



## **Core Network and Interoperability Testing (INT); Interworking between the IP Multimedia (IM)**

**Core Network (CN) subsystem and  
Circuit Switched (CS) networks;  
Conformance Test Specification;  
(3GPP™ Release 10);**

**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 Core Network and Interoperability Testing (INT).

The present document is part 2 of a multi-part deliverable covering the Conformance Test Specification to the Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks (Release 10), as identified below:

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

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

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## Modal verbs terminology

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# 1 Scope

The present document specifies the Test Suite Structure and Test Purposes for SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks based on ETSI TS 129 163 [1] (Release 10).

## 2 References

### 2.1 Normative 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 reference document (including any amendments) applies.

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

- [1] ETSI TS 129 163: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks (3GPP TS 29.163 Release 10)".
- [2] ETSI TS 102 710-1: "Core Network and Interoperability Testing (INT); Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks; Conformance Test Specification; (3GPPTM Release 10); Part 1: Protocol Implementation Conformance Statement (PICS)".
- [3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] Recommendation ITU-T T.38: "Procedures for real-time Group 3 facsimile communication over IP networks".
- [5] Recommendation ITU-T Q.850: "Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN user part".
- [6] ETSI TS 129 658: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; SIP Transfer of IP Multimedia Service Tariff Information; Protocol specification (3GPP TS 29.658 Release 9)".
- [7] Void.

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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.

- [i.1] Recommendation ITU-T E.164: "The international public telecommunication numbering plan".

## 3 Definitions, symbols and abbreviations

### 3.1 Definitions

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

**Implementation Under Test (IUT):** Refer to ISO/IEC 9646-1 [3].

**System Under Test (SUT):** Refer to ISO/IEC 9646-1 [3].

**Test Purpose (TP):** Refer to ISO/IEC 9646-1 [3].

NOTE: This may contain additional information.

### 3.2 Symbols

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

### 3.3 Abbreviations

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

ACM	Address Complete Message
ANM	ANSWER Message
APM	APPLICATION transport Message
APP	APPLICATION transport Parameter
ASE	Application Service Element
CGB	Circuit Group Blocking message
CGBA	Circuit Group Blocking Acknowledge message
COT	Continuity message
GRA	Group Reset Acknowledge message
GRS	Group ReSet message
IAM	Initial Address Message
IUT	Implementation Under Test
oBCI	optional Backward Call Indicator
oFCI	optional Forward Call Indicator
REL	RELEASE message
RLC	ReLEASE Complete message
RSC	ReSET Circuit message
SUT	System Under Test
TP	Test Purpose

## 4 Test Suite Structure (TSS)

The Test Suite Structure is in close alignment with ETSI TS 129 163 [1].

SIP-ISUP			
Basic call	Sending_of_IAM	TP_101_xxx	
	Sending_of_COT	TP_102_xxx	
	Sending_of_SAM	TP_103_xxx	
	Sending_of_18x	TP_104_xxx	
	Sending_of_200_OK	TP_105_xxx	
	Sending_of_REL	TP_106_xxx	
	Receipt_of_REL	TP_107_xxx	
	Receipt_of_RSC-GRS-CGB	TP_108_xxx	
	Receipt_of_REFER	TP_109_xxx	
	Autonomous_Release	TP_110_xxx	
	Charging	TP_121_xxx	

ISUP-SIP			
	Basic call	Sending_of_INVITE	TP_201_xxx
		Receipt_of_COT	TP_202_xxx
		Sending_of_ACM	TP_203_xxx
		Sending_of_CPG	TP_204_xxx
		Receipt_of_200_OK	TP_205_xxx
		Sending_of_ANM	TP_206_xxx
		Sending_of_CON	TP_207_xxx
		Receipt_of_4xx-5xx-6xx	TP_208_xxx
		Receipt_of_BYE	TP_209_xxx
		Receipt_of_REL	TP_210_xxx
		Receipt_of_RSC-GRS-CGB	TP_211_xxx
		Autonomous_Release	TP_212_xxx
		Charging	TP_221_xxx

PSTN-SS		
	PSTN-SS/COL	TP_302_xxx
	PSTN-SS/MCID	TP_303_xxx
	PSTN-SS/SUB	TP_304_xxx
	PSTN-SS/CDIV	TP_305_xxx
	PSTN-SS/ECT	TP_306_xxx
	PSTN-SS/CW	TP_307_xxx
	PSTN-SS/HOLD	TP_308_xxx
	PSTN-SS/CCBS	TP_309_xxx
	PSTN-SS/CCNR	TP_310_xxx
	PSTN-SS/TP	TP_311_xxx
	PSTN-SS/CONF	TP_312_xxx
	PSTN-SS/CUG	TP_313_xxx
	PSTN-SS/MLPP	TP_314_xxx
	PSTN-SS/GVNS	TP_315_xxx
	PSTN-SS/REV	TP_316_xxx
	PSTN-SS/UUS	TP_317_xxx
	PSTN-SS/ACR	TP_318_xxx

IMS-SS		
	IMS-SS/OIP-OIR	TP_401_xxx
	IMS-SS/TIP-TIR	TP_402_xxx
	IMS-SS/CDIV	TP_403_xxx
	PSTN-SS/CONF	TP_404_xxx
	IMS-SS/MCID	TP_406_xxx
	IMS-SS/CUG	TP_407_xxx
	IMS-SS/CC	TP_408_xxx
	IMS-SS/CW	TP_409_xxx

## 5 Test Purposes (TP)

### 5.1 Introduction

#### 5.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see table 5.1.1-1).

**Table 5.1.1-1: TP identifier naming convention scheme**

Identifier: TP_<group>_<nnn>		
<group>	= group	3 digit field representing group reference according to TSS
<nnn>	= TP number	3 digit sequential number (001 to 999)

## 5.1.2 Test strategy

As the base standard ETSI TS 129 163 [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 ETSI TS 102 710-1 [2]. The criteria applied include the following:

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

## 5.1.3 Test purpose structure

The test purpose structure is according to the test suite structure (TSS). The Reference column in each Test Purpose refers to the basic specification [1] except when explicitly stated.

# 6 Test purposes (TP)

## 6.1 SIP-ISUP protocol interworking

### 6.1.1 Incoming call interworking from SIP to ISUP at I-MGCF

#### 6.1.1.1 Sending of IAM

<b>TP number</b>	TP_101_001	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Sending of IAM		
<b>Test Purpose</b>	Ensure that on reception of a SIP INVITE requesting a session, the I-MGCF sends an IAM message.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> 	<b>ISUP</b> IAM

<b>TP number</b>	TP_101_002	<b>Reference</b>	7.2.3.1.1																				
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/																						
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1 AND PICS 6.2.1/2																						
<b>Test Purpose name</b>	Preconditions support indicated in the Supported header COT procedure supported																						
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Supported header. The IAM is immediately sent. The Nature of connection indicator is set to 'continuity check performed on a previous circuit' or 'continuity check required'. After the UPDATE was received, a COT is sent.																						
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'continuity check performed on a previous circuit' or 'continuity check required' <b>COT:</b> Continuity indicator = 'Continuity check successful'																						
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Supported: precondition, 100rel  SDP      a=curr:qos local none            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel  SDP      a=curr:qos local none            a=curr:qos remote none            a=des:qos optional local sendrecv            a=des:qos mandatory remote sendrecv            a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b>  SDP      a=curr:qos local sendrecv            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE  SDP      a=curr:qos local sendrecv            a=curr:qos remote sendrecv            a=des:qos optional local sendrecv            a=des:qos mandatory remote sendrecv</p>																						
<b>Comments</b>																							
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                          <b>MGCF</b>                          <b>ISUP</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">INVITE</td> <td style="width: 33%; text-align: center;">→</td> <td style="width: 33%; text-align: right;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>183 Session Progress</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>PRACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>200 OK (PRACK)</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>UPDATE</td> <td style="text-align: center;">→</td> <td style="text-align: right;">→ COT</td> </tr> <tr> <td>200 OK (UPDATE)</td> <td style="text-align: center;">←</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	INVITE	→	→ IAM	100 Trying	←		183 Session Progress	←		PRACK	→		200 OK (PRACK)	←		UPDATE	→	→ COT	200 OK (UPDATE)	←		
INVITE	→	→ IAM																					
100 Trying	←																						
183 Session Progress	←																						
PRACK	→																						
200 OK (PRACK)	←																						
UPDATE	→	→ COT																					
200 OK (UPDATE)	←																						

<b>TP number</b>	TP_101_003	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Supported header		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Supported header. The IAM is sent after the UPDATE was received. The Nature of connection indicator is set to 'continuity check is not required'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'continuity check is not required'		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Supported: precondition, 100rel</p> <p>SDP      a=curr:qos local none              a=curr:qos remote none              a=des:qos mandatory local sendrecv              a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel</p> <p>SDP      a=curr:qos local none              a=curr:qos remote none              a=des:qos optional local sendrecv              a=des:qos mandatory remote sendrecv              a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b></p> <p>SDP      a=curr:qos local sendrecv              a=curr:qos remote none              a=des:qos mandatory local sendrecv              a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE</p> <p>SDP      a=curr:qos local sendrecv              a=curr:qos remote sendrecv              a=des:qos optional local sendrecv              a=des:qos mandatory remote sendrecv</p>		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b></p> <p>INVITE                      →    100 Trying                 ←    183 Session Progress     ←    PRACK                      →    200 OK (PRACK)            ←    UPDATE                      →    200 OK (UPDATE)           ←</p>	<p style="text-align: center;"><b>MGCF</b></p> <p>→      IAM</p>	<p style="text-align: center;"><b>ISUP</b></p> <p>Apply post test routine</p>

<b>TP number</b>	TP_101_004	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1 AND PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Require header		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Require header. The IAM is immediately sent. The Nature of connection indicator is set to 'continuity check performed on a previous circuit' or 'continuity check required'. After the UPDATE was received, a COT is sent.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'continuity check performed on a previous circuit' or 'continuity check required' <b>COT:</b> Continuity indicator = 'Continuity check successful'		
<b>SIP Parameter values</b>	<b>INVITE:</b> Require: precondition, 100rel SDP            a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>183:</b> Require: 100rel SDP            a=curr:qos local none a=curr:qos remote none a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv a=conf:qos remote sendrecv  <b>UPDATE:</b> SDP            a=curr:qos local sendrecv a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>200 OK UPDATE</b> SDP            a=curr:qos local sendrecv a=curr:qos remote sendrecv a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying 183 Session Progress PRACK 200 OK (PRACK) UPDATE 200 OK (UPDATE)	<b>MGCF</b> → ← → ← → → ←	<b>ISUP</b> IAM COT  <b>Apply post test routine</b>

<b>TP number</b>	TP_101_005	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Require header		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Require header. The IAM is sent after the UPDATE was received. The Nature of connection indicator is set to 'continuity check is not required'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'continuity check is not required'		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Require: precondition, 100rel  SDP            a=curr:qos local none                  a=curr:qos remote none                  a=des:qos mandatory local sendrecv                  a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel  SDP            a=curr:qos local none                  a=curr:qos remote none                  a=des:qos optional local sendrecv                  a=des:qos mandatory remote sendrecv                  a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b>  SDP            a=curr:qos local sendrecv                  a=curr:qos remote none                  a=des:qos mandatory local sendrecv                  a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE  SDP            a=curr:qos local sendrecv                  a=curr:qos remote sendrecv                  a=des:qos optional local sendrecv                  a=des:qos mandatory remote sendrecv</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE              → 100 Trying         ← 183 Session Progress     ← PRACK              → 200 OK (PRACK)     ← UPDATE              → 200 OK (UPDATE)    ← 	<b>MGCF</b> →     IAM <b>ISUP</b> Apply post test routine	

<b>TP number</b>	TP_101_006	<b>Reference</b>	7.3.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1 AND PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Supported header COT procedure supported		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Supported header. The IAM is immediately sent. The Nature of connection indicator is set to 'COT to be expected'. After the UPDATE was received, a COT is sent.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'COT to be expected' <b>COT:</b> Continuity indicator = 'Continuity check successful'		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: precondition, 100rel SDP      a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>183: Require: 100rel</b> SDP      a=curr:qos local none a=curr:qos remote none a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv a=conf:qos remote sendrecv  <b>UPDATE:</b> SDP      a=curr:qos local sendrecv a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>200 OK UPDATE</b> SDP      a=curr:qos local sendrecv a=curr:qos remote sendrecv a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 183 Session Progress ← PRACK → 200 OK (PRACK) ← UPDATE → 200 OK (UPDATE) ←	<b>MGCF</b> → IAM  → COT	<b>ISUP</b>

<b>TP number</b>	TP_101_007	<b>Reference</b>	7.3.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Supported header		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Supported header. The IAM is sent after the UPDATE was received. The Nature of connection indicator is set to 'no COT to be expected'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'no COT to be expected'		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Supported: precondition, 100rel</p> <p>SDP      a=curr:qos local none              a=curr:qos remote none              a=des:qos mandatory local sendrecv              a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel</p> <p>SDP      a=curr:qos local none              a=curr:qos remote none              a=des:qos optional local sendrecv              a=des:qos mandatory remote sendrecv              a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b></p> <p>SDP      a=curr:qos local sendrecv              a=curr:qos remote none              a=des:qos mandatory local sendrecv              a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE</p> <p>SDP      a=curr:qos local sendrecv              a=curr:qos remote sendrecv              a=des:qos optional local sendrecv              a=des:qos mandatory remote sendrecv</p>		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b></p> <p>INVITE                      →    100 Trying                 ←    183 Session Progress     ←    PRACK                      →    200 OK (PRACK)            ←    UPDATE                      →    200 OK (UPDATE)           ←</p> <p style="text-align: right;">→    IAM</p> <p style="text-align: right;"><b>Apply post test routine</b></p>	<b>MGCF</b>	<b>ISUP</b>

<b>TP number</b>	TP_101_008	<b>Reference</b>	7.3.3.1.1																								
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/																										
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1 AND PICS 6.2.1/2																										
<b>Test Purpose name</b>	Preconditions support indicated in the Require header																										
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Require header. The IAM is immediately sent. The Nature of connection indicator is set to 'COT to be expected'. After the UPDATE was received, a COT is sent.																										
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'COT to be expected' <b>COT:</b> Continuity indicator = 'Continuity check successful'																										
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Require: precondition, 100rel  SDP      a=curr:qos local none                a=curr:qos remote none                a=des:qos mandatory local sendrecv                a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel  SDP      a=curr:qos local none                a=curr:qos remote none                a=des:qos optional local sendrecv                a=des:qos mandatory remote sendrecv                a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b>  SDP      a=curr:qos local sendrecv                a=curr:qos remote none                a=des:qos mandatory local sendrecv                a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE  SDP      a=curr:qos local sendrecv                a=curr:qos remote sendrecv                a=des:qos optional local sendrecv                a=des:qos mandatory remote sendrecv</p>																										
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<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>183 Session Progress</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>PRACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>200 OK (PRACK)</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>UPDATE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ COT</td> </tr> <tr> <td>200 OK (UPDATE)</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		183 Session Progress	←		PRACK	→		200 OK (PRACK)	←		UPDATE	→	→ COT	200 OK (UPDATE)	←			
Mg	MGCF	ISUP																									
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PRACK	→																										
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UPDATE	→	→ COT																									
200 OK (UPDATE)	←																										

<b>TP number</b>	TP_101_009	<b>Reference</b>	7.3.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/2		
<b>Test Purpose name</b>	Preconditions support indicated in the Require header		
<b>Test Purpose</b>	Ensure that the Preconditions procedure is successful if the support of Precondition is indicated in the Require header. The IAM is sent after the UPDATE was received. The Nature of connection indicator is set to 'no COT to be expected'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = 'no COT to be expected'		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Require: precondition, 100rel            SDP            a=curr:qos local none                          a=curr:qos remote none                          a=des:qos mandatory local sendrecv                          a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel            SDP            a=curr:qos local none                          a=curr:qos remote none                          a=des:qos optional local sendrecv                          a=des:qos mandatory remote sendrecv                          a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b>            SDP            a=curr:qos local sendrecv                          a=curr:qos remote none                          a=des:qos mandatory local sendrecv                          a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE            SDP            a=curr:qos local sendrecv                          a=curr:qos remote sendrecv                          a=des:qos optional local sendrecv                          a=des:qos mandatory remote sendrecv</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 183 Session Progress ← PRACK → 200 OK (PRACK) ← UPDATE → 200 OK (UPDATE) ←	<b>MGCF</b> → IAM <b>ISUP</b> Apply post test routine	

<b>TP number</b>	TP_101_009_a	<b>Reference</b>	7.2.3.1.1																		
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/																				
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1																				
<b>Test Purpose name</b>	Preconditions fulfilled in the INVITE request																				
<b>Test Purpose</b>	Ensure that the Preconditions procedure is fulfilled indicated in the SDP received in the INVITE request. The IAM is immediately sent. The Nature of connection indicator is set to 'continuity check is not required'.																				
<b>ISUP Parameter values</b>	IAM: Nature of connection indicator = 'continuity check is not required'																				
<b>SIP Parameter values</b>	<p><b>INVITE:</b>            Supported: precondition, 100rel            or            Require: precondition, 100rel            SDP      a=curr:qos local sendrecv            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos none remote sendrecv</p> <p><b>180</b>            SDP      a=curr:qos local none            a=curr:qos remote sendrecv            a=des:qos none local sendrecv            a=des:qos mandatory remote sendrecv</p>																				
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td>PRACK</td> <td>→</td> <td></td> </tr> <tr> <td>200 OK (PRACK)</td> <td>←</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM	PRACK	→		200 OK (PRACK)	←		<b>Apply post test routine</b>	
Mg	MGCF	ISUP																			
INVITE	→	→ IAM																			
100 Trying	←																				
180 Ringing	←	← ACM																			
PRACK	→																				
200 OK (PRACK)	←																				

<b>TP number</b>	TP_101_009_b	<b>Reference</b>	7.3.3.1.1																		
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/																				
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1																				
<b>Test Purpose name</b>	Preconditions fulfilled in the INVITE request																				
<b>Test Purpose</b>	Ensure that the Preconditions procedure is fulfilled indicated in the SDP received in the INVITE request. The IAM is immediately sent. The Nature of connection indicator is set to 'no COT to be expected'.																				
<b>ISUP Parameter values</b>	IAM: Nature of connection indicator = 'no COT to be expected'																				
<b>SIP Parameter values</b>	<p><b>INVITE:</b>            Supported: precondition, 100rel            or            Require: precondition, 100rel            SDP      a=curr:qos local sendrecv            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos none remote sendrecv</p> <p><b>180</b>            SDP      a=curr:qos local none            a=curr:qos remote sendrecv            a=des:qos none local sendrecv            a=des:qos mandatory remote sendrecv</p>																				
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Mg	MGCF	ISUP																			
INVITE	→	→ IAM																			
100 Trying	←																				
180 Ringing	←	← ACM																			
PRACK	→																				
200 OK (PRACK)	←																				

<b>TP number</b>	TP_101_010	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Unsupported media type is rejected 488 is sent		
<b>Test Purpose</b>	Ensure that an unsupported media type is rejected a 488 Not Acceptable Here final response is sent to the calling user.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: SDP: m= video 4713 RTP/AVP 31		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 488 Not Acceptable Here ACK	MGCF → ← →	ISUP

<b>TP number</b>	TP_101_011	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Unsupported media type is rejected session successful		
<b>Test Purpose</b>	Ensure that an unsupported media type is rejected. The SUT sends in the SDP answer the port number '0' for the concerned media type.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: SDP: m=audio 4711 RTP/AVP 8 m= video 4713 RTP/AVP 31  180 Ringing or 183 Session Progress SDP: m=audio <appropriate Port #> RTP/AVP 8 m=video 0 RTP/AVP 31		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying <b>CASE A</b> 180 Ringing <b>CASE B</b> 183 Session Progress	MGCF → ← → IAM ← ACM → ← → ← → Apply post test routine	ISUP

<b>TP number</b>	TP_101_012	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Unsupported codec is deselected		
<b>Test Purpose</b>	Ensure that the SUT removes a codec from the codec list in the SDP answer if the codec is an unsupported codec.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP: m=audio 4711 RTP/AVP <unsupported codec> 8  180 Ringing or 183 Session Progress SDP: m=audio <appropriate Port #> RTP/AVP 8		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ←  <b>CASE A</b> 180 Ringing ←  <b>CASE B</b> 183 Session Progress ←	<b>MGCF</b>  → IAM  ← ACM	<b>ISUP</b>  <b>Apply post test routine</b>

<b>TP number</b>	TP_101_013	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	INVITE request without SDP offer received		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request without a SDP offer, the SUT sends a SDP offer in the first reliable non-failure message. The TMR in the sent INVITE is set to '3,1 kHz audio'.		
<b>ISUP Parameter values</b>	IAM: TMR 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: 100rel  180 Ringing or 183 Session Progress SDP: m=audio 4711 RTP/AVP 8		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ←  <b>CASE A</b> 180 Ringing ← PRACK → 200 OK PRACK ←	<b>MGCF</b>  → IAM  ← ACM	<b>ISUP</b>  <b>Apply post test routine</b>

