginal call was deflected.		
	3		
In case of a diverted-to user afte	r CD (alerting) was performed	d does not answer the comm	nunication request and the
diverted-to user has subscribed t			
CCNR is possible at User C.		-	
Preconditions:			
SIP header values:			
180 Ringing 1:			
Call-Info: <sip:ue c="">;purpos</sip:ue>	e=call-completion;m=NR		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE →		INVITE	
180 (Ringing)		180 (Ringing)	
		302 (Moved Temporarily)	
		ACK	
	CD ap	oplies	
190 (Dinging) 1			→ INVITE
180 (Ringing) 1	Apply post te	est routine	← 180 (Ringing)
		Scioutine	

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_027	4.6.8.6	PICS 4.3.2-1/9
Test purpose			
	if the original call was deflected.		
	user after CD (alerting) was perform		
Preconditions:	se, ensure that the terminating AS		
SIP header values:			
480 Temporarily Unavail	able 1: •;purpose=call-completion;m=NL		
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm) UE B	SIP 3 (Gm) UE C
INVITE	→	→ INVITE	
180 (Ringing)	+	 ✓ 180 (Ringing) 	
roo (runging)	X	 ← 302 (Moved Temporal 	rily)
		→ ACK	iiy)
		CD applies	UE C is not logged-in
490 (Tomporarily Llague		CD applies	
480 (Temporarily Unavai	-		
ACK	→	t to at noviting	
	Apply pos	t test routine	
TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_028	4.6.8.6	
Test purpose			
CCBS recall is not defled	cted.		
Ensure that a CCBS reca	all is not deflected at the terminati	ng Application Server.	
Preconditions:		0 11	
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE-B			
To: UE-A			
10. UE-A			
Event:call-completior			
Event:call-completior Content-Type: applic			
Event:call-completior Content-Type: applic cc-state: ready	ation/call-completion		
Event:call-completior Content-Type: applic cc-state: ready INVITE 1: sip: UE B;	ation/call-completion m=BS		
Event:call-completior Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE	ation/call-completion m=BS		
Event:call-completior Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B	ation/call-completion m=BS A		
Event:call-completior Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: <	ation/call-completion m=BS	on;m=BS	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: <	ation/call-completion m=BS A		
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC)	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT	ion;m=BS SIP 2 (Gm)	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: <	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT		
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC)	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT 3S request		
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC)	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT SS request User B becc	SIP 2 (Gm)	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT SUT SUT SUT User B beco ← NOTIFY 1	SIP 2 (Gm)	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY	ation/call-completion m=BS A <sip:ue-a>;purpose=call-completi SUT SUT SUT SUT User B beco ← NOTIFY 1</sip:ue-a>	SIP 2 (Gm)	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY 200 OK NOTIFY	ation/call-completion m=BS A <sip:ue-a>;purpose=call-completi SUT SUT SS request User B beco ← NOTIFY 1 → 200 OK NOTIFY</sip:ue-a>	SIP 2 (Gm) omes available	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY 200 OK NOTIFY INVITE 1	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT SUT SUT User B beco ← NOTIFY 1 → 200 OK NOTIFY →	SIP 2 (Gm) │ │ │ omes available ➔ INVITE	
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY 200 OK NOTIFY INVITE 1 180 (Ringing)	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT SS request User B becc ← NOTIFY 1 → 200 OK NOTIFY →	SIP 2 (Gm) omes available → INVITE ← 180 (Ringin	g)
Event:call-completion Content-Type: applic cc-state: ready INVITE 1: sip: UE B; From: UE To: UE B Call-Info: Comments: SIP 1 (ISC) Invoke CCE NOTIFY 200 OK NOTIFY INVITE 1	ation/call-completion m=BS A < <u>sip:UE-A>;purpose=call-completi</u> SUT SUT SUT User B beco ← NOTIFY 1 → 200 OK NOTIFY →	SIP 2 (Gm) omes available → INVITE ← 180 (Ringin	