<b>TP number</b>	TP_101_014	<b>Reference</b>	7.2.3.1.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	To header tag is sent in the first provisional response		
<b>Test Purpose</b>	Ensure that a To header tag is contained in the first provisional response.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: To: <URI>  180 Ringing or 183 Session Progress: To: <URI>; <tag>		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ←	ISUP IAM ACM
	<b>CASE A</b> 180 Ringing	←	
	<b>CASE B</b> 183 Session Progress	←	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_101_015	<b>Reference</b>	7.2.3.1.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Coding of called party number		
<b>Test Purpose</b>	<p>Ensure that an IAM is sent after an INVITE request was received.</p> <ul style="list-style-type: none"> <li>In case of the 'CC' of the received INVITE request URI is equal to the country code in which the next hop terminates: remove 'CC' from the user info and send the remaining part as digits in the called party number. The nature of address indicator is set to '<b>National (Significant) number</b>'.</li> <li>In case of the 'CC' of the received INVITE request URI is <b>not</b> equal to the country code in which the next hop terminates: send the unchanged part of the request URI without '+' as digits in the called party number. The nature of address indicator is set to '<b>International number</b>'.</li> </ul> <p>The internal Network Number Indicator = 'routing to internal network number not allowed' Numbering Plan Indicator = 'ISDN (Telephony) numbering plan (Recommendation E.164)'.</p>		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ←	ISUP IAM
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_101_016	<b>Reference</b>	7.2.3.1.2.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.1/21		
<b>Test Purpose name</b>	SendingCompleteIndication is mapped into a hex digit 'F' in the called party number		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML SendingCompleteIndication element a hex digit 'F' is sent at last digit in the called party number.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ←	ISUP IAM
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_101_017	<b>Reference</b>	7.2.3.1.2.2									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	PICS 6.1.1/1											
<b>Test Purpose name</b>	Nature of connection indicator											
<b>Test Purpose</b>	<p>Ensure that an IAM is sent after an INVITE request was received.  The nature of connection indicator is set:  <b>Satellite indicator</b> = 'no satellite circuit in the connection'.  <b>Continuity check indicator</b> = 'continuity check not required' or 'continuity check required'  or 'continuity check performed on a previous circuit'.  <b>Echo control device indicator</b></p> <ul style="list-style-type: none"> <li>• TMR audio 3,1 kHz or speech = outgoing echo control device included.</li> <li>• TMR 64 kBit/s or HLC 'Facsimile Group 2/3' = 'outgoing echo control device not included'.</li> </ul>											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>Mg</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>ISUP</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <b>Apply post test routine</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	IAM										
100 Trying	←											

<b>TP number</b>	TP_101_018	<b>Reference</b>	7.2.3.1.2.2									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	PICS 6.1.1/2											
<b>Test Purpose name</b>	Nature of connection indicator											
<b>Test Purpose</b>	<p>Ensure that an IAM is sent after an INVITE request was received.  The nature of connection indicator is set:  <b>Satellite indicator</b> = 'no satellite circuit in the connection'.  <b>Continuity check indicator</b> = 'no COT to be expected or 'COT to be expected'.  <b>Echo control device indicator</b> = outgoing echo control device included.</p>											
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<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	IAM										
100 Trying	←											

<b>TP number</b>	TP_101_019	<b>Reference</b>	7.2.3.1.2.3									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	NOT PICS 6.2.1/5											
<b>Test Purpose name</b>	Forward Call indicator - 3,1 kBit/s no PSTN XML attachment present											
<b>Test Purpose</b>	<p>Ensure that an IAM is sent after an INVITE request was received. If no PSTN XML attachment is present and the TMR is set to audio ,the Forward call indicator is coded as follows:</p> <ul style="list-style-type: none"> <li>• End-to-end method indicator = ('00') no end-to-end method available (only link-by-link method available).</li> <li>• Interworking indicator = ('1') interworking encountered.</li> <li>• End-to-end information indicator = ('0') no end-to-end information available.</li> <li>• ISDN user part/BICC indicator = ('0') ISDN user part/BICC not used all the way.</li> <li>• ISDN user part/BICC preference indicator = ('01') ISDN user part/BICC not required all the way.</li> <li>• ISDN access indicator = ('0') originating access non-ISDN.</li> <li>• SCCP method indicator = ('00') no indication.</li> </ul>											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>Mg</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>ISUP</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <b>Apply post test routine</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	IAM										
100 Trying	←											

<b>TP number</b>	TP_101_020	<b>Reference</b>	7.2.3.1.2.3									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	NOT PICS 6.2.1/5 AND NOT PICS 6.2.1/6											
<b>Test Purpose name</b>	Forward Call indicator - 64 kBit/s no PSTN XML attachment present											
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. If no PSTN XML attachment is present and the TMR 64 kBit/s <b>has no impact</b> of the coding of the Forward call indicator. The Forward call indicator is coded as follows: <ul style="list-style-type: none"> <li>• End-to-end method indicator = ('00') no end-to-end method available (only link-by-link method available).</li> <li>• Interworking indicator = ('1') interworking encountered.</li> <li>• End-to-end information indicator = ('0') no end-to-end information available.</li> <li>• ISDN user part/BICC indicator = ('0') ISDN user part/BICC not used all the way.</li> <li>• ISDN user part/BICC preference indicator = ('01') ISDN user part/BICC not required all the way.</li> <li>• ISDN access indicator = ('0') originating access non-ISDN.</li> <li>• SCCP method indicator = ('00') no indication.</li> </ul>											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33.33%;"><b>Mg</b></td> <td style="width: 33.33%;"><b>MGCF</b></td> <td style="width: 33.33%;"><b>ISUP</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <b>Apply post test routine</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	IAM										
100 Trying	←											

<b>TP number</b>	TP_101_021	<b>Reference</b>	7.2.3.1.2.3									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	NOT PICS 6.2.1/5 AND PICS 6.2.1/6											
<b>Test Purpose name</b>	Forward Call indicator - 64 kBit/s no PSTN XML attachment present											
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. If no PSTN XML attachment is present and the TMR 64 kBit/s <b>has impact</b> of the coding of the Forward call indicator, the Forward call indicator is coded as follows: <ul style="list-style-type: none"> <li>• End-to-end method indicator = ('00') no end-to-end method available (only link-by-link method available).</li> <li>• Interworking indicator = ('0') no interworking encountered.</li> <li>• End-to-end information indicator = ('0') no end-to-end information available.</li> <li>• ISDN user part/BICC indicator = ('1') ISDN user part/BICC used all the way.</li> <li>• ISDN user part/BICC preference indicator = ('01') ISDN user part/BICC not required all the way.</li> <li>• ISDN access indicator = ('1') originating access ISDN.</li> <li>• SCCP method indicator = ('00') no indication.</li> </ul>											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33.33%;"><b>Mg</b></td> <td style="width: 33.33%;"><b>MGCF</b></td> <td style="width: 33.33%;"><b>ISUP</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <b>Apply post test routine</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	IAM										
100 Trying	←											

<b>TP number</b>	TP_101_022	<b>Reference</b>	7.2.3.1.2.3, Table 02a								
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/										
<b>Selection criteria</b>	PICS 6.2.1/5										
<b>Test Purpose name</b>	Forward Call indicator PSTN XML Pi 6 attachment present										
<b>Test Purpose</b>	<p>Ensure that an IAM is sent after an INVITE request was received. If the PSTN XML attachment is present the ProgressIndicator value ProgressDescription = 6, the Forward call indicator is coded as follows:</p> <ul style="list-style-type: none"> <li>• End-to-end method indicator = ('00') no end-to-end method available (only link-by-link method available).</li> <li>• Interworking Indicator = ('0') no interworking encountered (No. 7 signalling all the way).</li> <li>• End-to-end information indicator = ('0') no end-to-end information available.</li> <li>• ISDN user part/BICC indicator = ('1') ISDN user part/BICC used all the way.</li> <li>• ISDN user part/BICC preference indicator = ('01') ISDN user part/BICC not required all the way.</li> <li>• ISDN access indicator = ('1') originating access ISDN.</li> <li>• SCCP method indicator = ('00') no indication.</li> </ul>										
<b>ISUP Parameter values</b>	IAM: Forward call indicator										
<b>SIP Parameter values</b>	<p>INVITE:</p> <p>PSTM XML MIME body</p> <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt;</pre> <p>PSTN</p> <p>    ProgressIndicator</p> <p>    ProgressOctet3</p> <p>        CodingStandard&gt;00&lt;</p> <p>        Location&gt;yyyy&lt;</p> <p>    ProgressOctet4</p> <p>        ProgressDescription&gt;0000110&lt;</p>										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">Mg</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		
Mg	MGCF	ISUP									
INVITE	→	→ IAM									
100 Trying	←										

<b>TP number</b>	TP_101_023	<b>Reference</b>	7.2.3.1.2.4								
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/										
<b>Selection criteria</b>											
<b>Test Purpose name</b>	Mapping of calling party category										
<b>Test Purpose</b>	Ensure that a cpc parameter SIP_CPC received in the P-Asserted-Identity URI parameter and the "language" in the Accept-Language SIP_LANG header is mapped into the calling party parameter category ISUP_CPC in the sent IAM. The mapping is described in table 6.1.1.1-1.										
<b>ISUP Parameter values</b>	IAM: Calling Party Category = ISUP_CPC										
<b>SIP Parameter values</b>	INVITE: P-Asserted-Identity = PARAM, Accept-Language = SIP_LANG										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">Mg</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		
Mg	MGCF	ISUP									
INVITE	→	→ IAM									
100 Trying	←										

**Table 6.1.1.1-1: Coding of calling party category**

Values for test purposes TP101032			
SIP_CPC		ISUP_CPC	
	cpc received in a P-Asserted-Identity PARAM	Accept-Language SIP_LANG	Sent Calling party's category
VA_01	operator	fr	operator, language French
VA_02	operator	en	operator, language English
VA_03	operator	de	operator, language German
VA_04	operator	ru	operator, language Russian
VA_05	operator	es	operator, language Spanish
VA_06	ordinary		ordinary calling subscriber
VA_07	test		test call
VA_08	payphone		payphone
VA_09	mobile-hplmn		mobile terminal located in the home PLMN
VA_10	mobile-vplmn		mobile terminal located in a visited PLMN
VA_11	unknown		calling party's category unknown at this time

TP number	TP_101_023A	Reference	7.2.3.1.2.4
TSS reference	SIP-ISUP/Basic call/Sending_of_IAM/		
Selection criteria	PICS 6.2.1/24		
Test Purpose name	Mapping of calling party category		
Test Purpose	Ensure that a cpc parameter value 'emergency' received in the P-Asserted-Identity URI parameter is mapped into the calling party parameter category 'emergency service call per ANSI Standard' in the sent IAM.		
ISUP Parameter values	IAM: Calling Party Category = emergency service call per ANSI Standard		
SIP Parameter values	INVITE: P-Asserted-Identity cpc= emergency		
Comments			
Message flows	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

TP number	TP_101_024	Reference	7.2.3.1.2.5
TSS reference	SIP-ISUP/Basic call/Sending_of_IAM/		
Selection criteria	PICS 6.2.4/8		
Test Purpose name	G.711 µ-law Coding of TMR		
Test Purpose	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '3,1 kHz audio' derived from the codec PCMU.		
ISUP Parameter values	IAM: TMR 3,1 kHz audio		
SIP Parameter values	INVITE: SDP m=audio <port #> RTP/AVP 0		
Comments			
Message flows	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_101_024A	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/8 AND PICS 6.2.4/9		
<b>Test Purpose name</b>	G.711 µ-law Coding of TMR		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '3,1 kHz audio' derived from the codec PCMU.		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP <dynamic-PT> a=rtpmap: <dynamic-PT> PCMU/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b>	<b>ISUP</b> IAM
	↔ <b>Apply post test routine</b>		

<b>TP number</b>	TP_101_025	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/5		
<b>Test Purpose name</b>	G.711 A-law Coding of TMR		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '3,1 kHz audio' derived from the codec PCMA.		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP 8 a=rtpmap:8 PCMA/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b>	<b>ISUP</b> IAM
	↔ <b>Apply post test routine</b>		

<b>TP number</b>	TP_101_025A	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/5 AND PICS 6.2.4/9		
<b>Test Purpose name</b>	G.711 A-law Coding of TMR		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '3,1 kHz audio' derived from the codec PCMA.		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP <dynamic-PT> a=rtpmap: <dynamic-PT> PCMA/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b>	<b>ISUP</b> IAM
	↔ <b>Apply post test routine</b>		

<b>TP number</b>	TP_101_026	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/1		
<b>Test Purpose name</b>	CLEARMODE Coding of TMR		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '64 kBit/s unrestricted' derived from the CLEARMODE codec.		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR 64 kBit/s unrestricted		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP <dynamic-PT> a=rtpmap: <dynamic-PT> CLEARMODE/8000		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_101_027	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/6		
<b>Test Purpose name</b>	T.38 Coding of TMR		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The Transmission Medium Requirement parameter in the IAM is set to '3,1 kHz audio' derived from the T.38 codec.		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=image <port #> udptl t38 <b>or</b> tcptl t38 a=[Based on ITU-T T.38 [4]] m=audio <port #> RTP/AVP G.711		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

Table 6.1.1.1-2: Void

<b>TP number</b>	TP_101_028	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/1		
<b>Test Purpose name</b>	CLEARMODE Coding of USI		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The User service Information parameter in the IAM if present is set to 'Unrestricted digital information' or 'Unrestricted digital inf. w/tones/ann' if the first stated codec was set to CLEARMODE.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI Information Transport Capability Unrestricted digital information <b>or</b> Unrestricted digital inf. w/tones/ann		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP <dynamic-PT> a=rtpmap: <dynamic-PT> CLEARMODE/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

<b>TP number</b>	TP_101_029	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/6		
<b>Test Purpose name</b>	Fax T.38 Coding of USI		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The User service Information parameter in the IAM if present is set to '3,1 kHz audio' if the first stated codec was set to T.38.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI Information Transport Capability 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=image 4<port #> udptl t38 <b>or</b> tcptl t38 a=[Based on ITU-T T.38 [4]] m=audio <port #> RTP/AVP G.711		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

Table 6.1.1.1-3: Void

<b>TP number</b>	TP_101_030	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.4/6		
<b>Test Purpose name</b>	T.38 Coding of HLC		
<b>Test Purpose</b>	Ensure that an IAM is sent after an INVITE request was received. The High Layer Compatibility parameter in the IAM if present is set according the mapping described in table 6.1.1.1-4.		
<b>ISUP Parameter values</b>	<b>IAM:</b> HLC High Layer Characteristics Identification Facsimile Group 2/3		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=image 4<port #> udptl t38 or tcptl t38 a=[Based on ITU-T T.38 [4]] m=audio <port #> RTP/AVP G.711		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

Table 6.1.1.1-4: Coding of HLC

HLC_VA	m= line			a= line	HLC parameter (optional)
	<media>	<transport>	<fmt-list>	rtpmap:<dynamic-PT> <encoding name> <clock rate>[<encoding parameters>]	High Layer Characteristics Identification
VA_01	image	Udptl	t38	Based on ITU-T T.38 [4]	"Facsimile Group 2/3"
VA_02	image	tcptl	t38	Based on ITU-T T.38 [4]	"Facsimile Group 2/3"

<b>TP number</b>	TP_101_031	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML HighLayerCompatibility		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML attachment in an INVITE request containing a HighLayerCompatibility element, this information is mapped into a High Layer Compatibility IE present in an ISUP Access Transport Parameter the High Layer Characteristics value is derived from the PSTN XMLHighLayerCharacteristics element.		
<b>ISUP Parameter values</b>	<b>IAM:</b> ATP High Layer Compatibility High Layer Characteristics>HLC_value		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.1.1.1-5: Mapping of PSTN XML HighLayerCharacteristic to ISUP ATP  
High layer compatibility**

HLC_value	XML HighLayerCharacteristic	DSS1 High layer characteristics identification
HLC_VA_1	'0000001'	Telephony
HLC_VA_2	'0000100'	Facsimile Group 2/3
HLC_VA_3	'0100001'	Facsimile Group 4 Class I
HLC_VA_4	'0100100'	Facsimile service Group 4, Classes II and III
HLC_VA_5	'0110010'	Syntax based Videotex
HLC_VA_6	'0110011'	International Videotex interworking via gateways or interworking units
HLC_VA_7	'0110101'	Telex service
HLC_VA_8	'1000010'	FTAM application
HLC_VA_9	'1100000'	Videotelephony

TP number	TP_101_032	Reference	7.2.3.1.2.5
TSS reference	SIP-ISUP/Basic call/Sending_of_IAM/		
Selection criteria	PICS 6.2.1/5		
Test Purpose name	Mapping of PSTN XML LowLayerCompatibility		
Test Purpose	Ensure that on receipt of a PSTN XML attachment in an INVITE request containing a LowLayerCompatibility element, this information is mapped into a Low Layer Compatibility IE present in an ISUP Access Transport Parameter the Information Transfer Capability value is derived from the PSTN XMLInformationTransferCapability element.		
ISUP Parameter values	IAM: ATP Low Layer Compatibility InformationTransferCapability=ITC_VA		
SIP Parameter values	INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability>ITC_VA< LLOctet4> TransferMode>00< InformationTransferRate>10000<		
Comments			
Message flows	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.1.1.1-6: Mapping of PSTN XML LowLayerCompatibility to ISUP ATP  
Low Layer Compatibility**

ITC_value	XML LLC InformationTransferCapability	LLC Information transfer capability
ITC_VA_1	'00000'	Speech
ITC_VA_2	'10000'	3,1 kHz audio
ITC_VA_3	'01001'	Unrestricted digital info
ITC_VA_4	'10001'	7 kHz audio

<b>TP number</b>	TP_101_033	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability into TMR and USI		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML attachment in an INVITE request containing a BearerCapability element, this information is mapped into a <b>User Service Information</b> Parameter the Information Transfer Capability value is derived from the PSTN XMLInformationTransferCapability element.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI Information Transfer Capability=ITC_value		
<b>SIP Parameter values</b>	<?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability>ITC_value< BCoctet4 TransferMode>00< InformationTransferRate>10000< BCoctet5 Layer1Identification>01< UserInfoLayer1Protocol>00011<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>ISUP</b> IAM	<b>ISUP</b> Apply post test routine

Table 6.1.1.1-7: Mapping of PSTN XML BearerCapability to ISUP User Service Information

ITC_value	XML InformationTransferCapability	USI Information transfer capability
ITC_VA_1	'00000'	Speech
ITC_VA_2	'10000'	3,1 kHz audio
ITC_VA_3	'01000'	unrestricted digital information

<b>TP number</b>	TP_101_034	<b>Reference</b>	7.2.3.1.2.5
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.1/5AND PICS 6.2.1/7		
<b>Test Purpose name</b>	Mapping of PSTN XML HighLayerCompatibility into User Teleservice Information parameter		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML attachment in an INVITE request containing a HighLayerCompatibility element, this information is mapped into a <b>User Teleservice Information</b> parameter the High Layer Characteristics value is derived from the PSTN XML HighLayerCharacteristics element.		
<b>ISUP Parameter values</b>	<b>IAM:</b> UTI High Layer Characteristics>HLC_value		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>ISUP</b> IAM	<b>ISUP</b> Apply post test routine

**Table 6.1.1.1-8: Mapping of PSTN XML HighLayerCharacteristic to ISUP User Teleservice Information**

HLC_value	XML HighLayerCharacteristic	DSS1 High layer characteristics identification
HLC_VA_1	'0000001'	Telephony
HLC_VA_2	'0000100'	Facsimile Group 2/3
HLC_VA_3	'0100001'	Facsimile Group 4 Class I
HLC_VA_4	'0100100'	Facsimile service Group 4, Classes II and III
HLC_VA_5	'0110010'	Syntax based Videotex
HLC_VA_6	'0110011'	International Videotex interworking via gateways or interworking units
HLC_VA_7	'0110101'	Telex service
HLC_VA_8	'1000010'	FTAM application
HLC_VA_9	'1100000'	Videotelephony

TP number	TP_101_035	Reference	7.2.3.1.2.5a
TSS reference	SIP-ISUP/Basic call/Sending_of_IAM/		
Selection criteria	PICS 6.2.1/5 AND PICS 6.2.4/1 AND PICS 6.2.4/7		
Test Purpose name	Fall Back connection type is sent		
Test Purpose	Ensure that on receipt of two BearerCapability elements in a INVITE PSTN XML MIME body: <ul style="list-style-type: none"> <li>The first stated codec in the SDP m line is the equivalent to the second BearerCapability element, the BearerCapability element is mapped into the User Service prime (USI prime) parameter in the sent IAM, the TMR is set according the second PSTN XML InformationTransferCapability value.</li> <li>The second stated codec in the SDP m line is the equivalent to the first BearerCapability element, the BearerCapability element is mapped into the User Service Information (USI) parameter in the sent IAM, the TMR prime is set according the first PSTN XML InformationTransferCapability value.</li> </ul>		
ISUP Parameter values	<b>IAM:</b> TMR = second InformationTransferCapability TMR prime = first InformationTransferCapability USI = first BearerCapability USI prime = second BearerCapability		
SIP Parameter values	<b>INVITE:</b> m=audio <port #> RTP/AVP <dynamic-PT> 8/0 a=rtpmap: <dynamic-PT> CLEARMODE/8000  PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoctet3 CodingStandard>00< InformationTransferCapability> <b>00000</b> < <b>or</b> InformationTransferCapability> <b>10000</b> < .... <b>BearerCapability</b> BCoctet3 CodingStandard>00< InformationTransferCapability> <b>10001</b> < ....		
Comments	SDP: m line contains as the first codec CLEARMODE and as the second codec a G.711 codec		
Message flows	<b>Mg</b> INVITE → 100 Trying ←	<b>MGCF</b> → IAM	<b>ISUP</b> Apply post test routine

<b>TP number</b>	TP_101_036	<b>Reference</b>	7.2.3.1.2.5a												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/														
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/7														
<b>Test Purpose name</b>	Fall Back connection type is not sent														
<b>Test Purpose</b>	<p>Ensure that on receipt of two BearerCapability elements in a INVITE PSTN XML MIME body:</p> <ul style="list-style-type: none"> <li>• The first stated codec in the SDP m line is the equivalent to the second BearerCapability element, the BearerCapability element.</li> <li>• The second stated codec in the SDP m line is the equivalent to the first BearerCapability element, the BearerCapability.</li> </ul> <p>Ensure that the IAM does not contain the Fallback connection type if the succeeding network does not support the Fallback connection type:</p> <ul style="list-style-type: none"> <li>• TMR = Speech or audio 3,1 kHz.</li> <li>• USI = Speech or audio 3,1 kHz.</li> <li>• A TMR prime parameter is not present.</li> <li>• A USI prime is not present.</li> </ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR = first InformationTransferCapability TMR prime = is not present USI = speech or audio 3,1 kHz USI prime = not present														
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=audio <port #> RTP/AVP <dynamic-PT> 8/0 a=rtpmap: <dynamic-PT> CLEARMODE/8000  PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>00000</b> < <b>or</b> InformationTransferCapability> <b>10000</b> < <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>10001</b> <														
<b>Comments</b>	SDP: m line contains as the first codec CLEARMODE and as the second codec a G.711 codec. <b>Configuration:</b> the succeeding network does not support the Fall back connection type.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>				
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>													
INVITE	→	→ IAM													
100 Trying	←														
<b>Apply post test routine</b>															

<b>TP number</b>	TP_101_037	<b>Reference</b>	7.2.3.1.2.9												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/														
<b>Selection criteria</b>	PICS 6.2.1/8														
<b>Test Purpose name</b>	Max-Forwards received, HOP is sent														
<b>Test Purpose</b>	Ensure that on receipt of the Max-Forwards header, the value is mapped into the Hop counter. The value of the HOP is created from the Max-Forwards header value by applying a given factor.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>				
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>													
INVITE	→	→ IAM													
100 Trying	←														
<b>Apply post test routine</b>															

<b>TP number</b>	TP_101_038	<b>Reference</b>	7.2.3.1.2.10
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML attachment in an INVITE request containing a ProgressIndicator element, this information is mapped into a Progress Indicator IE present in an ISUP Access Transport Parameter the Progress description value is derived from the PSTN XML ProgressDescription element.		
<b>ISUP Parameter values</b>	<b>IAM:</b> ATP Progress Indicator Progress Description=PI_value		
<b>SIP Parameter values</b>	<b>INVITE:</b> <?xml version="1.0" encoding="utf-8"?> PSTN <b>ProgressIndicator</b> ProgressOctet3 CodingStandard>00< Location>0000< ProgressOctet4 ProgressDescription>PI_value<		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.1.1.1-9: Mapping of PSTN XML ProgressIndicator to ISUP ATP Progress Indicator**

PI_value	XML ProgressIndicator ProgressDescription	ATP Progress Indicator value
PI_VA_1	'0000001'	Call is not end-to-end ISDN; further call progress information may be available in-band
PI_VA_2	'00000010'	Destination address is non-ISDN
PI_VA_3	'00000011'	Origination address is non-ISDN
PI_VA_4	'0000100'	Call has returned to the ISDN
PI_VA_5	'0000101'	Interworking has occurred and has resulted in a telecommunication service change
PI_VA_6	'0001000'	In-band information or an appropriate pattern is now available

<b>TP number</b>	TP_101_039	<b>Reference</b>	7.2.3.1.2A.1.1									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	PICS 6.2.2/1											
<b>Test Purpose name</b>	Number Portability Separate Directory Number Addressing Method is used. A Called Directory Number is present in the sent IAM											
<b>Test Purpose</b>	<p>Ensure that on receipt of an initial INVITE request containing the <b>rn</b> and <b>npdi</b> parameters in the request line, an IAM is sent. The <b>Called Party Number</b> is set to:</p> <ul style="list-style-type: none"> <li><b>Nature of address indicator:</b> "Network routing number in national (significant) number format" or "National (significant) number" or "Network routing number in network specific number format".</li> <li><b>Internal Network Number Indicator:</b> routing to internal network number not allowed.</li> <li><b>Numbering plan Indicator:</b> ISDN (Telephony) numbering plan (<i>Recommendation E.164</i>).</li> <li><b>Address Signal:</b> derived from the user info of the request URI the country code is removed.</li> </ul> <p>The <b>Called Directory Number</b> is set to:</p> <ul style="list-style-type: none"> <li><b>Nature of address indicator</b> "National (significant) number".</li> <li><b>Internal Network Number Indicator:</b> routing to internal network number not allowed.</li> <li><b>Numbering plan Indicator:</b> ISDN (Telephony) numbering plan (<i>Recommendation E.164</i>).</li> <li><b>Address Signal:</b> derived from the rn parameter if the Number Portability Routing Number contains an E164 number the country code is removed else the address digits applied unchanged.</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Called party number, Called Directory Number											
<b>SIP Parameter values</b>	INVITE: Request URI: sip: <called number>; rn=<Number Portability Routing Number>; npdi											
<b>Comments</b>	The URI parameters can be received in arbitrary order.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;">Mg</th> <th style="width: 33.33%;">MGCF</th> <th style="width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM	<b>Apply post test routine</b>				
Mg	MGCF	ISUP										
INVITE 100 Trying	→ ←	→ IAM										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_101_040	<b>Reference</b>	7.2.3.1.2A.1.2									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/											
<b>Selection criteria</b>	PICS 6.2.2/2											
<b>Test Purpose name</b>	Number Portability Concatenated Addressing Method is used. The called party number is present											
<b>Test Purpose</b>	<p>Ensure that on receipt of an initial INVITE request containing the <b>rn</b> and <b>npdi</b> parameters in the request line, an IAM is sent. The <b>Called Party Number</b> is set to:</p> <ul style="list-style-type: none"> <li><b>Nature of address indicator:</b> "Network routing number concatenated with called directory number" or "National (significant) number".</li> <li><b>Internal Network Number Indicator:</b> routing to internal network number not allowed.</li> <li><b>Numbering plan Indicator:</b> ISDN (Telephony) numbering plan (<i>Recommendation E.164</i>).</li> <li><b>Address Signal:</b> derived from the rn parameter if the Number Portability Routing Number contains an E164 number the country code is removed else the address digits applied unchanged. The called party number derived from the user info is appended except the country code.</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Called party number											
<b>SIP Parameter values</b>	INVITE: Request URI: sip: <called number>; rn=<Number Portability Routing Number>; npdi											
<b>Comments</b>	The URI parameters can be received in arbitrary order.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;">Mg</th> <th style="width: 33.33%;">MGCF</th> <th style="width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM	<b>Apply post test routine</b>				
Mg	MGCF	ISUP										
INVITE 100 Trying	→ ←	→ IAM										
<b>Apply post test routine</b>												

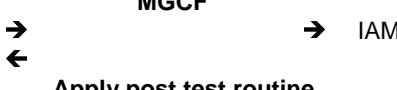
<b>TP number</b>	TP_101_041	<b>Reference</b>	7.2.3.1.2A.1.3												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/														
<b>Selection criteria</b>	PICS 6.2.2/3														
<b>Test Purpose name</b>	Number Portability Separate Network Routing Number Addressing Method is used. A Network Routing Number is present in the sent IAM														
<b>Test Purpose</b>	<p>Ensure that on receipt of an initial INVITE request containing the <b>rn</b> and <b>npdi</b> parameters in the request line, an IAM is sent. The <b>Called Party Number</b> is set to:</p> <ul style="list-style-type: none"> <li><b>Nature of address indicator:</b> "National (significant) number".</li> <li><b>Internal Network Number Indicator:</b> routing to internal network number not allowed.</li> <li><b>Numbering plan Indicator:</b> ISDN (Telephony) numbering plan (<i>Recommendation E.164</i>).</li> <li><b>Address Signal:</b> derived from the user info of the request URI the country code is removed.</li> </ul> <p>The <b>Network Routing Number</b> is set to:</p> <ul style="list-style-type: none"> <li><b>Nature of address indicator:</b> "Network routing number in national (significant) number format" or "Network routing number in network specific number format".</li> <li><b>Numbering plan Indicator:</b> ISDN (Telephony) numbering plan (<i>Recommendation E.164</i>).</li> <li><b>Address Signal:</b> derived from the rn parameter if the Number Portability Routing Number contains an E164 number the country code is removed else the address digits applied unchanged.</li> </ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number, Network Routing Number														
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI: sip: <called number>; rn=<Number Portability Routing Number>; npdi														
<b>Comments</b>	The URI parameters can be received in arbitrary order.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>				
Mg	MGCF	ISUP													
INVITE	→	→ IAM													
100 Trying	←														
<b>Apply post test routine</b>															

<b>TP number</b>	TP_101_042	<b>Reference</b>	7.2.3.1.2A.2												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/														
<b>Selection criteria</b>	PICS 6.2.2/1 OR PICS 6.2.2/2 OR PICS 6.2.2/3 AND PICS 6.2.2/4														
<b>Test Purpose name</b>	Sending of Number Portability Forward Information														
<b>Test Purpose</b>	<p>Ensure that on receipt of an initial INVITE request containing the <b>npdi</b> parameters in the request line, an IAM is sent. The IAM contains the Number Portability Forward Information parameter set according the following roles:</p> <ul style="list-style-type: none"> <li>If the Number Portability Database Dip Indicator is present, and there is no Number Portability Routing Number, set to "number portability query done for called number, non-ported called subscriber".</li> </ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Number Portability Forward Information														
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI: sip: <called number>; npdi														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>				
Mg	MGCF	ISUP													
INVITE	→	→ IAM													
100 Trying	←														
<b>Apply post test routine</b>															

<b>TP number</b>	TP_101_043	<b>Reference</b>	7.2.3.1.2A.2											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/													
<b>Selection criteria</b>	PICS 6.2.2/1 OR PICS 6.2.2/2 OR PICS 6.2.2/3 AND PICS 6.2.2/4													
<b>Test Purpose name</b>	Sending of Number Portability Forward Information													
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request containing the <b>rn</b> and <b>npdi</b> parameters in the request line, an IAM is sent. The IAM contains the Number Portability Forward Information parameter set according the following roles: <ul style="list-style-type: none"><li>• If the Number Portability Database Dip Indicator is present, and a Number Portability Routing Number is present, set to "number portability query done for called number, ported called subscriber".</li></ul>													
<b>ISUP Parameter values</b>	<b>IAM:</b> Number Portability Forward Information													
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI: sip: <called number>; rn=<Number Portability Routing Number>; npdi													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>			
Mg	MGCF	ISUP												
INVITE	→	→ IAM												
100 Trying	←													
<b>Apply post test routine</b>														

<b>TP number</b>	TP_101_044	<b>Reference</b>	7.2.3.1.2A.2											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/													
<b>Selection criteria</b>	PICS 6.2.2/1 OR PICS 6.2.2/2 OR PICS 6.2.2/3 AND PICS 6.2.2/4													
<b>Test Purpose name</b>	Sending of Number Portability Forward Information													
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request containing the <b>rn</b> parameters in the request line, an IAM is sent. The IAM contains the Number Portability Forward Information parameter set according the following roles: <ul style="list-style-type: none"><li>• If there is no Number Portability Database Dip Indicator, set to "number portability query not done for called number".</li></ul>													
<b>ISUP Parameter values</b>	<b>IAM:</b> Number Portability Forward Information													
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI: sip: <called number>; rn=<Number Portability Routing Number>													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>			
Mg	MGCF	ISUP												
INVITE	→	→ IAM												
100 Trying	←													
<b>Apply post test routine</b>														

<b>TP number</b>	TP_101_045	<b>Reference</b>	7.2.3.1.2B.1											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/													
<b>Selection criteria</b>	PICS 6.2.2/5 AND PICS 6.2.2/6 AND PICS 6.2.2/8													
<b>Test Purpose name</b>	Request URI cic parameter is mapped into IAM TNS parameter													
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request containing the <b>cic</b> parameter in the request line, an IAM is sent. The Transit network selection parameter is set to: <ul style="list-style-type: none"><li>• <b>Type of network identification:</b> CCITT-standardized identification or national network identification.</li><li>• <b>Network identification plan:</b> according value of Type of network identification.</li><li>• <b>Network identification:</b> digits derived from the carrier identification code value of the cic parameter.</li></ul>													
<b>ISUP Parameter values</b>	<b>IAM:</b> Transit network selection													
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI: sip: <called number>; cic=< Carrier identification code >													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>			
Mg	MGCF	ISUP												
INVITE	→	→ IAM												
100 Trying	←													
<b>Apply post test routine</b>														

<b>TP number</b>	TP_101_046	<b>Reference</b>	7.2.3.1.2.11
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	P-Access-Network-Info header is sent in the Location parameter in the IAM		
<b>Test Purpose</b>	<p>Ensure when an INVITE request is received and a P-Access-Network-Info header is present, an IAM is sent and the Location number parameter is present.</p> <ul style="list-style-type: none"> <li>• The Nature of address indicator is copied from bit 7 to 1 of octet 1 of the gstin-location field.</li> <li>• The Numbering plan is copied from bit 7 to 5 of octet 2 of the gstin-location field.</li> <li>• The Address signals are copied from octet 3 to n of the gstin-location field.</li> </ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Location number Nature of address indicator Copied from bit 7 to 1 of octet 1 of the binary representation of the gstin-location field Numbering plan indicator Copied from bit 7 to 5 of octet 2 of the binary representation of the gstin-location field Address signals Copied from octet 3 to n of the binary representation of the gstin-location field		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Access-Network-Info: gstin-location="[[location information in binary representation]]"		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b>  <b>ISUP</b> IAM <b>Apply post test routine</b>	

<b>TP number</b>	TP_101_047	<b>Reference</b>	7.2.3.1.2.11
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	P-Access-Network-Info header is sent in the Location parameter in the IAM no Privacy header present		
<b>Test Purpose</b>	<p>Ensure when an INVITE request is received and a P-Access-Network-Info header is present, an IAM is sent and the Location number parameter is present.</p> <ul style="list-style-type: none"> <li>• The Address presentation restriction indicator is copied from bit 4 and 3 of octet 2 of the gstin-location field.</li> </ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Location number Address presentation restriction indicator Copied from bit 4 and 3 of octet 2 of the binary representation of the gstin-location field		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Access-Network-Info: gstin-location="[[location information in binary representation]]"		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b>  <b>ISUP</b> IAM <b>Apply post test routine</b>	

<b>TP number</b>	TP_101_048	<b>Reference</b>	7.2.3.1.2.11
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	P-Access-Network-Info header is sent in the Location parameter in the IAM Privacy header set to header		
<b>Test Purpose</b>	<p>Ensure when an INVITE request is received and a P-Access-Network-Info header is present, an IAM is sent and the Location number parameter is present.</p> <ul style="list-style-type: none"> <li>The Address presentation restriction indicator is set according the Privacy header value 'header' as well present in the received INVITE request.</li> </ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Location number Address presentation restriction indicator Presentation restricted		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Access-Network-Info: gdstn-location=" [location information in binary representation]" Privacy: header		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> 	<b>ISUP</b> IAM  <i>Apply post test routine</i>

<b>TP number</b>	TP_101_049	<b>Reference</b>	7.2.3.1.2.11
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	P-Access-Network-Info header 'np' parameter present is sent in the Location parameter in the IAM		
<b>Test Purpose</b>	<p>Ensure when an INVITE request is received and a P-Access-Network-Info header is present, an IAM is sent and the Location number parameter is present.</p> <ul style="list-style-type: none"> <li>The Screening indicator is set according the np parameter in the P-Access-Network-Info header in the received INVITE request.</li> </ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Location number Screening indicator Network provided		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Access-Network-Info: gdstn-location=" [location information]";network-provided		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> 	<b>ISUP</b> IAM  <i>Apply post test routine</i>

<b>TP number</b>	TP_101_050	<b>Reference</b>	7.2.3.1.2.11
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_IAM/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	P-Access-Network-Info header no 'np' parameter present is sent in the Location parameter in the IAM		
<b>Test Purpose</b>	<p>Ensure when an INVITE request is received and a P-Access-Network-Info header is present, an IAM is sent and the Location number parameter is present.</p> <p>The Screening indicator is copied from bit 2 and 1 of octet 2 of the gdstn-location field.</p>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Location number Screening indicator Copied from bit 2 and 1 of octet 2 of the binary representation of the gdstn-location field		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Access-Network-Info: gdstn-location=" [location information]"		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> 	<b>ISUP</b> IAM  <i>Apply post test routine</i>

### 6.1.1.2 Sending of COT

<b>TP number</b>	TP_102_001	<b>Reference</b>	7.2.3.1.3
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_COT/		
<b>Selection criteria</b>	PICS 6.1.1/1 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/4		
<b>Test Purpose name</b>	Sending of ISUP COT		
<b>Test Purpose</b>	If the IAM has already been sent, the Continuity message shall be sent indicating "continuity check successful", when all of the following conditions have been met: <ul style="list-style-type: none"> <li>• The requested preconditions (if any) in the IMS network have been met.</li> <li>• A possible outstanding continuity check procedure is successfully performed on the outgoing circuit.</li> </ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = "Continuity check performed on a previous circuit" or "Continuity check required on this circuit" <b>COT continuity indicator:</b> Continuity check successful		
<b>SIP Parameter values</b>	<b>INVITE:</b> Require: precondition SDP      a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>183:</b> Require: 100rel SDP      a=curr:qos local none a=curr:qos remote none a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv a=conf:qos remote sendrecv  <b>UPDATE:</b> SDP      a=curr:qos local sendrecv a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>200 OK UPDATE</b> SDP      a=curr:qos local sendrecv a=curr:qos remote sendrecv a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 183 Session Progress ← PRACK → 200 OK (PRACK) ← UPDATE → 200 OK (UPDATE) ←	<b>MGCF</b> → IAM  → COT	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_102_002	<b>Reference</b>	7.3.3.1.3
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_COT/		
<b>Selection criteria</b>	PICS 6.1.1/2 AND PICS 6.2.1/1 AND NOT PICS 6.2.1/4		
<b>Test Purpose name</b>	Sending of BICC COT		
<b>Test Purpose</b>	If the IAM has already been sent, the Continuity message shall be sent indicating "continuity check successful", when all of the following conditions have been met: <ul style="list-style-type: none"><li>• The requested preconditions (if any) in the IMS network have been met.</li><li>• A possible outstanding continuity check procedure is successfully performed on the outgoing circuit.</li></ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = "COT to be expected" <b>COT continuity indicator:</b> Continuity check successful;		
<b>SIP Parameter values</b>	<b>INVITE:</b> Require: precondition SDP        a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>183:</b> Require: 100rel SDP        a=curr:qos local none a=curr:qos remote none a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv a=conf:qos remote sendrecv  <b>UPDATE:</b> SDP        a=curr:qos local sendrecv a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos optional remote sendrecv  <b>200 OK UPDATE</b> SDP        a=curr:qos local sendrecv a=curr:qos remote sendrecv a=des:qos optional local sendrecv a=des:qos mandatory remote sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying 183 Session Progress PRACK 200 OK (PRACK) UPDATE 200 OK (UPDATE)	<b>MGCF</b> → ← ← → ← → ←	<b>ISUP</b> IAM → COT Apply post test routine

### 6.1.1.3 Sending of SAM

<b>TP number</b>	TP_103_001	<b>Reference</b>	7.2.3.1.3A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_SAM/		
<b>Selection criteria</b>	PICS 6.2.3/1		
<b>Test Purpose name</b>	Receipt of INFO request, sending of SAM		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a Supported: 100rel or Required: 100rel a 183 Session Progress is sent indicating the overlap capability in the Supported: 100rel or Required: 100rel. After the ISUP IAM message has been sent the I-MGCF receives additional digits. The additional digits are received in in-dialogue SIP INFO requests.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: INFO: Content-Type: application/x-session-info SubsequentDigit: <additional digits>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE(1) → 484 Address Incomplete ← ACK →  INVITE(2) → 183 Session Progress ←  INFO → 200 OK (INFO) ←	<b>MGCF</b> → IAM → SAM	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_103_002	<b>Reference</b>	7.2.3.1.3A.3
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_SAM/		
<b>Selection criteria</b>	PICS 6.2.3/2		
<b>Test Purpose name</b>	Receipt of multiple INVITE request, sending of SAM		
<b>Test Purpose</b>	After the ISUP IAM message has been sent the I-MGCF receives additional digits. The additional digits are received in multiple SIP INVITE requests.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE(1)	→	→ IAM
	<b>CASE A</b>		
	INVITE(2)	→	→ SAM
	484 Address Incomplete(1)	←	
	ACK	→	
	INVITE(3)	→	→ SAM
	484 Address Incomplete(2)	←	
	ACK	→	
	180 Ringing(3)	←	← ACM
	<b>CASE B</b>		
	484 Address Incomplete(1)	←	
	ACK	→	
	INVITE(2)	→	→ SAM
	484 Address Incomplete(2)	←	
	ACK	→	
	INVITE(3)	→	→ SAM
	180 Ringing(3)	←	← ACM
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_103_003	<b>Reference</b>	7.2.3.1.3A.3
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_SAM/		
<b>Selection criteria</b>	PICS 6.2.3/2		
<b>Test Purpose name</b>	Receipt of multiple INVITE request, unsuccessful		
<b>Test Purpose</b>	After the ISUP IAM message has been sent the I-MGCF receives additional digits. The additional digits are received in multiple SIP INVITE requests. If the number of digits contained in the Request line is equal or less than the number of digits already received for the communication, then the SUT shall immediately send a 484 Address Incomplete response for this INVITE. In this case, no SAM shall be sent to BICC/ISUP procedures.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE(1) → <b>CASE A</b> INVITE(2) → 484 Address Incomplete(1) ← ACK →  <b>CASE B</b> 484 Address Incomplete(1) ← ACK → INVITE(2) → 484 Address Incomplete(2) ← ACK →	<b>MGCF</b>	<b>ISUP</b> → IAM
	<b>Apply post test routine</b>		