CC/Interaction/CDIV Test purpose	TP	Reference	Selection expression
Test purpose	CC_N09_029	4.6.8.6	
	,		
CCNR recall is not deflect	ed.		
Ensure that a CCNR recal	I is not deflected at the terminati	ng Application Server.	
Preconditions:			
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE-B			
To: UE-A			
Event:call-completion			
Content-Type: applicat	tion/call-completion		
cc-state: ready INVITE 1: sip: UE B; n			
From: UE A			
To: UE B			
	sip:UE-A>;purpose=call-completi	on:m=NR	
Comments:			
SIP 1 (ISC)	SUT	SIP 2 (Gm)	
Invoke CCBS			
		omes available	
	← NOTIFY 1		
200 OK NOTIFY	→ 200 OK NOTIFY		
INVITE 1	→	→ INVITE	
180 (Ringing)	+	← 180 (Ringin	a)
4xx	÷		J Temporarily)
ACK	→	→ ACK	· · · · · · · · · · · · · · · · · · ·
	<u> </u>		1
7927	ITP	Reference	Selection expression
TSS		1000	
CC/Interaction/CDIV	CC_N09_030	4.6.8.6	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose		4.6.8.6	
CC/Interaction/CDIV		4.6.8.6	
CC/Interaction/CDIV Test purpose CCNL recall is not deflecte	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflecte Ensure that a CCNL recall			
CC/Interaction/CDIV Test purpose CCNL recall is not deflecte Ensure that a CCNL recall Preconditions:	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflecte Ensure that a CCNL recall Preconditions: SIP header values:	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflecte Ensure that a CCNL recall Preconditions: SIP header values:	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: application	ed.		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready	ed. I is not deflected at the terminatin		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n	ed. I is not deflected at the terminatin tion/call-completion n=NL		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A	ed. I is not deflected at the terminatin tion/call-completion n=NL		
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B	ed. I is not deflected at the terminatin tion/call-completion	ng Application Server.	
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B	ed. I is not deflected at the terminatin tion/call-completion n=NL	ng Application Server.	
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s< td=""><td>ed. I is not deflected at the terminatin tion/call-completion</td><td>ng Application Server.</td><td>PICS 4.3.2-1/9</td></s<>	ed. I is not deflected at the terminatin tion/call-completion	ng Application Server.	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s< td=""><td>ed. I is not deflected at the terminatin tion/call-completion n=NL sip:UE-A>;purpose=call-completi</td><td>ng Application Server.</td><td>PICS 4.3.2-1/9</td></s<>	ed. I is not deflected at the terminatin tion/call-completion n=NL sip:UE-A>;purpose=call-completi	ng Application Server.	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s SIP 1 (ISC) Invoke CCBS</s 	ed. I is not deflected at the terminatin tion/call-completion n=NL sip:UE-A>;purpose=call-completi SUT S request User B becc	ng Application Server.	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s SIP 1 (ISC) Invoke CCBS</s 	ed. Lis not deflected at the terminatin tion/call-completion h=NL sip:UE-A>;purpose=call-completi SUT S request User B beco ← NOTIFY 1	on;m=NL	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s SIP 1 (ISC)</s 	ed. I is not deflected at the terminatin tion/call-completion n=NL sip:UE-A>;purpose=call-completi SUT S request User B becc	on;m=NL	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s Comments: SIP 1 (ISC) Invoke CCBS NOTIFY 200 OK NOTIFY</s 	ed. I is not deflected at the terminatin tion/call-completion h=NL Sip:UE-A>;purpose=call-completi SUT S request User B beco ← NOTIFY 1 → 200 OK NOTIFY	on;m=NL SIP 2 (Gm)	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s Comments: SIP 1 (ISC) Invoke CCBS NOTIFY 200 OK NOTIFY INVITE 1</s 	ed. I is not deflected at the terminatin tion/call-completion h=NL sip:UE-A>;purpose=call-completi Sut Sut Srequest User B beco ← NOTIFY 1 → 200 OK NOTIFY →	on;m=NL SIP 2 (Gm) pomes available	PICS 4.3.2-1/9
CC/Interaction/CDIV Test purpose CCNL recall is not deflected Ensure that a CCNL recall Preconditions: SIP header values: NOTIFY 1 sip:O-AS From: UE-B To: UE-A Event:call-completion Content-Type: applicat cc-state: ready INVITE 1: sip: UE B; n From: UE A To: UE B Call-Info: <s Comments: SIP 1 (ISC) Invoke CCBS NOTIFY 200 OK NOTIFY</s 	ed. I is not deflected at the terminatin tion/call-completion h=NL Sip:UE-A>;purpose=call-completi SUT S request User B beco ← NOTIFY 1 → 200 OK NOTIFY	on;m=NL SIP 2 (Gm) omes available → INVITE ← 180 (Ringin	PICS 4.3.2-1/9