#### 6.1.1.4 Sending of 18x provisional responses

<b>TP number</b>	TP_104_001	<b>Reference</b>	7.2.3.1.4.0
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Sending of 180 Ringing after ACM was received		
<b>Test Purpose</b>	The SUT shall send the SIP 180 Ringing when receiving the following messages: - ACM with Called party's status indicator set to subscriber free.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party status indicator = subscriber free		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 180 Ringing ← <b>ISUP</b> → IAM ← ACM	<b>MGCF</b>	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_002	<b>Reference</b>	7.2.3.1.4.0												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Sending of 180 Ringing after CPG was received														
<b>Test Purpose</b>	The SUT shall send the SIP 180 Ringing when receiving the following messages: - CPG with Event indicator set to ALERTING.														
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party status indicator = no indication <b>CPG:</b> Event indicator = ALERTING														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td>ACM(no indication)</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>CPG(ALERTING)</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←	ACM(no indication)	180 Ringing	←	CPG(ALERTING)		
Mg	MGCF	ISUP													
INVITE	→	IAM													
100 Trying	←	ACM(no indication)													
180 Ringing	←	CPG(ALERTING)													

<b>TP number</b>	TP_104_003	<b>Reference</b>	7.2.3.1.4									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/											
<b>Selection criteria</b>	PICS 6.2.1/23											
<b>Test Purpose name</b>	ACM received, P-Early-Media header present in 180											
<b>Test Purpose</b>	Ensure that on receipt of an ACM free a 180 Ringing is sent. In the 180 Ringing a P-Early-Media header is present indicating authorization of early media											
<b>ISUP Parameter values</b>	<b>IAM:</b> 3,1 kHz audio <b>ACM:</b> BCI Called party status indicator = free											
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: 100rel P-Early-Media: supported 180 ringing P-Early-Media: < authorization of early media>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM(free)</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	180 Ringing	←	ACM(free)		
Mg	MGCF	ISUP										
INVITE	→	IAM										
180 Ringing	←	ACM(free)										

<b>TP number</b>	TP_104_004	<b>Reference</b>	7.2.3.1.4												
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/														
<b>Selection criteria</b>	PICS 6.2.1/10														
<b>Test Purpose name</b>	Provide media in a Call-Info header field, or an Alert-Info header field in a 180														
<b>Test Purpose</b>	Ensure that the SUT is able to provide media instead of the in-band media received from the PSTN in a Call-Info header field, or an Alert-Info header field present in a 180 Ringing.														
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party status indicator = subscriber free														
<b>SIP Parameter values</b>	180: Call-Info: <Media resource>; or Alert-Info: <Media resource>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM		
Mg	MGCF	ISUP													
INVITE	→	IAM													
100 Trying	←														
180 Ringing	←	ACM													

<b>TP number</b>	TP_104_005	<b>Reference</b>	7.2.3.1.4A											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/													
<b>Selection criteria</b>	PICS 6.2.1/10													
<b>Test Purpose name</b>	Provide media in a Call-Info header field, or an Alert-Info header field in a 183													
<b>Test Purpose</b>	Ensure that the SUT is able to provide media instead of the in-band media received from the PSTN in a Call-Info header field, or an Alert-Info header field present in a 183 Session Progress.													
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party status indicator = no indication													
<b>SIP Parameter values</b>	183: Call-Info: <Media resource>; or Alert-Info: <Media resource>													
<b>Comments</b>														
<b>Message flows</b>	<table style="margin-left: auto; margin-right: auto;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>183 Session Progress</td> <td>←</td> <td>ACM(no indication)</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		183 Session Progress	←	ACM(no indication)	
Mg	MGCF	ISUP												
INVITE	→	IAM												
100 Trying	←													
183 Session Progress	←	ACM(no indication)												

<b>TP number</b>	TP_104_006	<b>Reference</b>	7.2.3.1.4 Table 7a.0f														
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																
<b>Selection criteria</b>	PICS 6.2.1/5																
<b>Test Purpose name</b>	Mapping of Progress Indicator received in an ACM/CPG																
<b>Test Purpose</b>	Ensure that on receipt of an ACM called party status subscriber free or CPG event indicator ALERTING, a <b>180 Ringing</b> is sent. The Progress Indicator IE contained in the ACM or CPG ATP parameter is mapped into the PSTN XML element in the 180 as indicated in table 6.1.1.4-2. <ul style="list-style-type: none"> <li>• Progress Indicator received in an ACM called party status subscriber free 180 Ringing is sent in the PSTN XML element contains the ProgressIndicator value PI_value.</li> <li>• Progress Indicator received in a CPG Event indicator ALERTING 180 Ringing is sent in the PSTN XML element contains the ProgressIndicator value PI_value.</li> </ul>																
<b>ISUP Parameter values</b>	CASE A <b>ACM:</b> BCi Called party status = subscriber free ATP contains a Progress Indicator IE  CASE B <b>ACM:</b> BCi Called party status = no indication  <b>CPG:</b> ATP contains a Progress Indicator IE																
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported  180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< Location<yyyy> ProgressOctet4 ProgressDescription>PI_value<																
<b>Comments</b>																	
<b>Message flows</b>	<table style="margin-left: auto; margin-right: auto;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td><b>CASE A</b> 180 Ringing</td> <td>←</td> <td>ACM</td> </tr> <tr> <td><b>CASE B</b> 183 Session Progress</td> <td>←</td> <td>ACM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>CPG</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	<b>CASE A</b> 180 Ringing	←	ACM	<b>CASE B</b> 183 Session Progress	←	ACM	180 Ringing	←	CPG	
Mg	MGCF	ISUP															
INVITE	→	IAM															
<b>CASE A</b> 180 Ringing	←	ACM															
<b>CASE B</b> 183 Session Progress	←	ACM															
180 Ringing	←	CPG															

<b>TP number</b>	TP_104_007	<b>Reference</b>	7.2.3.1.4 Table 7a.0f
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of High layer compatibility received in an ACM/CPG		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status subscriber free or CPG event indicator ALERTING, a <b>180 Ringing</b> is sent. The High layer compatibility IE contained in the ACM or CPG ATP parameter is mapped into the HighLayerCompatibility PSTN XML element in the 180 as indicated in table 6.1.1.4-3.</p> <ul style="list-style-type: none"> <li>• High layer compatibility received in an ACM called party status subscriber free 180 Ringing is sent in the PSTN XML element contains the HighLayerCompatibility value HLC_value.</li> <li>• High layer compatibility received in a CPG Event indicator ALERTING 180 Ringing is sent in the PSTN XML element contains the HighLayerCompatibility value HLC_value.</li> </ul>		
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> BCi Called party status = subscriber free ATP contains a Progress Indicator IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication</p> <p><b>CPG:</b> ATP contains a High layer compatibility IE</p>		
<b>SIP Parameter values</b>	<p>INVITE:            P-Early-Media: supported</p> <p>180:  &lt;?xml version="1.0" encoding="utf-8"?&gt;            PSTN            HighLayerCompatibility            HLOctet3            CodingStandard&gt;00&lt;            Interpretation&gt;100&lt;            PresentationMethod&gt;01&lt;            HLOctet4            HighLayerCharacteristics&gt;<b>HLC_value</b>&lt;</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	<b>CASE A</b> 180 Ringing	←	← ACM
	<b>CASE B</b> 183 Session Progress 180 Ringing	← ←	← ACM ← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_008	<b>Reference</b>	7.2.3.1.4 Table 7a.0f
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Low layer compatibility received in an ACM/CPG		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status subscriber free or CPG event indicator ALERTING, a <b>180 Ringing</b> is sent. The Low layer compatibility IE contained in the ACM or CPG ATP parameter is mapped into the LowLayerCompatibility PSTN XML element in the 180 as indicated in table 6.1.1.4-4.</p> <ul style="list-style-type: none"> <li>• Low layer compatibility received in an ACM called party status subscriber free 180 Ringing is sent in the PSTN XML element contains the LowLayerCompatibility value ITC_value.</li> <li>• Low layer compatibility received in a CPG Event indicator ALERTING 180 Ringing is sent in the PSTN XML element contains the LowLayerCompatibility value ITC_value.</li> </ul>		
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> CASE A BCi Called party status = subscriber free ATP contains a Low layer compatibility IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication</p> <p><b>CPG:</b> ATP contains a Low layer compatibility IE</p>		
<b>SIP Parameter values</b>	<p>INVITE:            P-Early-Media: supported</p> <p>180:  &lt;?xml version="1.0" encoding="utf-8"?&gt;            PSTN            LowLayerCompatibility&gt;            LLOctet3&gt;            CodingStandard&gt;00&lt;            InformationTransferCapability&gt;ITC_value&lt;            LLOctet4&gt;            TransferMode&gt;00&lt;            InformationTransferRate&gt;10000&lt;</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	<b>CASE A</b> 180 Ringing	←	← ACM
	<b>CASE C</b> 183 Session Progress	←	← ACM
	180 Ringing	←	← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_009	<b>Reference</b>	7.2.3.1.4 Table 7a.0f																							
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																									
<b>Selection criteria</b>	PICS 6.2.1/5																									
<b>Test Purpose name</b>	Mapping of Bearer Capability received in an ACM/CPG																									
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status subscriber free or CPG event indicator ALERTING, a <b>180 Ringing</b> is sent. The Bearer Capability IE contained in the ACM or CPG ATP parameter is mapped into the BearerCapability PSTN XML element in the 180 as indicated in table 6.1.1.4-5.</p> <ul style="list-style-type: none"> <li>• Bearer Capability received in an ACM called party status subscriber free 180 Ringing is sent in the PSTN XML element contains the BearerCapability value ITC_value.</li> <li>• Bearer Capability received in a CPG Event indicator ALERTING 180 Ringing is sent in the PSTN XML element contains the BearerCapability value ITC_value.</li> </ul>																									
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> BCi Called party status = subscriber free ATP contains a Bearer Capability IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication</p> <p><b>CPG:</b> ATP contains a Bearer Capability IE</p>																									
<b>SIP Parameter values</b>	<p>INVITE:            P-Early-Media: supported</p> <p>180:            &lt;?xml version="1.0" encoding="utf-8"?&gt;            PSTN            BearerCapability            BCoctet3            CodingStandard&gt;00&lt;            InformationTransferCapability&gt;ITC_value&lt;            BCoctet4            TransferMode&gt;00&lt;            InformationTransferRate&gt;10000&lt;            BCoctet5&gt;            Layer1Identification&gt;01&lt;            UserInfoLayer1Protocol&gt;00011&lt;</p>																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td colspan="3"><b>CASE C</b></td> </tr> <tr> <td style="text-align: center;">183 Session Progress</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td style="text-align: center;">180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CPG</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Apply post test routine</b></td></tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	<b>CASE C</b>			183 Session Progress	←	← ACM	180 Ringing	←	← CPG	<b>Apply post test routine</b>			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																								
INVITE	→	→ IAM																								
<b>CASE A</b>																										
180 Ringing	←	← ACM																								
<b>CASE C</b>																										
183 Session Progress	←	← ACM																								
180 Ringing	←	← CPG																								
<b>Apply post test routine</b>																										

<b>TP number</b>	TP_104_010	<b>Reference</b>	7.2.3.1.4 Table 7a.0g
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator into PSTN XML ProgressIndicator element value 1 sent in 180		
<b>Test Purpose</b>	Ensure that on receipt of an ACM or CPG and the Backward call indicator ISDN User Part indicator is set to ISDN User Part not used all the way, a <b>180 Ringing</b> is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 1 (Call is not end-to-end ISDN: "further progress information may be available in-band").		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI ISDN User Part indicator = ISDN User Part not used all the way  <b>CPG:</b> BCI ISDN User Part indicator = ISDN User Part not used all the way		
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← <b>CASE A</b> 180 Ringing ← → ACM  <b>CASE B</b> 180 Ringing ← → ACM (no indication) 180 Ringing ← → CPG (Alerting)	<b>MGCF</b> → IAM	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_011	<b>Reference</b>	7.2.3.1.4 Table 7a.0g
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator into PSTN XML ProgressIndicator element value 2 sent in 180		
<b>Test Purpose</b>	Ensure that on receipt of an ACM or CPG and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access non-ISDN, a <b>180 Ringing</b> is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 2 (Destination address is non-ISDN).		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access non-ISDN  <b>CPG:</b> BCI ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access non-ISDN		
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← <b>CASE A</b> 180 Ringing ← → ACM  <b>CASE B</b> 180 Ringing ← → ACM (no indication) 180 Ringing ← → CPG (Alerting)	<b>MGCF</b> → IAM	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_012	<b>Reference</b>	7.2.3.1.4 Table 7a.0g
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator into PSTN XML ProgressIndicator element value 7 sent in 180		
<b>Test Purpose</b>	Ensure that on receipt of an ACM or CPG and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access ISDN, a 180 Ringing is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 7.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access ISDN	<b>CPG:</b> BCI ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access ISDN	
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000111<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying <b>CASE A</b> 180 Ringing	<b>MGCF</b> → ← ←	<b>ISUP</b> IAM ACM
	<b>CASE B</b> 180 Ringing	← ←	ACM (no indication) CPG (Alerting)
		<b>Apply post test routine</b>	

TP number	TP_104_013	Reference	7.2.3.1.4 Table 7a.0g
TSS reference	SIP-ISUP/Basic call/Sending_of_18x/		
Selection criteria	PICS 6.2.1/5		
Test Purpose name	Mapping of optional Backward call indicator into PSTN XML ProgressIndicator element value 8 sent in 180		
Test Purpose	Ensure that on receipt of an ACM or CPG and the optional Backward call indicator In-band information indicator in-band information or an appropriate pattern is now available, a <b>180 Ringing</b> is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 8.		
ISUP Parameter values	<b>ACM:</b> oBCI    In-band information indicator in-band information or an appropriate pattern is now available  <b>CPG:</b> oBCI    In-band information indicator in-band information or an appropriate pattern is now available		
SIP Parameter values	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0001000<		
Comments			
Message flows	Mg	MGCF	ISUP
	INVITE	→	→ IAM
	100 Trying	←	
	<b>CASE A</b>		
	180 Ringing	←	← ACM
	<b>CASE B</b>		
	180 Ringing	←	← ACM (no indication) ← CPG (Alerting)
		Apply post test routine	

<b>TP number</b>	TP_104_014	<b>Reference</b>	7.2.3.1.4
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/7		
<b>Test Purpose name</b>	The SUT performs Fall back		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and the subsequent ISUP/BICC network is not able to perform Fall back, Fall back is performed in the SUT: The TMR in the sent IAM is set to 'speech' or '3,1 kHz audio' USI is copied from the first BearerCapability element received in the PSTN XML. Upon an ACM is received a 180 Ringing is sent.		
<b>ISUP Parameter values</b>	IAM TMR Speech or 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoocet3 CodingStandard>00< InformationTransferCapability> <b>00000</b> < <b>or</b> InformationTransferCapability> <b>10000</b> < .... <b>BearerCapability</b> BCoocet3 CodingStandard>00< InformationTransferCapability> <b>10001</b> < ....  180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoocet3 CodingStandard>00< InformationTransferCapability> <b>00000</b> < <b>or</b> InformationTransferCapability> <b>10000</b> < .... <b>ProgressIndicator</b> .... ProgressOctet4 ProgressDescription> <b>0000101</b> <		
<b>Comments</b>	Fallback is performed in the SUT.		
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying 180 Ringing	<b>MGCF</b> → ← ←	ISUP IAM ACM  <b>Apply post test routine</b>

<b>TP number</b>	TP_104_015	<b>Reference</b>	7.2.3.1.4.0b														
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/7																
<b>Test Purpose name</b>	Receipt of TMU speech, no BC present in ATP																
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter set to speech in the ACM, a <b>180 Ringing</b> is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set to Speech.																
<b>ISUP Parameter values</b>	<b>ACM:</b> Transmission medium used = speech																
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>00000< ... ...																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM			<b>Apply post test routine</b>	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>															
INVITE	→	IAM															
100 Trying	←																
180 Ringing	←	ACM															
		<b>Apply post test routine</b>															

<b>TP number</b>	TP_104_016	<b>Reference</b>	7.2.3.1.4.0b														
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/7																
<b>Test Purpose name</b>	Receipt of TMU 3,1 kHz audio, no BC present in ATP																
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter set to 3,1 kHz audio in the ACM, a <b>180 Ringing</b> is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set to 3,1 kHz audio.																
<b>ISUP Parameter values</b>	<b>ACM:</b> Transmission medium used = 3,1 kHz audio																
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>10000< ... ...																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM			<b>Apply post test routine</b>	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>															
INVITE	→	IAM															
100 Trying	←																
180 Ringing	←	ACM															
		<b>Apply post test routine</b>															

<b>TP number</b>	TP_104_017	<b>Reference</b>	7.2.3.1.4.1.0b
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/8		
<b>Test Purpose name</b>	Receipt of TMU, BC present in ATP PSTN XML BearerCapability sent in 180		
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter and in the ATP a Bearer Capability IE in the ACM, a <b>180 Ringing</b> is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set as indicated in table 6.1.1.4-1.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Transmission medium used, ATP Bearer Capability IE		
<b>SIP Parameter values</b>	180 Ringing <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability>ITC_value< ... ...		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 180 Ringing ←  <b>MGCF</b> → IAM ← ACM  <b>ISUP</b>		
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_018	<b>Reference</b>	7.2.3.1.4.1.0b
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/7		
<b>Test Purpose name</b>	Receipt of TMU, BC present in ATP PSTN XML BearerCapability sent in 183		
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter and in the ATP a Bearer Capability IE in the ACM, a 183 Session Progress is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set as indicated in table 6.1.1.4-1.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Transmission medium used, ATP Bearer Capability IE BCi Called party status = no indication		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability>ITC_value< ... ...		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← 183 Session Progress ←  <b>MGCF</b> → IAM ← ACM  <b>ISUP</b>		
	<b>Apply post test routine</b>		

Table 6.1.1.4-1: Mapping of TMU and Bearer capability IE to PSTN XML BearerCapability

<b>ITC_value</b>	<b>← 180 Ringing or 183 Session Progress</b>	<b>←ACM/CPG</b>
ITC_value_VA_01	PSTN XML BearerCapability = "Speech"	TMU "Speech" ATP BC "speech"
ITC_value_VA_02	PSTN XML BearerCapability = "Speech"	TMU "3,1 kHz audio" ATP BC "speech"
ITC_value_VA_03	PSTN XML BearerCapability = "3,1 kHz audio"	TMU "Speech" ATP BC "3,1 kHz audio"
ITC_value_VA_04	PSTN XML BearerCapability = "3,1 kHz audio"	TMU "3,1 kHz audio" ATP BC "3,1 kHz audio"

<b>TP number</b>	TP_104_019	<b>Reference</b>	7.2.3.1.4A
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	NOT PICS 6.2.1/5 AND NOT PICS 6.2.1/23		
<b>Test Purpose name</b>	ACM no indication received, no SIP response is sent		
<b>Test Purpose</b>	Ensure that on receipt of an early ACM no SIP response is sent if the INVITE does not contain a P-Early-Media header.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>Mg</b>                    <b>MGCF</b>                    <b>ISUP</b>          INVITE                    →                    → IAM                                    ←                    ← ACM(no indication)  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_104_020	<b>Reference</b>	7.2.3.1.4A
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/23		
<b>Test Purpose name</b>	ACM received, P-Early-Media header present in 183		
<b>Test Purpose</b>	Ensure that on receipt of an early ACM a 183 Session Progress is sent. In the 183 session Progress a P-Early-Media header is present indicating authorization of early media.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Speech or 3,1 kHz audio <b>ACM:</b> BCI Called party status indicator = no indication		
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported 183 Session Progress P-Early-Media: < authorization of early media>		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>Mg</b>                    <b>MGCF</b>                    <b>ISUP</b>          INVITE                    →                    → IAM          183 Session Progress    ←                    ← ACM(no indication)  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_104_022	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of optional Backward call indicator in ACM into PSTN XML ProgressIndicator element value 8 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of an <b>ACM</b> and the optional Backward call indicator In-band information indicator in-band information or an appropriate pattern is now available, a 183 Session Progress is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 8.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status indicator = no indication oBCI In-band information indicator in-band information or an appropriate pattern is now available		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0001000<		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>Mg</b>                    <b>MGCF</b>                    <b>ISUP</b>          INVITE                    →                    → IAM          183 Session Progress    ←                    ← ACM  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_104_023	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in ACM into PSTN XML ProgressIndicator element value 1 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of an <b>ACM</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part not used all the way, a 183 Session Progress is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 1 (Call is not end-to-end ISDN: "further progress information may be available in-band").		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI ISDN User Part indicator = ISDN User Part not used all the way BCi Called party status indicator = no indication		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 183 Session Progress	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM ← ACM

<b>TP number</b>	TP_104_024	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in ACM into PSTN XML ProgressIndicator element value 2 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of an <b>ACM</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access non-ISDN, a 183 Session Progress is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 2 (Destination address is non-ISDN).		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access non-ISDN BCi Called party status indicator = no indication		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying 183 Session Progress	<b>MGCF</b> → ← ← <b>Apply post test routine</b>	<b>ISUP</b> IAM ← ACM

<b>TP number</b>	TP_104_025	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.1															
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																	
<b>Selection criteria</b>	PICS 6.2.1/5																	
<b>Test Purpose name</b>	Mapping of Backward call indicator in ACM into PSTN XML ProgressIndicator element value 7 sent in a 183																	
<b>Test Purpose</b>	Ensure that on receipt of an <b>ACM</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access ISDN, a 183 Session Progress is sent. A PSTN XML ProgressIndicator element is present the value is set to No. 7.																	
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access ISDN BCi Called party status indicator = no indication																	
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000111<																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>183 Session Progress</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		183 Session Progress	←	← ACM			<b>Apply post test routine</b>		
Mg	MGCF	ISUP																
INVITE	→	→ IAM																
100 Trying	←																	
183 Session Progress	←	← ACM																
		<b>Apply post test routine</b>																

<b>TP number</b>	TP_104_026	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2																								
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																										
<b>Selection criteria</b>	PICS 6.2.1/5																										
<b>Test Purpose name</b>	Mapping of optional Backward call indicator in CPG into PSTN XML ProgressIndicator element value 8 sent in a 183																										
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG</b> and the optional Backward call indicator In-band information indicator in-band information or an appropriate pattern is now available, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 8.																										
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator = Progress oBCi In-band information indicator in-band information or an appropriate pattern is now available																										
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0001000<																										
<b>Comments</b>																											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>Case A</td> <td></td> <td></td> </tr> <tr> <td>18x</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td>183 Session Progress</td> <td>←</td> <td>← CPG</td> </tr> <tr> <td>Case B</td> <td></td> <td></td> </tr> <tr> <td>18x (P-Early-Media)</td> <td>←</td> <td>← ACM ← CPG</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	Case A			18x	←	← ACM	183 Session Progress	←	← CPG	Case B			18x (P-Early-Media)	←	← ACM ← CPG			<b>Apply post test routine</b>		
Mg	MGCF	ISUP																									
INVITE	→	→ IAM																									
Case A																											
18x	←	← ACM																									
183 Session Progress	←	← CPG																									
Case B																											
18x (P-Early-Media)	←	← ACM ← CPG																									
		<b>Apply post test routine</b>																									

<b>TP number</b>	TP_104_027	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in CPG into PSTN XML ProgressIndicator element value 1 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part not used all the way, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 1 (Call is not end-to-end ISDN: "further progress information may be available in-band").		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator = Progress BCi ISDN User Part indicator = ISDN User Part not used all the way		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE Case A 18x 183 Session Progress  Case B 18x (P-Early-Media)	<b>MGCF</b> → ← ←  ←	<b>ISUP</b> IAM ACM CPG  ACM CPG

<b>TP number</b>	TP_104_028	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in CPG into PSTN XML ProgressIndicator element value 2 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG (Progress)</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access non-ISDN, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 2 (Destination address is non-ISDN).		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi free <b>CPG:</b> Event indicator = Progress BCi ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access non-ISDN		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	Case A		
	180 Ringing	←	← ACM
	183 Session Progress	←	← CPG
	Case B		
	18x (P-Early-Media)	←	← ACM ← CPG
			<b>Apply post test routine</b>

<b>TP number</b>	TP_104_029	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in CPG into PSTN XML ProgressIndicator element value 7 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG (Progress)</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access ISDN, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 7.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi free <b>CPG:</b> Event indicator = Progress BCi ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access ISDN		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000111<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE Case A 180 Ringing 183 Session Progress	<b>MGCF</b> → ← ←	<b>ISUP</b> IAM ACM CPG
	Case B 18x (P-Early-Media)	←	ACM CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_030	<b>Reference</b>	7.2.3.1.4A
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/23		
<b>Test Purpose name</b>	Mapping of Event information 'in-band info or appropriate pattern is now available' in CPG sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a CPG and the Event information is set to "in-band information or an appropriate pattern is now available", a 183 Session Progress is sent if no P-Early-Media header was sent before. A P-Early-Media header is present indicating authorization of early media.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi called party status=no indication BCi no ISDN <b>CPG:</b> Event indicator = in-band information or an appropriate pattern is now available		
<b>SIP Parameter values</b>	183 Session Progress P-Early-Media: < authorization of early media>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE Case A 18x 183 Session Progress	<b>MGCF</b> → ← ←	<b>ISUP</b> IAM ACM CPG
	Case B 18x (P-Early-Media)	←	ACM CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_031	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in CPG into PSTN XML ProgressIndicator element value 2 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG (in-band information or an appropriate pattern is now available)</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access non-ISDN, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 2 (Destination address is non-ISDN).		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi called party status=no indication BCi no ISDN <b>CPG:</b> Event indicator = in-band information or an appropriate pattern is now available BCi ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access non-ISDN		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → Case A 18x ← ← ACM 183 Session Progress ← ← CPG  Case B 18x (P-Early-Media) ← ← ACM ← CPG	<b>MGCF</b>	<b>ISUP</b> → IAM ← ACM ← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_032	<b>Reference</b>	7.2.3.1.4A Table 7.2.3.1.4A.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Backward call indicator in CPG into PSTN XML ProgressIndicator element value 7 sent in a 183		
<b>Test Purpose</b>	Ensure that on receipt of a <b>CPG (in-band information or an appropriate pattern is now available)</b> and the Backward call indicator ISDN User Part indicator is set to ISDN User Part used all the way and ISDN access indicator = Terminating access ISDN, a 183 Session Progress is sent if no P-Early-Media header was sent before. A PSTN XML ProgressIndicator element is present the value is set to No. 7.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator = in-band information or an appropriate pattern is now available BCi ISDN User Part indicator = ISDN User Part used all the way BCi ISDN access indicator = Terminating access ISDN		
<b>SIP Parameter values</b>	183 Session Progress <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000111<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE Case A 18x 183 Session Progress	<b>MGCF</b> → ← ←	<b>ISUP</b> IAM ACM CPG
	Case B 18x (P-Early-Media)	←	ACM CPG
		<b>Apply post test routine</b>	

<b>TP number</b>	TP_104_033	<b>Reference</b>	7.2.3.1.4 Table 7a.0f																																			
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																																					
<b>Selection criteria</b>	PICS 6.2.1/5																																					
<b>Test Purpose name</b>	Mapping of Progress Indicator received in an ACM/CPG into 183																																					
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status no indication or CPG, a 183 Session Progress is sent if no P-Early-Media header was sent before. The Progress Indicator IE contained in the ACM/CPG ATP parameter is mapped into the PSTN XML element in the 183 Session Progress as indicated in table 6.1.1.4-2.</p> <ul style="list-style-type: none"> <li>• Progress Indicator received in an ACM called party status no indication a 183 Session Progress is sent in the PSTN XML element contains the ProgressIndicator value PI_value.</li> <li>• Progress Indicator received in a CPG a 183 Session Progress is sent in the PSTN XML element contains the ProgressIndicator value PI_value.</li> </ul>																																					
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> BCi Called party status = no indication ATP contains a Progress Indicator IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication  <b>CPG:</b> ATP contains a Progress Indicator IE</p>																																					
<b>SIP Parameter values</b>	<p>183 Session Progress:  &lt;?xml version="1.0" encoding="utf-8"?&gt;  PSTN  ProgressIndicator  ProgressOctet3  CodingStandard&gt;00&lt;  Location&gt;0011&lt;  ProgressOctet4  ProgressDescription&gt;<b>PI_value</b>&lt;</p>																																					
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18x (P-Early-Media)	←	← ACM																																				
		← CPG																																				
<b>Apply post test routine</b>																																						

Table 6.1.1.4-2: Mapping of Progress Indicator information element to PSTN XML ProgressIndicator

<b>PI_value</b>	<b>ATP Progress Indicator value</b>	<b>XML ProgressIndicator ProgressDescription</b>
PI_VA_1	Call is not end-to-end ISDN; further call progress information may be available in-band	'0000001'
PI_VA_2	Destination address is non-ISDN	'0000010'
PI_VA_3	Origination address is non-ISDN	'0000011'
PI_VA_4	Call has returned to the ISDN	'0000100'
PI_VA_5	Interworking has occurred and has resulted in a telecommunication service change	'0000101'
PI_VA_6	In-band information or an appropriate pattern is now available	'0001000'

<b>TP number</b>	TP_104_034	<b>Reference</b>	7.2.3.1.4 Table 7a.0f																																
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																																		
<b>Selection criteria</b>	PICS 6.2.1/5																																		
<b>Test Purpose name</b>	Mapping of High layer compatibility received in an ACM/CPG into 183																																		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status no indication or CPG, a 183 Session Progress is sent if no P-Early-Media header was sent before. The High layer compatibility IE contained in the ACM/CPG ATP parameter is mapped into the HighLayerCompatibility PSTN XML element in the 183 Session Progress as indicated in table 6.1.1.4-3.</p> <ul style="list-style-type: none"> <li>• High layer compatibility received in an ACM called party status no indication, a 183 Session Progress is sent in the PSTN XML element contains the HighLayerCompatibility value HLC_value.</li> <li>• High layer compatibility received in a CPG a 183 Session Progress is sent in the PSTN XML element contains the HighLayerCompatibility value HLC_value.</li> </ul>																																		
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> BCi Called party status = no indication ATP contains a High layer compatibility IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication  <b>CPG:</b> ATP contains a High layer compatibility IE</p>																																		
<b>SIP Parameter values</b>	<p>183 Session Progress:  &lt;?xml version="1.0" encoding="utf-8"?&gt;  PSTN  HighLayerCompatibility  HLOctet3  CodingStandard&gt;00&lt;  Interpretation&gt;100&lt;  PresentationMethod&gt;01&lt;  HLOctet4  HighLayerCharacteristics&gt;<b>HLC_value</b>&lt;</p>																																		
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<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																																	
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Case b																																			
18x (P-Early-Media)	←	← ACM																																	
		← CPG																																	

**Table 6.1.1.4-3: Mapping of High layer compatibility information element to PSTN XML HighLayerCharacteristic**

<b>HLC_value</b>	<b>DSS1 High layer characteristics identification</b>	<b>XML HighLayerCharacteristic</b>
HLC_VA_1	Telephony	'0000001'
HLC_VA_2	Facsimile Group 2/3	'0000100'
HLC_VA_3	Facsimile Group 4 Class I	'0100001'
HLC_VA_4	Facsimile service Group 4, Classes II and III	'0100100'
HLC_VA_5	Syntax based Videotext	'0110010'
HLC_VA_6	International Videotex interworking via gateways or interworking units	'0110011'
HLC_VA_7	Telex service	'0110101'
HLC_VA_8	FTAM application	'1000010'
HLC_VA_9	Videotelephony	'1100000'

<b>TP number</b>	TP_104_035	<b>Reference</b>	7.2.3.1.4 Table 7a.0f
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Low layer compatibility received in an ACM/CPG into 183		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status no indication or CPG, a 183 Session Progress is sent if no P-Early-Media header was sent before. The Low layer compatibility IE contained in the ACM ATP parameter is mapped into the LowLayerCompatibility PSTN XML element in the 183 Session Progress as indicated in table 6.1.1.4-4.</p> <ul style="list-style-type: none"> <li>• Low layer compatibility received in an ACM called party status no indication, a 183 Session Progress is sent in the PSTN XML element contains the LowLayerCompatibility value ITC_value.</li> <li>• Low layer compatibility received in a CPG a 183 Session Progress is sent in the PSTN XML element contains the LowLayerCompatibility value ITC_value.</li> </ul>		
<b>ISUP Parameter values</b>	<p>CASE A  <b>ACM:</b> BCi Called party status = no indication ATP contains a Low layer compatibility IE</p> <p>CASE B  <b>ACM:</b> BCi Called party status = no indication  <b>CPG:</b> ATP contains a Low layer compatibility IE</p>		
<b>SIP Parameter values</b>	<p>183 Session Progress:  &lt;?xml version="1.0" encoding="utf-8"?&gt;  PSTN  LowLayerCompatibility&gt;  LLOctet3&gt;  CodingStandard&gt;00&lt;  InformationTransferCapability&gt;ITC_value&lt;  LLOctet4&gt;  TransferMode&gt;00&lt;  InformationTransferRate&gt;10000&lt;</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	<b>CASE A</b> 183 Session Progress	←	← ACM
	<b>CASE B</b> Case a 18x	←	← ACM
	183 Session Progress	←	← CPG
	Case b 18x (P-Early-Media)	←	← ACM ← CPG
	<b>Apply post test routine</b>		

**Table 6.1.1.4-4: Mapping of Low Layer Compatibility to PSTN XML LowLayerCompatibility**

ITC_value	LLC Information transfer capability	XML LLC InformationTransferCapability
ITC_VA_1	Speech	'00000'
ITC_VA_2	3,1 kHz audio	'10000'
ITC_VA_3	Unrestricted digital info	'01000'
ITC_VA_3	7 kHz audio	'10001'

<b>TP number</b>	TP_104_036	<b>Reference</b>	7.2.3.1.4 Table 7a.0f																																
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/																																		
<b>Selection criteria</b>	PICS 6.2.1/5																																		
<b>Test Purpose name</b>	Mapping of Bearer Capability received in an ACM/CPG into 183																																		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ACM called party status no indication or CPG, a 183 Session Progress is sent if no P-Early-Media header was sent before. The Bearer Capability IE contained in the ACM ATP parameter is mapped into the BearerCapability PSTN XML element in the 183 Session Progress as indicated in table 6.1.1.4-5.</p> <ul style="list-style-type: none"> <li>• Bearer Capability received in an ACM called party status subscriber free 183 Session Progress is sent in the PSTN XML element contains the BearerCapability value ITC_value.</li> <li>• Bearer Capability received in a CPG a 183 Session Progress is sent in the PSTN XML element contains the BearerCapability value ITC_value.</li> </ul>																																		
<b>ISUP Parameter values</b>	CASE A <b>ACM:</b> BCi Called party status = no indication ATP contains a Bearer Capability IE  CASE B <b>ACM:</b> BCi Called party status = no indication <b>CPG:</b> ATP contains a Bearer Capability IE																																		
<b>SIP Parameter values</b>	183 Session Progress: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoCet3 CodingStandard>00< InformationTransferCapability>ITC_value< BCoCet4 TransferMode>00< InformationTransferRate>10000< BCoCet5> Layer1Identification>01< UserInfoLayer1Protocol>00011<																																		
<b>Comments</b>																																			
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td style="text-align: center;">183 Session Progress</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>Case a</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">18x</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td style="text-align: center;">183 Session Progress</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CPG</td> </tr> <tr> <td>Case b</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">18x (P-Early-Media)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM ← CPG</td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>Apply post test routine</b></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	<b>CASE A</b>			183 Session Progress	←	← ACM	<b>CASE B</b>			Case a			18x	←	← ACM	183 Session Progress	←	← CPG	Case b			18x (P-Early-Media)	←	← ACM ← CPG	<b>Apply post test routine</b>			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																																	
INVITE	→	→ IAM																																	
<b>CASE A</b>																																			
183 Session Progress	←	← ACM																																	
<b>CASE B</b>																																			
Case a																																			
18x	←	← ACM																																	
183 Session Progress	←	← CPG																																	
Case b																																			
18x (P-Early-Media)	←	← ACM ← CPG																																	
<b>Apply post test routine</b>																																			

Table 6.1.1.4-5: Mapping of Bearer capability to PSTN XML BearerCapability

<b>ITC_value</b>	<b>BC Information transfer capability</b>	<b>XML InformationTransferCapability</b>
ITC_VA_1	Speech	'00000'
ITC_VA_2	3,1 kHz audio	'10000'
ITC_VA_3	Unrestricted digital inf. W/tone/ann	'10001'
ITC_VA_4	Unrestricted digital information	'01000'

<b>TP number</b>	TP_104_038	<b>Reference</b>	7.2.3.1.4B
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.3.2/5 OR PICS 6.3.2/27		
<b>Test Purpose name</b>	ACM containing CDIV information and oBCi inband if available, a 181 is sent a P-Early-Media present		
<b>Test Purpose</b>	Ensure that on receipt of an ACM containing a Redirection number, Call diversion information and Generic notification set to 'Call is diverted' and an optional backward call indicator set to In-band info or an appropriate pattern is now available, a 181 Call Is Being Forwarded is sent, a P-Early-Media is present indicating authorization of early media.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status = no indication Redirection number Call diversion information Generic notification = 'Call is diverted'		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: histinfo P-Early-Media: supported 181 Call Is Being Forwarded P-Early-Media: <indicating authorization of early media>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying 181 Call Is Being Forwarded	<b>MGCF</b> → ← ←	<b>ISUP</b> → IAM ← ACM
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_040	<b>Reference</b>	7.2.3.1.4B
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.3.2/5 OR PICS 6.3.2/27		
<b>Test Purpose name</b>	CPG containing CDIV information and oBCi inband if available, a 181 is sent a P-Early-Media present		
<b>Test Purpose</b>	Ensure that on receipt of a CPG Event Indicator set to Progress containing a Redirection number, Call diversion information and Generic notification set to 'Call is diverted' and an optional backward call indicator set to In-band info or an appropriate pattern is now available, a 181 Call Is Being Forwarded is sent, a P-Early-Media is present indicating authorization of early media.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event Indicator set to Progress Redirection number Call diversion information Generic notification = 'Call is diverted' oBCI In-band information indicator in-band information or an appropriate pattern is now available		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: histinfo P-Early-Media: supported 181 Call Is Being Forwarded P-Early-Media: <indicating authorization of early media>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180/183 181 Call Is Being Forwarded	<b>MGCF</b> → ← ←	<b>ISUP</b> → IAM ← ACM ← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_104_041	<b>Reference</b>	7.2.3.1.4D
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/9		
<b>Test Purpose name</b>	Mapping of Cause parameter in ACM into Reason header in 183		
<b>Test Purpose</b>	Ensure that when a Cause indicator parameter is received in an ISUP ACM the Cause value is mapped into a Reason header in the sent 183 Session Progress as described in table 6.1.1.4-6.		
<b>ISUP Parameter values</b>	ACM Cause indicators Cause value <b>Cause_Parameter</b>		
<b>SIP Parameter values</b>	180 Reason: Q850, cause=<Derived from the ACM cause value>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM ← ACM

<b>TP number</b>	TP_104_042	<b>Reference</b>	7.2.3.1.4D
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_18x/		
<b>Selection criteria</b>	PICS 6.2.1/9		
<b>Test Purpose name</b>	Mapping of Cause parameter in CPG into Reason header in 183		
<b>Test Purpose</b>	Ensure that when a Cause indicator parameter is received in an ISUP CPG the Cause value is mapped into a Reason header in the sent 183 Session Progress as described in table 6.1.1.4-6.		
<b>ISUP Parameter values</b>	CPG Cause indicators Cause value <b>Cause_Parameter</b>		
<b>SIP Parameter values</b>	183 Reason: Q850, cause=<Derived from the CPG cause value>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 183 Session Progress	<b>MGCF</b> → ← ← <b>Apply post test routine</b>	<b>ISUP</b> IAM ← ACM ← CPG

Table 6.1.1.4-6: Mapping of Cause parameter in ACM or CPG into Reason header in 183

	<b>←SIP 183 Session Progress</b>	<b>←ACM/CPG</b>
	Reason header cause value	<b>Cause_Parameter</b>
VA_01	4	Cause value No. 4 (Send special information tone)
VA_02	5	Cause value No. 5 (Misdialled trunk prefix)
VA_03	18	Cause value No. 18 (no user responding)
VA_04	19	Cause value No. 19 (no answer from the user)
VA_05	22	Cause value No. 22 (number changed)
VA_06	23	Cause value No. 23 (Re-route to new destination)
VA_07	26	Cause value No. 26 (Non-selected user clearing)
VA_08	27	Cause value No. 27 (destination out of order)
VA_09	41	Cause value No. 41 (Temporary failure)
VA_10	50	Cause value No. 50 (requested facility no subscribed)
VA_11	65	Cause value No. 65 Bearer capability not implemented

	← SIP 183 Session Progress	← ACM/CPG
	Reason header cause value	Cause_Parameter
VA_12	87	Cause value No. 87 (User not member of Closed User Group(CUG))
VA_13	90	Cause value No. 90 (Non existing Closed User Group (CUG) )
VA_14	97	Cause value No. 97 (Message type non-existent or not implemented)
VA_15	98	Cause value No. 98 (Message not compatible with call state or message type non-existent or not implemented)
VA_16	99	Cause value No. 99 (information element/parameter non-existent or not implemented))
VA_17	102	Cause value No. 102 (recovery on timer expiry)

### 6.1.1.5 Sending of the 200 OK (INVITE)

TP number	TP_105_001	Reference	7.2.3.1.5																		
TSS reference	SIP-ISUP/Basic call/Sending_of_200_OK/																				
Selection criteria																					
Test Purpose name	An ANM is received a 200 OK is sent																				
Test Purpose	Ensure that on receipt of an ANM the SUT sends a 200 OK INVITE.																				
ISUP Parameter values																					
SIP Parameter values																					
Comments																					
Message flows	<table style="width: 100%; text-align: center;"> <thead> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>ANM</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM	200 OK (INVITE)	←	ANM	ACK	→			
Mg	MGCF	ISUP																			
INVITE	→	IAM																			
100 Trying	←																				
180 Ringing	←	ACM																			
200 OK (INVITE)	←	ANM																			
ACK	→																				

TP number	TP_105_002	Reference	7.2.3.1.5															
TSS reference	SIP-ISUP/Basic call/Sending_of_200_OK/																	
Selection criteria																		
Test Purpose name	A CON is received a 200 OK is sent																	
Test Purpose	Ensure that on receipt of a CON the SUT sends a 200 OK INVITE.																	
ISUP Parameter values																		
SIP Parameter values																		
Comments																		
Message flows	<table style="width: 100%; text-align: center;"> <thead> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>CON</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		200 OK (INVITE)	←	CON	ACK	→			
Mg	MGCF	ISUP																
INVITE	→	IAM																
100 Trying	←																	
200 OK (INVITE)	←	CON																
ACK	→																	

<b>TP number</b>	TP_105_003	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1																									
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/																											
<b>Selection criteria</b>	PICS 6.2.1/5																											
<b>Test Purpose name</b>	Progress indicator received in ANM/CON is mapped into PSTN XML ProgressIndicator																											
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and an ATP containing a Progress indicator IE set to value PI_value a, 200 OK INVITE is sent. The PSTN XML ProgressIndicator value is set as indicated in table 6.1.1.5-1.																											
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> ATP contains a Progress Indicator IE value PI_value																											
<b>SIP Parameter values</b>	200 OK INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< Location<yyyy> ProgressOctet4 ProgressDescription>PI_value<																											
<b>Comments</b>																												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→	
Mg	MGCF	ISUP																										
INVITE	→	→ IAM																										
<b>CASE A</b>																												
180 Ringing	←	← ACM																										
200 OK (INVITE)	←	← ANM																										
ACK	→																											
<b>CASE B</b>																												
200 OK (INVITE)	←	← CON																										
ACK	→																											