TSS	TP		Ref	erence	Selection expression
CC/Interaction/CDIV	CC	_N09_031	4.6	.8.1	
Test purpose					
CCBS recall is not forwa	nrded.				
The originating user acti					
CFU: Ensure that the CO	CBS recall is r	not forwarded if the c	priginating user ha	as activated CFL	J.
Preconditions:					
SIP header values:					
NOTIFY 1 sip:O-AS					
From: UE-B					
To: UE-A					
Event:call-completion					
Content-Type: applic	ation/call-com	npletion			
cc-state: ready					
REFER: sip: UE A; m=					
Refer-To; UE B; met					
INVITE 1: sip: UE B;	m=BS				
From: UE A					
To: UE B					
Call-Info: <sip:ue-a></sip:ue-a>	;purpose=cal	I-completion;m=BS			
Comments:		0.117			
SIP 1 (Gm) UE A		SUT		SIP 2 (ISC)	
Invoke CCI Activate CF					
Activate CF	U to user C	Heer D hee	omes available		
		User b bec			
		200 (
		200 0		200 0K NOTI	- 1
CASE A					
REFER	🗲 REF	FR			
202 Accepted		Accepted			
LUL NUCEPIEU	a 202	noocpieu			
CASE B					
INVITE	← INV	ITE			
180 (Ringing)		(Ringing)			
	- 100		t test routine		

CC/Interaction/CDIV			Reference	Selection expression
	CC_N09_032		4.6.8.1	
Test purpose				
CCNR recall is not forwarded.				
The originating user activates	CCNR. Before the te	rminating user becc	mes available the	originating user activates
CFU. Ensure that the CCNR re				
Preconditions:				
SIP header values:				
NOTIFY 1 sip:O-AS				
From: UE-B				
To: UE-A				
Event:call-completion				
Content-Type: application/	call-completion			
cc-state: ready	·			
REFER: sip: UE A; m=NR				
Refer-To; UE B; method=I				
NVITE 1: sip: UE B; m=NF	२			
From: UE A				
To: UE B				
Call-Info: <sip:ue-a>;purpo</sip:ue-a>	ose=call-completion;r	m=NR		
Comments:				
SIP 1 (Gm) UE A	-	UT	SIP 2 (ISC)	
Invoke CCBS rec				
Activate CFU to u				
	User	B becomes availa		
		NOTIFY		
		200 OK NOTIFY	→ 200 OK NOT	TIFY
	REFER			
202 Accepted	202 Accepted			
CASE B				
NVITE				
180 (Ringing)				
		bly post test routin	e	

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TSS	TP		Reference	Selection expression
CC/Interaction/CDIV	CC_N09_033		4.6.8.1	PICS 4.3.2-1/9
Test purpose				
CCNL recall is not forwar	rded.			
				originating user activates
CFU. Ensure that the CC	NL recall is not forwarde	ed if the originating use	er has activated C	FU.
Preconditions:				
SIP header values:				
NOTIFY 1 sip:O-AS				
From: UE-B				
To: UE-A				
Event:call-completion				
Content-Type: applica	ation/call-completion			
cc-state: ready	NII.			
REFER: sip: UE A; m= Refer-To; UE B; meth				
INVITE 1: sip: UE B;				
From: UE A				
To: UE B				
	;purpose=call-completion	n;m=NL		
Comments:		,		
SIP 1 (Gm) UE A		SUT	SIP 2 (ISC)	
Invoke CCE				
Activate CFI				
	Use	er B becomes availat	ole	
			NOTIFY 1	
		200 OK NOTIFY	→ 200 OK NO ⁻	TIFY
CASE A				
REFER	← REFER			
202 Accepted	→ 202 Accepted			
CASE B				
INVITE	← INVITE			
180 (Ringing)	➔ 180 (Ringing)			
		pply post test routine	9	