**Table 6.1.1.5-1: Mapping of Progress Indicator information element to PSTN XML ProgressIndicator**

PI_value	ATP Progress Indicator value	XML ProgressIndicator ProgressDescription
PI_VA_1	Call is not end-to-end ISDN; further call progress information may be available in-band	'0000001'
PI_VA_2	Destination address is non-ISDN	'0000010'
PI_VA_3	Origination address is non-ISDN	'0000011'
PI_VA_4	Call has returned to the ISDN	'0000100'
PI_VA_5	Interworking has occurred and has resulted in a telecommunication service change	'0000101'
PI_VA_6	In-band information or an appropriate pattern is now available	'0001000'

<b>TP number</b>	TP_105_004	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	High layer compatibility received in ANM/CON is mapped into PSTN XML HighLayerCompatibility		
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and an ATP containing a High layer compatibility IE set to value HLC_value, a 200 OK INVITE is sent. The PSTN XML HighLayerCompatibility value is set as indicated in table 6.1.1.5-2.		
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> ATP contains a High layer compatibility IE value HLC_value		
<b>SIP Parameter values</b>	200 OK INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	Mg	MGCF	ISUP
	INVITE	→	→ IAM
	<b>CASE A</b>		
	180 Ringing	←	← ACM
	200 OK (INVITE)	←	← ANM
	ACK	→	
	<b>CASE B</b>		
	200 OK (INVITE)	←	← CON
	ACK	→	
	Apply post test routine		

**Table 6.1.1.5-2: Mapping of High layer compatibility information element to PSTN XML HighLayerCharacteristic**

HLC_value	DSS1 High layer characteristics identification	XML HighLayerCharacteristic
HLC_VA_1	Telephony	'0000001'
HLC_VA_2	Facsimile Group 2/3	'0000100'
HLC_VA_3	Facsimile Group 4 Class I	'0100001'
HLC_VA_4	Facsimile service Group 4, Classes II and III	'0100100'
HLC_VA_5	Syntax based Videotex	'0110010'
HLC_VA_6	International Videotex interworking via gateways or interworking units	'0110011'
HLC_VA_7	Telex service	'0110101'
HLC_VA_8	FTAM application	'1000010'
HLC_VA_9	Videotelephony	'1100000'

<b>TP number</b>	TP_105_005	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Low layer compatibility received in ANM/CON is mapped into PSTN XML LowLayerCompatibility		
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and an ATP containing a Low layer compatibility IE set to value ITC_value, a 200 OK INVITE is sent. The PSTN XML LowLayerCompatibility value is set as indicated in table 6.1.1.5-3.		
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> ATP contains a Low layer compatibility IE value <b>ITC_value</b>		
<b>SIP Parameter values</b>	200 OK INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < LLOctet4> TransferMode>00< InformationTransferRate>10000< LLOctet5> Layer1Identification>01</ UserInfoLayer1Protocol> <b>ITC_value</b> </		
<b>Comments</b>	When the 'XML UserInfoLayer1Protocol' element is absent, the entire 'LLOctet5' element is absent		
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
<b>CASE A</b>			
	180 Ringing	←	← ACM
	200 OK (INVITE)	←	← ANM
	ACK	→	
<b>CASE B</b>			
	200 OK (INVITE)	←	← CON
	ACK	→	
	Apply post test routine		

Table 6.1.1.5-3: Mapping of Low Layer Compatibility to PSTN XML LowLayerCompatibility

ITC_value	LLC Information transfer capability	XML LLC InformationTransferCapability	XML UserInfoLayer1Protocol
ITC_VA_1	Speech	'00000'	'00011'
ITC_VA_2	3,1 kHz audio	'10000'	'00011'
ITC_VA_3	Unrestricted digital info	'01000'	absent
ITC_VA_4	7 kHz audio	'10001'	'00110'

<b>TP number</b>	TP_105_006	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Bearer Capability received in ANM/CON is mapped into PSTN XML BearerCapability		
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and an ATP containing a Bearer Capability IE set to value ITC_value, a 200 OK INVITE is sent. The PSTN XML BearerCapability value is set as indicated in table 6.1.1.5-4.		
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> ATP contains a Bearer Capability IE value <b>ITC_value</b>		
<b>SIP Parameter values</b>	200 OK INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < BCoocet4 TransferMode>00< InformationTransferRate>10000< BCoocet5> Layer1Identification>01< UserInfoLayer1Protocol> <b>ITC_value</b> </		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE  <b>CASE A</b> 180 Ringing  200 OK (INVITE) ACK	<b>MGCF</b> →  CASE A ← →  CASE B ← →	<b>ISUP</b> IAM  ACM  ANM  CON  Apply post test routine

Table 6.1.1.5-4: Mapping of Bearer capability to PSTN XML BearerCapability

<b>ITC_value</b>	<b>BC Information transfer capability</b>	<b>XML InformationTransferCapability</b>	<b>XML UserInfoLayer1Protocol</b>
ITC_VA_1	Speech	'00000'	'00011'
ITC_VA_2	3,1 kHz audio	'10000'	'00011'
ITC_VA_3	Unrestricted digital inf. W/tone/ann	'10001'	'00110'

<b>TP number</b>	TP_105_007	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Backward call indicator mapped into PSTN XML ProgressIndicator value 1		
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and the backward call indicator is set to <b>ISDN User Part not used all the way</b> , a 200 OK INVITE is sent and the PSTN XML ProgressIndicator value is set to 1 (Call is not end-to-end ISDN: further progress information may be available in-band).		
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> BCi ISDN User Part indicator = ISDN User Part not used all the way		
<b>SIP Parameter values</b>	200 OK INVITE <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE <b>CASE A</b> 180 Ringing 200 OK (INVITE) ACK	MGCF → ← ← → <b>CASE B</b> 200 OK (INVITE) ACK	ISUP IAM ACM ANM CON
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_105_008	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.2
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Backward call indicator mapped into PSTN XML ProgressIndicator value 2		
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and the backward call indicator is set to <b>ISDN User Part used all the way and Terminating access non-ISDN</b> , a 200 OK INVITE is sent and the PSTN XML ProgressIndicator value is set to 2 (Destination address is non-ISDN).		
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> BCi ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access non-ISDN		
<b>SIP Parameter values</b>	200 OK INVITE <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE <b>CASE A</b> 180 Ringing 200 OK (INVITE) ACK	MGCF → ← ← → <b>CASE B</b> 200 OK (INVITE) ACK	ISUP IAM ACM ANM CON
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_105_009	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.2																											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/																													
<b>Selection criteria</b>	PICS 6.2.1/5																													
<b>Test Purpose name</b>	Backward call indicator mapped into PSTN XML ProgressIndicator value 7																													
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and the backward call indicator is set to <b>ISDN User Part used all the way and Terminating access ISDN</b> , a 200 OK INVITE is sent and the PSTN XML ProgressIndicator value is set to 7.																													
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> BCi ISDN User Part indicator = ISDN User Part used all the way ISDN access indicator = Terminating access ISDN																													
<b>SIP Parameter values</b>	200 OK INVITE <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0000111<																													
<b>Comments</b>																														
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td><b>CASE A</b></td> <td></td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE B</b></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→		<b>Apply post test routine</b>	
Mg	MGCF	ISUP																												
INVITE	→	→ IAM																												
<b>CASE A</b>																														
180 Ringing	←	← ACM																												
200 OK (INVITE)	←	← ANM																												
ACK	→																													
<b>CASE B</b>																														
200 OK (INVITE)	←	← CON																												
ACK	→																													

<b>TP number</b>	TP_105_010	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.2																											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/																													
<b>Selection criteria</b>	PICS 6.2.1/5																													
<b>Test Purpose name</b>	Optional backward call indicator mapped into PSTN XML ProgressIndicator value 8																													
<b>Test Purpose</b>	Ensure that on receipt of an ANM/CON and the optional backward call indicator is set to <b>in-band information or an appropriate pattern is now available</b> , a 200 OK INVITE is sent and the PSTN XML ProgressIndicator value is set to 8 (In-band information or appropriate pattern is now available).																													
<b>ISUP Parameter values</b>	<b>ANM/CON:</b> Optional backward call indicator In-band information indicator = in-band information or an appropriate pattern is now available																													
<b>SIP Parameter values</b>	200 OK INVITE <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ... ProgressOctet4 ProgressDescription>0001000<																													
<b>Comments</b>																														
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td><b>CASE A</b></td> <td></td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE B</b></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→		<b>Apply post test routine</b>	
Mg	MGCF	ISUP																												
INVITE	→	→ IAM																												
<b>CASE A</b>																														
180 Ringing	←	← ACM																												
200 OK (INVITE)	←	← ANM																												
ACK	→																													
<b>CASE B</b>																														
200 OK (INVITE)	←	← CON																												
ACK	→																													

<b>TP number</b>	TP_105_011	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Receipt of TMU speech in ANM/CON, no BC present in ATP		
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter set to <b>speech</b> in the ANM/CON, a 200 OK INVITE is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set to <b>Speech</b> .		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR = second InformationTransferCapability TMR prime = first InformationTransferCapability USI = first BearerCapability USI prime = second BearerCapability <b>ANM/CON:</b> Transmission medium used = speech		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>00000</b> < .... <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>10001</b> < ....  <b>200 OK INVITE</b> <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoCet3 CodingStandard>00< InformationTransferCapability>00000< ....		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	<b>CASE A</b>		
	180 Ringing	←	← ACM
	200 OK (INVITE)	←	← ANM
	ACK	→	
	<b>CASE B</b>		
	200 OK (INVITE)	←	← CON
	ACK	→	
			<b>Apply post test routine</b>

<b>TP number</b>	TP_105_012	<b>Reference</b>	7.2.3.1.5 Table 7.2.3.1.5.1
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Receipt of TMU 3,1 kHz audio in ANM/CON, no BC present in ATP		
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter set to <b>3,1 kHz audio</b> in the ANM/CON, a 200 OK INVITE is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set to <b>3,1 kHz audio</b> .		
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR = second InformationTransferCapability TMR prime = first InformationTransferCapability USI = first BearerCapability USI prime = second BearerCapability <b>ANM/CON:</b> Transmission medium used = 3,1 kHz audio		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>10000</b> < .... <b>BearerCapability</b> BCoCet3 CodingStandard>00< InformationTransferCapability> <b>10001</b> < ....  <b>200 OK INVITE</b> <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoCet3 CodingStandard>00< InformationTransferCapability>10000< ....		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	<b>CASE A</b>		
	180 Ringing	←	← ACM
	200 OK (INVITE)	←	← ANM
	ACK	→	
	<b>CASE B</b>		
	200 OK (INVITE)	←	← CON
	ACK	→	
			<b>Apply post test routine</b>

<b>TP number</b>	TP_105_013	<b>Reference</b>	7.2.3.1.5																											
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/																													
<b>Selection criteria</b>	PICS 6.2.1/5																													
<b>Test Purpose name</b>	Receipt of TMU, BC present in ATP PSTN XML BearerCapability sent in 200 OK																													
<b>Test Purpose</b>	Ensure that on receipt of a Transmission medium used parameter and in the ATP a Bearer Capability IE in the ANM/CON, a 200 OK INVITE is sent and a PSTN XML BearerCapability element is present the InformationTransferCapability is set as indicated in table 6.1.1.5-5.																													
<b>ISUP Parameter values</b>	<b>IAM:</b> TMR = second InformationTransferCapability TMR prime = first InformationTransferCapability USI = first BearerCapability USI prime = second BearerCapability <b>ANM/CON:</b> Transmission medium used, ATP Bearer Capability IE																													
<b>SIP Parameter values</b>	200 OK INVITE <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCocet3 CodingStandard>00< InformationTransferCapability>ITC_value< ...																													
<b>Comments</b>																														
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>			Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→	
Mg	MGCF	ISUP																												
INVITE	→	→ IAM																												
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180 Ringing	←	← ACM																												
200 OK (INVITE)	←	← ANM																												
ACK	→																													
<b>CASE B</b>																														
200 OK (INVITE)	←	← CON																												
ACK	→																													

Table 6.1.1.5-5: Mapping of TMU and Bearer capability IE to PSTN XML BearerCapability

ITC_value	← 180 Ringing or 183 Session Progress	←ACM/CPG	
ITC_value_VA_01	PSTN XML BearerCapability = "Speech"	TMU	"Speech"
		ATP	BC "speech"
ITC_value_VA_02	PSTN XML BearerCapability = " Speech "	TMU	"3,1 kHz audio"
		ATP	BC "speech"
ITC_value_VA_03	PSTN XML BearerCapability = "3,1 kHz audio"	TMU	"Speech "
		ATP	BC "3,1 kHz audio"
ITC_value_VA_04	PSTN XML BearerCapability = "3,1 kHz audio"	TMU	"3,1 kHz audio"
		ATP	BC "3,1 kHz audio"

<b>TP number</b>	TP_105_014	<b>Reference</b>	7.2.3.1.5																															
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_200_OK/																																	
<b>Selection criteria</b>	PICS 6.2.1/5																																	
<b>Test Purpose name</b>	Fall back does not occur, no TMU parameter received																																	
<b>Test Purpose</b>	Ensure when the sent IAM contains a TMR prime and a USI prime and the TMR is set to 64 kBit/s preferred and a TMU parameter is not present in the ANM or CON, a 200 OK INVITE is sent. The Bearer Capability IE present in the ATP parameter is mapped in the PSTN XML BearerCapability element. The first stated codec in the SDP answer is set to the value of the first stated codec in the SDP offer.																																	
<b>ISUP Parameter values</b>	<p><b>IAM:</b>  TMR = second InformationTransferCapability  TMR prime = first InformationTransferCapability  USI = first BearerCapability  USI prime = second BearerCapability</p> <p><b>ANM/CON:</b></p>																																	
<b>SIP Parameter values</b>	<p>200 OK INVITE  &lt;?xml version="1.0" encoding="utf-8"?&gt;  PSTN      BearerCapability      BCoocet3          CodingStandard&gt;00&lt;          InformationTransferCapability&gt;<b>00110</b>&lt;          ...  SDP      m=audio &lt;port #&gt; RTP/AVP &lt;dynamic Pay Load Type&gt;      a=rtpmap: &lt;dynamic Pay Load Type&gt; CLEARMODE/8000</p>																																	
<b>Comments</b>																																		
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 30%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td><b>CASE A</b></td> <td></td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE B</b></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>Apply post test routine</b></td><td></td></tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→		<b>Apply post test routine</b>					
Mg	MGCF	ISUP																																
INVITE	→	→ IAM																																
<b>CASE A</b>																																		
180 Ringing	←	← ACM																																
200 OK (INVITE)	←	← ANM																																
ACK	→																																	
<b>CASE B</b>																																		
200 OK (INVITE)	←	← CON																																
ACK	→																																	
<b>Apply post test routine</b>																																		

### 6.1.1.6 Sending of the Release message (REL)

<b>TP number</b>	TP_106_001	<b>Reference</b>	7.2.3.1.7																														
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/																																
<b>Selection criteria</b>																																	
<b>Test Purpose name</b>	BYE received in confirmed dialogue no Reason header included, a REL is sent																																
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in confirmed dialogue and no Reason header is present, a REL message is sent. The cause indicator is set to No. 16 (normal clearing), the location is set to 'network beyond interworking point'.																																
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = 16 (normal clearing) Location = network beyond interworking point																																
<b>SIP Parameter values</b>																																	
<b>Comments</b>																																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">Mg</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>← ACM</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td>← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>→ REL</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>← RLC</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM				200 OK (INVITE)	←	← ANM	ACK	→					BYE	→	→ REL	200 OK (BYE)	←	← RLC		
Mg	MGCF	ISUP																															
INVITE	→	→ IAM																															
100 Trying	←																																
180 Ringing	←	← ACM																															
200 OK (INVITE)	←	← ANM																															
ACK	→																																
BYE	→	→ REL																															
200 OK (BYE)	←	← RLC																															

<b>TP number</b>	TP_106_002	<b>Reference</b>	7.2.3.1.7																														
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/																																
<b>Selection criteria</b>																																	
<b>Test Purpose name</b>	BYE received in confirmed dialogue Reason header included, a REL is sent																																
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in confirmed dialogue and a Reason header is present, a REL message is sent. The cause indicator is set to the Reason header cause value, the location is set to 'network beyond interworking point'.																																
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b> Location = network beyond interworking point																																
<b>SIP Parameter values</b>	BYE: Reason: Q.850; cause= <b>Cause_value</b>																																
<b>Comments</b>	The <b>Cause_value</b> is a PIXIT parameter.																																
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">Mg</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>← ACM</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td>← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>BYE</td> <td style="text-align: center;">→</td> <td>→ REL</td> </tr> <tr> <td>200 OK (BYE)</td> <td style="text-align: center;">←</td> <td>← RLC</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM				200 OK (INVITE)	←	← ANM	ACK	→					BYE	→	→ REL	200 OK (BYE)	←	← RLC		
Mg	MGCF	ISUP																															
INVITE	→	→ IAM																															
100 Trying	←																																
180 Ringing	←	← ACM																															
200 OK (INVITE)	←	← ANM																															
ACK	→																																
BYE	→	→ REL																															
200 OK (BYE)	←	← RLC																															

<b>TP number</b>	TP_106_003	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	BYE received in early dialogue no Reason header included, a REL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in early dialogue and no Reason header is present, a REL message is sent. The cause indicator is set to No. 16 (normal clearing), the location is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = 16 (normal clearing) Location = network beyond interworking point		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	18x	←	← ACM
	BYE	→	→ REL
	200 OK (BYE)	←	← RLC
	487 Request Terminated	←	
	ACK	→	

<b>TP number</b>	TP_106_004	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	BYE received in early dialogue Reason header included, a REL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in early dialogue and a Reason header is present, a REL message is sent. The cause indicator is set to the Reason header cause value, the location is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b> Location = network beyond interworking point		
<b>SIP Parameter values</b>	BYE: Reason: Q.850; cause= <b>Cause_value</b>		
<b>Comments</b>	The <b>Cause_value</b> is a PIXIT parameter.		
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	18x	←	← ACM
	BYE	→	→ REL
	200 OK (BYE)	←	← RLC
	487 Request Terminated	←	
	ACK	→	

<b>TP number</b>	TP_106_005	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	CANCEL received in early dialogue no Reason header included, a REL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a CANCEL request in early dialogue and no Reason header is present, a REL message is sent. The cause indicator is set to No. 16 (normal clearing), the location is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = 31 (normal unspecified) Location = network beyond interworking point		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	18x	←	← ACM
	CANCEL	→	→ REL
	200 OK (CANCEL)	←	← RLC
	487 Request Terminated	←	
	ACK	→	

<b>TP number</b>	TP_106_006	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	CANCEL received in early dialogue Reason header included, a REL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a CANCEL request in early dialogue and a Reason header is present, a REL message is sent. The cause indicator is set to the Reason header cause value, the location is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b> Location = network beyond interworking point		
<b>SIP Parameter values</b>	CANCEL: Reason: Q.850; cause= <b>Cause_value</b>		
<b>Comments</b>	The <b>Cause_value</b> is a PIXIT parameter,		
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	18x	←	ACM
	CANCEL	→	REL
	200 OK (CANCEL)	←	RLC
	487 Request Terminated	←	
	ACK	→	

<b>TP number</b>	TP_106_007	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	BYE received in confirmed dialogue PSTN XML HighLayerCompatibility present, a REL is sent containing a High layer compatibility IE		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in confirmed dialogue and a PSTN XML HighLayerCompatibility is present, a REL is sent and an ATP is present containing a High layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-1.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP High layer compatibility High Layer Characteristic = HLC_value		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HILOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HILOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	100 Trying	←	ACM
	180 Ringing	←	
	200 OK (INVITE)	←	ANM
	ACK	→	
	BYE	→	REL
	200 OK (BYE)	←	RLC

<b>TP number</b>	TP_106_008	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	BYE received in early dialogue PSTN XML HighLayerCompatibility present, a REL is sent containing a High layer compatibility IE		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in early dialogue and a PSTN XML HighLayerCompatibility is present, a REL is sent and an ATP is present containing a High layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-1.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP High layer compatibility High Layer Characteristic = HLC_value		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE →  BYE → 200 OK (BYE) ← 487 Request Terminated ← ACK →	<b>MGCF</b> → IAM  → REL ← RLC	<b>ISUP</b>

<b>TP number</b>	TP_106_009	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	CANCEL received in early dialogue PSTN XML HighLayerCompatibility present, a REL is sent containing a High layer compatibility IE		
<b>Test Purpose</b>	Ensure that on receipt of a CANCEL request in early dialogue and a PSTN XML HighLayerCompatibility is present, a REL is sent and an ATP is present containing a High layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-1.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP High layer compatibility High Layer Characteristic = HLC_value		
<b>SIP Parameter values</b>	CANCEL <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE →  CANCEL → 200 OK (CANCEL) ← 487 Request Terminated ← ACK →	<b>MGCF</b> → IAM  → REL ← RLC	<b>ISUP</b>

**Table 6.1.1.6-1: Mapping of High layer compatibility information element to PSTN XML  
HighLayerCharacteristic**

HLC_value	DSS1 High layer characteristics identification	XML HighLayerCharacteristic
HLC_VA_1	Telephony	'0000001'
HLC_VA_2	Facsimile Group 2/3	'0000100'
HLC_VA_3	Facsimile Group 4 Class I	'0100001'
HLC_VA_4	Facsimile service Group 4, Classes II and III	'0100100'
HLC_VA_5	Syntax based Videotex	'0110010'
HLC_VA_6	International Videotex interworking via gateways or interworking units	'0110011'
HLC_VA_7	Telex service	'0110101'
HLC_VA_8	FTAM application	'1000010'
HLC_VA_9	Videotelephony	'1100000'

TP number	TP_106_010	Reference	7.2.3.1.7
TSS reference	SIP-ISUP/Basic call/Sending_of_REL/		
Selection criteria	PICS 6.2.1/5		
Test Purpose name	BYE received in confirmed dialogue PSTN XML LowLayerCompatibility present, a REL is sent containing a Low layer compatibility IE		
Test Purpose	Ensure that on receipt of a BYE request in confirmed dialogue and a PSTN XML LowLayerCompatibility is present, a REL is sent and an ATP is present containing a Low layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-2.		
ISUP Parameter values	REL: ATP Low layer compatibility Information Transfer Capability = <b>ITC_value</b>		
SIP Parameter values	CANCEL <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < ...<		
Comments			
Message flows	Mg INVITE 100 Trying 180 Ringing  200 OK (INVITE) ACK  BYE 200 OK (BYE)	MGCF → ← ←  ← →  → ←	ISUP IAM ACM  ANM  REL RLC

<b>TP number</b>	TP_106_011	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	BYE received in early dialogue PSTN XML LowLayerCompatibility present, a REL is sent containing a Low layer compatibility IE		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request in early dialogue and a PSTN XML LowLayerCompatibility is present, a REL is sent and an ATP is present containing a Low layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-2.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP Low layer compatibility Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	CANCEL <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < ...		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE BYE 200 OK (BYE) 487 Request Terminated ACK	<b>MGCF</b> → → ← ← →	<b>ISUP</b> IAM REL RLC

<b>TP number</b>	TP_106_012	<b>Reference</b>	7.2.3.1.7
<b>TSS reference</b>	SIP-ISUP/Basic call/Sending_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	CANCEL received in early dialogue PSTN XML LowLayerCompatibility present, a REL is sent containing a Low layer compatibility IE		
<b>Test Purpose</b>	Ensure that on receipt of a CANCEL request in early dialogue and a PSTN XML LowLayerCompatibility is present, a REL is sent and an ATP is present containing a Low layer compatibility IE. The value is mapped as indicated in table 6.1.1.6-2.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP Low layer compatibility Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	CANCEL <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < ...		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE CANCEL 200 OK (CANCEL) 487 Request Terminated ACK	<b>MGCF</b> → → ← ← →	<b>ISUP</b> IAM REL RLC

Table 6.1.1.6-2: Mapping of Low Layer Compatibility to PSTN XML LowLayerCompatibility

<b>ITC_value</b>	<b>LLC Information transfer capability</b>	<b>XML LLC InformationTransferCapability</b>
ITC_VA_1	Speech	'00000'
ITC_VA_2	3,1 kHz audio	'10000'
ITC_VA_3	Unrestricted digital info	'01000'
ITC_VA_4	7 kHz audio	'10001'

### 6.1.1.7 Receipt of the Release Message

<b>TP number</b>	TP_107_001	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL is received, a BYE request is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message in the confirmed dialogue, a BYE is sent. The Reason header is present and the cause value is set to the received cause value in the REL Cause indicator.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b>		
<b>SIP Parameter values</b>	<b>BYE:</b> Reason: Q.850; cause = <b>Cause_value</b>		
<b>Comments</b>	Cause_value is a PIXIT parameter.		
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	100 Trying	←	← ACM
	180 Ringing	←	
	200 OK (INVITE)	←	← ANM
	ACK	→	
	BYE	←	← REL
	200 OK (BYE)	→	→ RLC

<b>TP number</b>	TP_107_002	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL is received before an early dialogue is established, a final response is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message before an early dialogue is established a SIP final response is sent. The response code is derived from the Cause value received in the REL according the rules described in table 6.1.1.7-1. The cause value of the received REL is present in the Reason header of the sent final response.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b>		
<b>SIP Parameter values</b>	4xx/5xx/6xx: Reason: Q.850; cause = <b>Cause_value</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	100 Trying	←	
	SIP_final_Response	←	← REL
	ACK	→	→ RLC

<b>TP number</b>	TP_107_003	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL is received after an early dialogue is established (180), a final response is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to sending a 180 Ringing is established a SIP final response is sent. The response code is derived from the Cause value received in the REL according the rules described in table 6.1.1.7-1. The cause value of the received REL is present in the Reason header of the sent final response.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status = subscriber free <b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b>		
<b>SIP Parameter values</b>	4xx/5xx/6xx: Reason: Q.850; cause = <b>Cause_value</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	180 Ringing	←	← ACM
	SIP_final_Response	←	← REL
	ACK	→	→ RLC

<b>TP number</b>	TP_107_004	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL is received after an early dialogue is established (181), a final response is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to sending a 181 Call Is Being Forwarded is established a SIP final response is sent. The response code is derived from the Cause value received in the REL according the rules described in table 6.1.1.7-1. The cause value of the received REL is present in the Reason header of the sent final response.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status = no indication Redirection number Call diversion information Generic notification = 'Call is diverted' <b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b>		
<b>SIP Parameter values</b>	4xx/5xx/6xx: Reason: Q.850; cause = <b>Cause_value</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 181 Call Is Being Forwarded	<b>MGCF</b> → ←	ISUP → IAM ← ACM
	SIP_final_Response ACK	← →	← REL → RLC

<b>TP number</b>	TP_107_005	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL is received after an early dialogue is established (181), a final response is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to sending a 183 Session Progress is established a SIP final response is sent. The response code is derived from the Cause value received in the REL according the rules described in table 6.1.1.7-1. The cause value of the received REL is present in the Reason header of the sent final response.		
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status = no indication oBCi in-band info available <b>REL:</b> Cause indicator Cause Value = <b>Cause_value</b>		
<b>SIP Parameter values</b>	4xx/5xx/6xx: Reason: Q.850; cause = <b>Cause_value</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 183 Session Progress	<b>MGCF</b> → ←	ISUP → IAM ← ACM
	SIP_final_Response ACK	← →	← REL → RLC

<b>TP number</b>	TP_107_006	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	An ATP Progress indicator IE present in a REL is mapped into the PSTN XML ProgressIndicator in the sent final response		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and Progress Indicator IE is present in an ATP, a SIP final response as indicated in table 6.1.1.7-5 is sent, a PSTN XML ProgressIndicator is contained and the Progress Description is derived from the received REL Progress indicator as indicated in table 6.1.1.7-2.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP Progress Indicator = PI_value		
<b>SIP Parameter values</b>	4xx/5xx/6xx: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< Location<yyyy> ProgressOctet4 ProgressDescription>PI_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ←  SIP_final_Response ← ACK →	<b>MGCF</b> → IAM ← ACM  ← REL → RLC	<b>ISUP</b>

<b>TP number</b>	TP_107_007	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	An ATP High Layer Compatibility IE present in a REL is mapped into the PSTN XML HighLayerCompatibility in the sent final response		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and High Layer Compatibility IE is present in an ATP, a SIP final response as indicated in table 6.1.1.7-5 is sent, a PSTN XML HighLayerCompatibility is contained and the HighLayerCharacteristics is derived from the received REL High Layer Compatibility as indicated in table 6.1.1.7-3.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP High Layer Compatibility = HLC_value		
<b>SIP Parameter values</b>	4xx/5xx/6xx: <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics>HLC_value<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ←  SIP_final_Response ← ACK →	<b>MGCF</b> → IAM ← ACM  ← REL → RLC	<b>ISUP</b>

<b>TP number</b>	TP_107_008	<b>Reference</b>	7.2.3.1.8
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	An ATP Low Layer Compatibility IE present in a REL is mapped into the PSTN XML LowLayerCompatibility in the sent final response		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and Low Layer Compatibility IE is present in an ATP, a SIP final response as indicated in table 6.1.1.7-5 is sent, a PSTN XML LowLayerCompatibility is contained and the InformationTransferCapability is derived from the received REL Low Layer Compatibility as indicated in table 6.1.1.7-4.		
<b>ISUP Parameter values</b>	<b>REL:</b> ATP Low Layer Compatibility = <b>ITC_value</b>		
<b>SIP Parameter values</b>	4xx/5xx/6xx: <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < LLOctet4> TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	180 Ringing	←	ACM
	SIP_final_Response	←	REL
	ACK	→	RLC

**Table 6.1.1.7-1: Receipt of the Release message (REL)**

<b>SIP_final_Response</b>	<b>←SIP Message</b>	<b>← REL</b>
	Status code	Cause parameter
VA_01	404 Not Found	Cause value No. 1 (unallocated (unassigned) number)
VA_02	604 Does not exist anywhere	Cause value No. 2 (no route to network)
VA_03	604 Does not exist anywhere	Cause value No. 3 (no route to destination)
VA_04	500 Server Internal error	Cause value No. 4 (Send special information tone)
VA_05	404 Not Found	Cause value No. 5 (Mis dialled trunk prefix)
VA_06	486 Busy Here	Cause value No. 17 (user busy)
VA_07	480 Temporarily unavailable	Cause value No. 18 (no user responding)
VA_08	480 Temporarily unavailable	Cause value No. 19 (no answer from the user)
VA_09	480 Temporarily unavailable	Cause value No. 20 (subscriber absent)
VA_10	603 Decline	Cause value No. 21 (call rejected), Location = 000 / user (U)
VA_11	403 Forbidden	Cause value No. 21 (call rejected) , Location not equal 000 / user (U)
VA_12	410 Gone	Cause value No. 22 (number changed)
VA_13	410 Gone	Cause value No. 23 (Re-route to new destination)
VA_14	433 Anonymity Disallowed	Cause value No. 24 (call rejected due to ACR supplementary service)
VA_15	483 Too many hops	Cause value No. 25 (Exchange routing error)
VA_16	480 Temporarily unavailable	Cause value No. 26 (Non-selected user clearing)
VA_17	502 Bad Gateway	Cause value No. 27 (destination out of order)
VA_18	484 Address Incomplete	Cause value No. 28 invalid number format (address incomplete)

SIP_final_Response	← SIP Message	← REL
	Status code	Cause parameter
VA_19	501 Not Implemented	Cause value No. 29 (facility rejected)
VA_20	480 Temporarily unavailable	Cause value No. 31 (normal unspecified) (class default)
VA_21	486 Busy here	Cause value No. 34 (No circuit/channel available) CCBS indicator = CCBS possible
VA_22	503 Service Unavailable	Cause value No. 34 (No circuit/channel available) CCBS indicator = CCBS not possible or absent
VA_23	500 Server Internal error	Cause value No. 38 (Network out of order)
VA_24	503 Service Unavailable	Cause value No. 41 (Temporary failure)
VA_25	503 Service Unavailable	Cause value No. 42 (Switching equipment congestion)
VA_26	500 Server Internal error	Cause value No. 43 (Access information discarded)
VA_27	503 Service Unavailable	Cause value No. 44 (Requested channel not available)
VA_28	500 Server Internal error	Cause value No. 46 (Precedence call blocked)
VA_29	503 Service Unavailable	Cause value No. 47 (Resource unavailable (class default))
VA_30	488 Not acceptable here	Cause value No. 50 (requested facility no subscribed)
VA_31	603 Decline	Cause value No. 55 (Incoming class barred within Closed User Group (CUG))
VA_32	603 Decline	Cause value No. 57 (bearer capability not authorised)
VA_33	503 Service Unavailable	Cause value No. 58 (bearer capability not presently available)
VA_34	501 Not Implemented	Cause value No. 63 (service option not available, unspecified) (class default)
VA_35	500 Server Internal error	Cause value No. 65 Bearer capability not implemented
VA_36	501 Not Implemented	Cause value No. 69 (Requested facility not implemented)
VA_37	501 Not Implemented	Cause value No. 70 (Only restricted digital information capability available)
VA_38	501 Not Implemented	Cause value No. 79 (Service or option not implemented(class default))
VA_39	403 Forbidden	Cause value No. 87 (User not member of Closed User Group(CUG))
VA_40	606 Not acceptable	Cause value No. 88 (incompatible destination)
VA_41	403 Forbidden	Cause value No. 90 (Non existing Closed User Group (CUG) )
VA_42	500 Server Internal error	Cause value No. 91 (invalid transit network selection)
VA_43	500 Server Internal error	Cause value No. 95 (invalid message) (class default)
VA_44	501 Not Implemented	Cause value No. 97 (Message type non-existent or not implemented)
VA_45	501 Not Implemented	Cause value No. 99 (information element/parameter non-existent or not implemented))
VA_46	501 Not Implemented	Cause value No. 98 (Message not compatible with call state or message type non-existent or not implemented)
VA_47	504 Server timeout	Cause value No. 102 (recovery on timer expiry)

SIP_final_Response	← SIP Message	← REL
	Status code	Cause parameter
VA_48	501 Not Implemented	Cause value No. 103 (Non-existent parameter passed on)
VA_49	501 Not Implemented	Cause value No. 110 (Message with unrecognised Parameter, discarded)
VA_50	400 Bad Request	Cause value No. 111 (protocol error, unspecified) (class default)
VA_51	500 Server Internal error	Cause value No. 127 (interworking unspecified) (class default)

**Table 6.1.1.7-2: Mapping of Progress Indicator information element to PSTN XML ProgressIndicator**

PI_value	ATP Progress Indicator value	XML ProgressIndicator ProgressDescription
PI_VA_1	Call is not end-to-end ISDN; further call progress information may be available in-band	'0000001'
PI_VA_2	Destination address is non-ISDN	'0000010'
PI_VA_3	Origination address is non-ISDN	'0000011'
PI_VA_4	Call has returned to the ISDN	'0000100'
PI_VA_5	Interworking has occurred and has resulted in a telecommunication service change	'0000101'
PI_VA_6	In-band information or an appropriate pattern is now available	'0001000'

**Table 6.1.1.7-3: Mapping of High layer compatibility information element to PSTN XML HighLayerCharacteristic**

HLC_value	DSS1 High layer characteristics identification	XML HighLayerCharacteristic
HLC_VA_1	Telephony	'0000001'
HLC_VA_2	Facsimile Group 2/3	'0000100'
HLC_VA_3	Facsimile Group 4 Class I	'0100001'
HLC_VA_4	Facsimile service Group 4, Classes II and III	'0100100'
HLC_VA_5	Syntax based Videotex	'0110010'
HLC_VA_6	International Videotex interworking via gateways or interworking units	'0110011'
HLC_VA_7	Telex service	'0110101'
HLC_VA_8	FTAM application	'1000010'
HLC_VA_9	Videotelephony	'1100000'

**Table 6.1.1.7-4: Mapping of Low Layer Compatibility to PSTN XML LowLayerCompatibility**

ITC_value	LLC Information transfer capability	XML LLC InformationTransferCapability
ITC_VA_1	Speech	'00000'
ITC_VA_2	3,1 kHz audio	'10000'
ITC_VA_3	Unrestricted digital info	'01000'
ITC_VA_4	7 kHz audio	'10001'

**Table 6.1.1.7-5: Receipt of the Release message (REL)**

SIP_final_Response	← SIP Message	← REL
	Status code	Cause parameter
VA_01	480 Temporarily unavailable	Cause value No. 19 (no answer from the user)
VA_02	603 Decline	Cause value No. 21 (call rejected), Location = 000 / user (U)
VA_03	501 Not Implemented	Cause value No. 63 (service option not available, unspecified) (class default)

SIP_final_Response	← SIP Message	← REL
	Status code	Cause parameter
VA_04	504 Server timeout	Cause value No. 102 (recovery on timer expiry)
VA_05	500 Server Internal error	Cause value No. 127 (interworking unspecified) (class default)

### 6.1.1.8 Receipt of RSC, GRS or CGB (H/W oriented)

TP number	TP_108_004	Reference	7.2.3.1.9 2)
TSS reference	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
Selection criteria			
Test Purpose name	RSC received after an early dialogue was established		
Test Purpose	Ensure that the SUT is able to send a 480 Temporarily Unavailable if a <b>RSC</b> is received and an early dialogue is established.		
ISUP Parameter values			
SIP Parameter values			
Comments			
Message flows	Mg INVITE 180 Ringing 480 Temporarily Unavailable ACK	MGCF → ← ← →	ISUP IAM ACM RSC RLC

TP number	TP_108_005	Reference	7.2.3.1.9 2)
TSS reference	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
Selection criteria			
Test Purpose name	GRS received after an early dialogue was established		
Test Purpose	Ensure that the SUT is able to send a 480 Temporarily Unavailable for any dialogue affected in the range, if a <b>GRS</b> is received and an early dialogue is established.		
ISUP Parameter values			
SIP Parameter values			
Comments			
Message flows	Mg INVITE (1) 180 Ringing  INVITE (2) 180 Ringing  480 Temporarily Unavailable (1) ACK  480 Temporarily Unavailable (2) ACK	MGCF → ←  → ←  ← →	ISUP IAM ACM  IAM ACM  GRS GRA  GRA

<b>TP number</b>	TP_108_006	<b>Reference</b>	7.2.3.1.9 2)
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	CGB received after an early dialogue was established		
<b>Test Purpose</b>	Ensure that the SUT is able to send a 480 Temporarily Unavailable for any dialogue affected in the range, if a <b>CGB hardware oriented</b> is received and an early dialogue is established.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE (1) 180 Ringing	→ ←	→ IAM ← ACM
	INVITE (2) 180 Ringing	→ ←	→ IAM ← ACM
	480 Temporarily Unavailable (1) ACK	← →	← GGB → GGBA
	480 Temporarily Unavailable (2) ACK	← →	

<b>TP number</b>	TP_108_007	<b>Reference</b>	7.2.3.1.9 1)
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	RSC received after a confirmed dialogue was established		
<b>Test Purpose</b>	Ensure that the SUT is able to send a BYE request if a <b>RSC</b> is received and a confirmed dialogue is established.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	180 Ringing	←	← ACM
	200 OK INVITE	←	← ANM
	ACK	→	
	BYE	←	← RSC
	200 OK BYE	→	→ RLC

<b>TP number</b>	TP_108_008	<b>Reference</b>	7.2.3.1.9 1)
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	GRS received after a confirmed dialogue was established		
<b>Test Purpose</b>	Ensure that the SUT is able to send a BYE request for any dialogue affected in the range, if a <b>GRS</b> is received and a confirmed dialogue is established.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE (1) 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ IAM ← ACM ← ANM
	INVITE (2) 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ IAM ← ACM ← ANM
	BYE (1) 200 OK BYE	← →	← GRS → GRA
	BYE (2) 200 OK BYE	← →	

<b>TP number</b>	TP_108_009	<b>Reference</b>	7.2.3.1.9 1)
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	CGB received after a confirmed dialogue was established		
<b>Test Purpose</b>	Ensure that the SUT is able to send a BYE request for any dialogue affected in the range, if a <b>CGB hardware oriented</b> is received and a confirmed dialogue is established.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE (1) 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ IAM ← ACM ← ANM
	INVITE (2) 180 Ringing 200 OK INVITE ACK	→ ← ← →	→ IAM ← ACM ← ANM
	BYE (1) 200 OK BYE	← →	← GGB → GGBA
	BYE (2) 200 OK BYE	← →	

### 6.1.1.9 Receipt of REFER

<b>TP number</b>	TP_109_001	<b>Reference</b>	7.2.3.1.9a																							
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REFER/																									
<b>Selection criteria</b>																										
<b>Test Purpose name</b>	REFER received in the confirmed dialogue																									
<b>Test Purpose</b>	Ensure that on receipt of a REFER request in the confirmed dialogue, a 403 Forbidden response to this REFER request is sent.																									
<b>ISUP Parameter values</b>																										
<b>SIP Parameter values</b>																										
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 30%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td>ANM</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>403 Forbidden</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM	200 OK (INVITE)	←		ACK	→	ANM	REFER	→		403 Forbidden	←		<b>Apply post test routine</b>
Mg	MGCF	ISUP																								
INVITE	→	IAM																								
100 Trying	←																									
180 Ringing	←	ACM																								
200 OK (INVITE)	←																									
ACK	→	ANM																								
REFER	→																									
403 Forbidden	←																									

<b>TP number</b>	TP_109_002	<b>Reference</b>	7.2.3.1.9a																	
<b>TSS reference</b>	SIP-ISUP/Basic call/Receipt_of_REFER/																			
<b>Selection criteria</b>																				
<b>Test Purpose name</b>	REFER received in the early dialogue																			
<b>Test Purpose</b>	Ensure that on receipt of a REFER request in the early dialogue, a 403 Forbidden response to this REFER request is sent.																			
<b>ISUP Parameter values</b>																				
<b>SIP Parameter values</b>																				
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 30%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>ACM</td> </tr> <tr> <td>REFER</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>403 Forbidden</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM	REFER	→		403 Forbidden	←		<b>Apply post test routine</b>
Mg	MGCF	ISUP																		
INVITE	→	IAM																		
100 Trying	←																			
180 Ringing	←	ACM																		
REFER	→																			
403 Forbidden	←																			

### 6.1.1.10 Autonomous Release at I-MGCF

<b>TP number</b>	TP_110_001	<b>Reference</b>	7.2.3.1.10														
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/																
<b>Selection criteria</b>	NOT PICS 6.2.3/1 AND NOT PICS 6.2.3/2																
<b>Test Purpose name</b>	Determination that insufficient digits received																
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and the SUT determines that insufficient digits received, the SUT sends a 484 Address Incomplete final response.																
<b>ISUP Parameter values</b>																	
<b>SIP Parameter values</b>																	
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 30%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>484 Address Incomplete</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→		100 Trying	←		484 Address Incomplete	←		ACK	→		<b>Apply post test routine</b>
Mg	MGCF	ISUP															
INVITE	→																
100 Trying	←																
484 Address Incomplete	←																
ACK	→																

<b>TP number</b>	TP_110_002	<b>Reference</b>	7.2.3.1.10																	
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/																			
<b>Selection criteria</b>																				
<b>Test Purpose name</b>	Connection request is not routable																			
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and the SUT is unable to route the call due to congestion, the SUT sends a 480 Temporarily Unavailable final response.																			
<b>ISUP Parameter values</b>																				
<b>SIP Parameter values</b>																				
<b>Comments</b>	Prepare the SUT that a call is not routeable e.g. no circuit available.																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td colspan="3"><b>Apply pre test routine</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td></td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>480 Temporarily Unavailable</td> <td>←</td> <td></td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </table>	Mg	MGCF	ISUP	<b>Apply pre test routine</b>			INVITE	→		100 Trying	←		480 Temporarily Unavailable	←		ACK	→		
Mg	MGCF	ISUP																		
<b>Apply pre test routine</b>																				
INVITE	→																			
100 Trying	←																			
480 Temporarily Unavailable	←																			
ACK	→																			