TSS	TP	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_034	4.6.8.1	
Test purpose			
CCBS recall is not forwarded.	Originating user is not logged	-in.	
-			
The originating user activates			
CFU. Ensure that the CCBS re	ecall is suspended if the origin	ating user has activated C	FU and is not logged-in.
Preconditions:			
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE-B			
To: UE-A			
Event:call-completion	- II I- ti		
Content-Type: application/	call-completion		
cc-state: ready			
PUBLISH: sip T-AS	purpose=call-completion;m=E		
		5	
P-Assertd-Identi Expires=(> 0)	I.Y. OE A		
Event: presence			
	pplication/pidf+xml		
	1.0" encoding="UTF-8"?>		
<pre><pre>control control cont</pre></pre>			
<pre>tuple id=" a</pre>	ny uri ">		
<status></status>			
	c>closed		
Comments:			
SIP 1 (Gm) UE A	SUT	SIP 2 (IS	iC)
Invoke CCBS red	quest		
Activate CFU to u	iser C		
	User B becon	nes available	
		NOTIFY 🗲 NOTIFY	1
	200 Oł	KNOTIFY 🔿 200 OK I	NOTIFY
		PUBLISH 🗲 PUBLISH	1
			PUBLISH
	Apply post	test routine	

	ГР		erence	Selection expression
	CC_N09_035	4.6.	8.1	
Test purpose				
CCNR recall is not forwarded. Orig	ninating user is not logged-in.			
	IR. Before the terminating user beco			
	is suspended if the originating user	has a	activated CFU ar	id is not logged-in.
Preconditions:				
SIP header values:				
NOTIFY 1 sip:O-AS				
From: UE-B				
To: UE-A				
Event:call-completion	amplation			
Content-Type: application/call- cc-state: ready	completion			
PUBLISH: sip T-AS				
	oose=call-completion;m=NR			
P-Assertd-Identity: L				
Expires=(> 0)				
Event: presence				
Content-Type: applic	cation/pidf+xml			
	encoding="UTF-8"?>			
<presence< td=""><td>5</td><td></td><td></td><td></td></presence<>	5			
- <tuple id=" any u</td><td>ri "></tuple>				
<status></status>				
<basic>cl</basic>	osed			
Comments:				
SIP 1 (Gm) UE A	SUT		SIP 2 (ISC)	
Invoke CCBS reques				
Activate CFU to user	-			
	User B becomes availa			
	NOTIFY	_		.,
	200 OK NOTIFY	→	200 OK NOTIF	Ŷ
	PUBLISH	~	PUBLISH	
	200 OK PUBLISH		200 OK PUBLISH	20
	Apply post test routir		200 OK PUBLI	

TSS	ТР	Reference	Selection expression
CC/Interaction/CDIV	CC_N09_036	4.6.8.1	PICS 4.3.2-1/9
Test purpose			
CCNL recall is not forwarde	ed. Originating user is not logge	d-in.	
	es CCNL. Before the terminating		
	recall is suspended if the origin	nating user has activated	CFU and is not logged-in.
Preconditions:			
SIP header values:			
NOTIFY 1 sip:O-AS			
From: UE-B			
To: UE-A			
Event:call-completion			
Content-Type: application	on/call-completion		
cc-state: ready			
PUBLISH: sip T-AS	A H H C	N 11	
	-A; purpose=call-completion;m=	NL	
P-Assertd-Ide			
Expires=(> 0)			
Event: prese			
	e: application/pidf+xml		
	n="1.0" encoding="UTF-8"?>		
<presence< td=""><td>I and the</td><td></td><td></td></presence<>	I and the		
•	=" any uri ">		
<statu< td=""><td></td><td></td><td></td></statu<>			
Comments:	asic>closed		
SIP 1 (Gm) UE A	SUT	SIP 2 (1	SC)
Invoke CCBS		511 2 (1	56)
Activate CFU t			
Activate CI U t		mes available	
	0301 0 0000	NOTIFY	1
	200 0		NOTIFY
	200 0	1 10 01 200 OK	
		PUBLISH -> PUBLIS	н
	200 Ok		PUBLISH
		test routine	

History

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