<b>TP number</b>	TP_110_003	<b>Reference</b>	7.2.3.1.10																				
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/																						
<b>Selection criteria</b>																							
<b>Test Purpose name</b>	Call release due to the ISUP/BICC compatibility procedure																						
<b>Test Purpose</b>	Ensure that on receipt of an unknown parameter in an ISUP/BICC message and the parameter compatibility is set to 'Release call', a REL is sent the cause value is set to #99 or #110 and in addition a 500 Server Internal Error is sent, the Reason header cause value is set to the same value as sent in the REL.																						
<b>ISUP Parameter values</b>	CPG: unknown parameter, parameter compatibility = release call REL: cause value = 99 or 110																						
<b>SIP Parameter values</b>	500 Server Internal Error: Reason: cause=99 or 110																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td colspan="3"><b>Apply pre test routine</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td></td> <td></td> <td>← CPG</td> </tr> <tr> <td>500 Server Internal Error</td> <td>←</td> <td>→ REL</td> </tr> <tr> <td>ACK</td> <td>→</td> <td>← RLC</td> </tr> </table>	Mg	MGCF	ISUP	<b>Apply pre test routine</b>			INVITE	→	→ IAM	180 Ringing	←	← ACM			← CPG	500 Server Internal Error	←	→ REL	ACK	→	← RLC	
Mg	MGCF	ISUP																					
<b>Apply pre test routine</b>																							
INVITE	→	→ IAM																					
180 Ringing	←	← ACM																					
		← CPG																					
500 Server Internal Error	←	→ REL																					
ACK	→	← RLC																					

<b>TP number</b>	TP_110_004	<b>Reference</b>	7.2.3.1.10																				
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/																						
<b>Selection criteria</b>																							
<b>Test Purpose name</b>	Call release due to the ISUP/BICC compatibility procedure																						
<b>Test Purpose</b>	Ensure that on receipt of an unknown ISUP/BICC message and the message compatibility is set to 'Release call', a REL is sent the cause value is set to #97 and in addition a 500 Server Internal Error is sent, the Reason header cause value is set to the same value as sent in the REL.																						
<b>ISUP Parameter values</b>	Unknown message: message compatibility = release call REL: cause value = 97																						
<b>SIP Parameter values</b>	500 Server Internal Error: Reason: cause=97																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td colspan="3"><b>Apply pre test routine</b></td> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td></td> <td></td> <td>← &lt;any unknown message&gt;</td> </tr> <tr> <td>500 Server Internal Error</td> <td>←</td> <td>→ REL</td> </tr> <tr> <td>ACK</td> <td>→</td> <td>← RLC</td> </tr> </table>	Mg	MGCF	ISUP	<b>Apply pre test routine</b>			INVITE	→	→ IAM	180 Ringing	←	← ACM			← <any unknown message>	500 Server Internal Error	←	→ REL	ACK	→	← RLC	
Mg	MGCF	ISUP																					
<b>Apply pre test routine</b>																							
INVITE	→	→ IAM																					
180 Ringing	←	← ACM																					
		← <any unknown message>																					
500 Server Internal Error	←	→ REL																					
ACK	→	← RLC																					

<b>TP number</b>	TP_110_005	<b>Reference</b>	7.2.3.1.10
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Call release due to T7 expiry		
<b>Test Purpose</b>	Ensure that on T7 expiry, the call is released. A REL is sent. In addition a 484 Address Incomplete is sent and the cause value of the Reason header is equal to the Cause indicator value in the sent REL.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 484 Address Incomplete ACK	<b>MGCF</b> → T7 expiry ← →	<b>ISUP</b> IAM REL RLC

<b>TP number</b>	TP_110_006	<b>Reference</b>	7.2.3.1.10
<b>TSS reference</b>	SIP-ISUP/Basic call/Autonomous_Release/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Call release due to T9 expiry		
<b>Test Purpose</b>	Ensure that on expiry of the timer T9 the call is released. A REL is sent and the Cause indicator value is set to #19. In addition a 480 Temporarily Unavailable is sent and the cause value of the Reason header is set to #19.		
<b>ISUP Parameter values</b>	REL: cause value = 19		
<b>SIP Parameter values</b>	480 Temporarily Unavailable: Reason: cause=19		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 480 Temporarily Unavailable ACK	<b>MGCF</b> → T9 expiry ← →	<b>ISUP</b> IAM ACM REL RLC

## 6.1.2 Outgoing Call Interworking from ISUP to SIP at O-MGCF

### 6.1.2.1 Sending of INVITE

<b>TP number</b>	TP_201_001	<b>Reference</b>	7.2.3.2.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	IAM received, a INVITE is sent		
<b>Test Purpose</b>	Ensure that on receipt of an IAM message, an INVITE request is sent.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> → Apply post test routine	<b>Mg</b> INVITE ← 100 Trying

<b>TP number</b>	TP_201_002	<b>Reference</b>	7.2.3.2.1.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>	PICS 6.2.1/4											
<b>Test Purpose name</b>	IAM received and COT requested or performed, the INVITE is deferred until COT is received											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the continuity check indicator is set to: <ul style="list-style-type: none"> <li>• '<i>continuity check required on this circuit</i>'</li> <li>• '<i>continuity check performed on previous circuit</i>'</li> </ul> the sending of the initial INVITE request is deferred until the COT message is received and the Continuity indicator is set to ' <i>continuity check successful</i> '.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = continuity check required on this circuit or continuity check performed on previous circuit <b>COT:</b> Continuity indicator = continuity check successful											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> </tr> <tr> <td>COT</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→		COT	→	→ INVITE ← 100 Trying		
ISUP	MGCF	Mg										
IAM	→											
COT	→	→ INVITE ← 100 Trying										
		<b>Apply post test routine</b>										

<b>TP number</b>	TP_201_003	<b>Reference</b>	7.2.3.2.1.2												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/														
<b>Selection criteria</b>	PICS 6.2.1/3														
<b>Test Purpose name</b>	Preconditions indicated in the supported header														
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the continuity indicator is set to 'Continuity check performed on a previous circuit' or 'Continuity check required on this circuit' an INVITE request is sent and the Supported header contains the value <b>precondition</b> and <b>100rel</b> . If the COT message is received, an UPDATE request is sent to fulfil the preconditions.														
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = continuity check required on this circuit or continuity check performed on previous circuit <b>COT:</b> Continuity indicator = continuity check successful														
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Supported: precondition, 100rel  SDP      a=curr:qos local none  a=curr:qos remote none  a=des:qos mandatory local sendrecv  a=des:qos none remote sendrecv  OR  a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel  SDP      a=curr:qos local none  a=curr:qos remote none  a=des:qos none local sendrecv  OR  a=des:qos optional local sendrecv  a=des:qos mandatory remote sendrecv  a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b>  SDP      a=curr:qos local sendrecv  a=curr:qos remote none  a=des:qos mandatory local sendrecv  a=des:qos none remote sendrecv  OR  a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE  SDP      a=curr:qos local sendrecv  a=curr:qos remote sendrecv  a=des:qos none local sendrecv  OR  a=des:qos optional local sendrecv  a=des:qos mandatory remote sendrecv</p>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td></td> <td> → INVITE  ← 100 Trying  ← 183 Session Progress  → PRACK  ← 200 OK (PRACK)  → UPDATE  ← 200 OK (UPDATE) </td> </tr> <tr> <td style="text-align: center;">COT</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 200 OK (UPDATE)	COT	→			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 200 OK (UPDATE)												
COT	→														

<b>TP number</b>	TP_201_004	<b>Reference</b>	7.2.3.2.1.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/11		
<b>Test Purpose name</b>	Information request procedure successful, Calling party number in INF received		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number is present, an Information Request (INR) message is sent. On receipt of an Information (INF) message containing a calling party number the initial INVITE request is sent.		
<b>ISUP Parameter values</b>	<b>IAM:</b> No calling party number present <b>INR:</b> Calling party address request indicator = calling party address requested <b>INF:</b> Calling party address response = calling party address included Calling party number		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → INR ← INF →	MGCF → INVITE ← 100 Trying	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_201_005	<b>Reference</b>	7.2.3.2.1.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/11 AND PICS 6.2.1/12		
<b>Test Purpose name</b>	Information request procedure not successful, no Calling party number in INF received, the call is rejected		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number is present, an Information Request (INR) message is sent. On receipt of an Information (INF) message and no Calling party number is present, the call is rejected.		
<b>ISUP Parameter values</b>	<b>IAM:</b> No calling party number present <b>INR:</b> Calling party address request indicator = calling party address requested <b>INF:</b> Calling party address response = calling party address not included		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → INR ← INF → REL ← RLC →	MGCF →	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_201_006	<b>Reference</b>	7.2.3.2.1.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/11 AND NOT PICS 6.2.1/12		
<b>Test Purpose name</b>	Information request procedure not successful, no Calling party number in INF received, the call is continued		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number is present, an Information Request (INR) message is sent. On receipt of an Information (INF) message and no Calling party number is present, the call is continued.		
<b>ISUP Parameter values</b>	<b>IAM:</b> No calling party number present <b>INR:</b> Calling party address request indicator = calling party address requested <b>INF:</b> Calling party address response = calling party address not included		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → INR ← INF →	MGCF → INVITE ← 100 Trying	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_201_007	<b>Reference</b>	7.2.3.2.1.3															
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																	
<b>Selection criteria</b>	PICS 6.2.1/11																	
<b>Test Purpose name</b>	Information request procedure not successful, T 33 is expired																	
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number is present, an Information Request (INR) message is sent. If timer T33 is expired, the call is rejected.																	
<b>ISUP Parameter values</b>	<b>IAM:</b> No calling party number present <b>INR:</b> Calling party address request indicator = calling party address requested																	
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td></td> </tr> <tr> <td>INR</td> <td>←</td> <td>Start T<sub>33</sub></td> </tr> <tr> <td>REL</td> <td>←</td> <td>T<sub>33</sub> Expiry</td> </tr> <tr> <td>RLC</td> <td>→</td> <td></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		INR	←	Start T <sub>33</sub>	REL	←	T <sub>33</sub> Expiry	RLC	→			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→																	
INR	←	Start T <sub>33</sub>																
REL	←	T <sub>33</sub> Expiry																
RLC	→																	
		<b>Apply post test routine</b>																

<b>TP number</b>	TP_201_008	<b>Reference</b>	7.2.3.2.1.4 a)									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	End of address signalling determined by receipt of end-of-pulsing signal											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the called party number contains the <b>end-of-pulsing (ST) signal</b> , the initial INVITE is sent.											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE			← 100 Trying		
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
		← 100 Trying										
		<b>Apply post test routine</b>										

<b>TP number</b>	TP_201_009	<b>Reference</b>	7.2.3.2.1.4 b)									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	End of address signalling determined by receipt of the maximum number of digits used in the national numbering plan											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the called party number contains <b>maximum number of digits used in the national numbering plan</b> , the initial INVITE is sent.											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE			← 100 Trying		
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
		← 100 Trying										
		<b>Apply post test routine</b>										

<b>TP number</b>	TP_201_010	<b>Reference</b>	7.2.3.2.1.4 c)									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	End of address signalling determined by receipt of sufficient number of digits to route the call to the called party											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the called party number contains a <b>sufficient number of digits to route the call to the called party</b> , the initial INVITE is sent.											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE			← 100 Trying		
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
		← 100 Trying										
		<b>Apply post test routine</b>										

<b>TP number</b>	TP_201_011	<b>Reference</b>	7.2.3.2.1.4 d)																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	End of address signalling determined by observing that timer Ti/w1 has expired																				
<b>Test Purpose</b>	Ensure that on receipt of an IAM followed by several SAMs and the minimum number of digits required for routing the call have been received timer Ti/w1 is started. <b>When timer Ti/w1 is expired</b> the initial INVITE is sent.																				
<b>ISUP Parameter values</b>																					
<b>SIP Parameter values</b>																					
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td>Start Ti/w1</td> <td></td> </tr> <tr> <td></td> <td>Timeout Ti/w1 → INVITE</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td colspan="2"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →			SAM →			SAM →	Start Ti/w1			Timeout Ti/w1 → INVITE	← 100 Trying		<b>Apply post test routine</b>			
ISUP	MGCF	Mg																			
IAM →																					
SAM →																					
SAM →	Start Ti/w1																				
	Timeout Ti/w1 → INVITE	← 100 Trying																			
	<b>Apply post test routine</b>																				

<b>TP number</b>	TP_201_012	<b>Reference</b>	7.2.3.2.1.4																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	Early ACM is sent after expiry of Ti/w2 receipt of end-of-pulsing signal																				
<b>Test Purpose</b>	Ensure that an initial INVITE is sent after receipt of end-of-pulsing signal, the timer Ti/w2 is started. After expiry of Ti/w2 an ACM is sent and the called party status indicator is set to 'no indication'.																				
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication																				
<b>SIP Parameter values</b>																					
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td>Start Ti/w2</td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td>Timeout Ti/w2</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td colspan="2"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →			SAM →			SAM →	Start Ti/w2	→ INVITE	ACM ←	Timeout Ti/w2	← 100 Trying		<b>Apply post test routine</b>			
ISUP	MGCF	Mg																			
IAM →																					
SAM →																					
SAM →	Start Ti/w2	→ INVITE																			
ACM ←	Timeout Ti/w2	← 100 Trying																			
	<b>Apply post test routine</b>																				

<b>TP number</b>	TP_201_013	<b>Reference</b>	7.2.3.2.1.4																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	Early ACM is sent after expiry of Ti/w2 receipt of the maximum number of digits used in the national numbering plan																				
<b>Test Purpose</b>	Ensure that an initial INVITE is sent after receipt of the maximum number of digits used in the national numbering plan, the timer Ti/w2 is started. After expiry of Ti/w2 an ACM is sent and the called party status indicator is set to 'no indication'.																				
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication																				
<b>SIP Parameter values</b>																					
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td></td> <td></td> </tr> <tr> <td>SAM →</td> <td>Start Ti/w2</td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td>Timeout Ti/w2</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td colspan="2"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →			SAM →			SAM →	Start Ti/w2	→ INVITE	ACM ←	Timeout Ti/w2	← 100 Trying		<b>Apply post test routine</b>			
ISUP	MGCF	Mg																			
IAM →																					
SAM →																					
SAM →	Start Ti/w2	→ INVITE																			
ACM ←	Timeout Ti/w2	← 100 Trying																			
	<b>Apply post test routine</b>																				

<b>TP number</b>	TP_201_014	<b>Reference</b>	7.2.3.2.1.4																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																		
<b>Selection criteria</b>																			
<b>Test Purpose name</b>	Early ACM is sent after expiry of Ti/w2 receipt of a sufficient number of digits to route the call to the called party																		
<b>Test Purpose</b>	Ensure that an initial INVITE is sent after receipt of a sufficient number of digits to route the call to the called party, the timer Ti/w2 is started. After expiry of Ti/w2 an ACM is sent and the called party status indicator is set to 'no indication'.																		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication																		
<b>SIP Parameter values</b>																			
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> </tr> <tr> <td>SAM</td> <td>→</td> <td></td> </tr> <tr> <td>SAM</td> <td>→ Start Ti/w2</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>← Timeout Ti/w2</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→		SAM	→		SAM	→ Start Ti/w2	→ INVITE	ACM	← Timeout Ti/w2	← 100 Trying		<b>Apply post test routine</b>	
ISUP	MGCF	Mg																	
IAM	→																		
SAM	→																		
SAM	→ Start Ti/w2	→ INVITE																	
ACM	← Timeout Ti/w2	← 100 Trying																	
	<b>Apply post test routine</b>																		

<b>TP number</b>	TP_201_015	<b>Reference</b>	7.2.3.2.1.4										
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/												
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/21												
<b>Test Purpose name</b>	A PSTN XML SendingCompleteIndication is sent if the end of the address signalling is determined												
<b>Test Purpose</b>	Ensure that the end of the address signalling is determined a PSTN XML SendingCompleteIndication is sent.												
<b>ISUP Parameter values</b>													
<b>SIP Parameter values</b>	INVITE <?xml version="1.0" encoding="utf-8"?> PSTN sendingCompleteIndication</												
<b>Comments</b>													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE			← 100 Trying		<b>Apply post test routine</b>	
ISUP	MGCF	Mg											
IAM	→	→ INVITE											
		← 100 Trying											
	<b>Apply post test routine</b>												

<b>TP number</b>	TP_201_016	<b>Reference</b>	7.2.3.2.1a.2																																									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																																											
<b>Selection criteria</b>	PICS 6.2.3/1																																											
<b>Test Purpose name</b>	Overlap dialling using the in-dialogue method																																											
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress as a response to an INVITE containing an insufficient number of digits, the SUT sends all the digits received in additional SAMs in an additional INVITE and INFO requests depends on whether a final response or provisional response was received for the initial INVITE request. The INFO request contains an x-session-info attachment SubsequentDigit includes the digits received in the SAMs.																																											
<b>ISUP Parameter values</b>																																												
<b>SIP Parameter values</b>	INFO: SubsequentDigit: <digits received in SAMs>																																											
<b>Comments</b>																																												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> <tr> <td colspan="2"><b>CASE A</b></td> <td>← 484 Address Incomplete</td> </tr> <tr> <td colspan="2"></td> <td>→ ACK</td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> <tr> <td colspan="2"></td> <td>← 183 Session Progress</td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>→ INFO</td> </tr> <tr> <td colspan="2"></td> <td>← 200 OK (INFO)</td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>← 183 Session Progress</td> </tr> <tr> <td colspan="2"></td> <td>→ INFO</td> </tr> <tr> <td colspan="2"></td> <td>← 200 OK (INFO)</td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>→ INFO</td> </tr> <tr> <td colspan="2"></td> <td>← 200 OK (INFO)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	<b>CASE A</b>		← 484 Address Incomplete			→ ACK	SAM	→	→ INVITE			← 183 Session Progress	SAM	→	→ INFO			← 200 OK (INFO)	<b>CASE B</b>			SAM	→	← 183 Session Progress			→ INFO			← 200 OK (INFO)	SAM	→	→ INFO			← 200 OK (INFO)	<b>Apply post test routine</b>
ISUP	MGCF	Mg																																										
IAM	→	→ INVITE																																										
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SAM	→	→ INFO																																										
		← 200 OK (INFO)																																										

<b>TP number</b>	TP_201_017	<b>Reference</b>	7.2.3.2.1a.3																							
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																									
<b>Selection criteria</b>	PICS 6.2.3/2																									
<b>Test Purpose name</b>	Overlap dialling using the multiple INVITE method																									
<b>Test Purpose</b>	Ensure that on receipt of a 484 Address Incomplete as a response to an INVITE request containing an insufficient number of digits, the SUT sends all the digits received in additional SAMs in an additional INVITE requests. The Call-ID and the From tag values are identical to the values sent in the initial INVITE.																									
<b>ISUP Parameter values</b>																										
<b>SIP Parameter values</b>	INVITE: Request URI <all the received digits in IAM and SAMs> From: tag=<equal to initial INVITE> Call-ID: <equal to initial INVITE>																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> <tr> <td colspan="2"></td> <td>← 484 Address Incomplete</td> </tr> <tr> <td colspan="2"></td> <td>→ ACK</td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> <tr> <td colspan="2"></td> <td>← 484 Address Incomplete</td> </tr> <tr> <td colspan="2"></td> <td>→ ACK</td> </tr> <tr> <td>SAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE			← 484 Address Incomplete			→ ACK	SAM	→	→ INVITE			← 484 Address Incomplete			→ ACK	SAM	→	→ INVITE	<b>Apply post test routine</b>
ISUP	MGCF	Mg																								
IAM	→	→ INVITE																								
		← 484 Address Incomplete																								
		→ ACK																								
SAM	→	→ INVITE																								
		← 484 Address Incomplete																								
		→ ACK																								
SAM	→	→ INVITE																								

<b>TP number</b>	TP_201_018	<b>Reference</b>	7.2.3.2.1.1a.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	After expiry of Ti/w2 additional received SAMs are ignored		
<b>Test Purpose</b>	Ensure that after expiry of Ti/w2 an ACM is sent and the called party status indicator is set to 'no indication' and additional received SAMs are ignored.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status=no indication		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	
	SAM	→	
	SAM	→	Start Ti/w2 → INVITE 100 Trying
	ACM	←	Timeout Ti/w2
	SAM	→	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_201_019	<b>Reference</b>	7.2.3.2.1a.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.3/1		
<b>Test Purpose name</b>	Overlap dialling using the in-dialogue method		
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing while the in-dialogue procedure is used an additional received SAM is ignored.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INFO: SubsequentDigit: <digits received in SAMs>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 484 Address Incomplete → ACK
	SAM	→	→ INVITE ← 183 Session Progress
	SAM	→	→ INFO ← 200 OK (INFO)
	ACM	←	← 180 Ringing
	SAM	→	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_201_020	<b>Reference</b>	7.2.3.2.1a.3																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																										
<b>Selection criteria</b>	PICS 6.2.3/2																										
<b>Test Purpose name</b>	Overlap dialling using the multiple INVITE method																										
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing while the multiple INVITE procedure is used an additional received SAM is ignored.																										
<b>ISUP Parameter values</b>																											
<b>SIP Parameter values</b>	INVITE: Request URI <all the received digits in IAM and SAMs> From: tag=<equal to initial INVITE> Call-ID: <equal to initial INVITE>																										
<b>Comments</b>																											
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td style="text-align: center;">SAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td style="text-align: center;">SAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">SAM</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 484 Address Incomplete → ACK	SAM	→		→ INVITE ← 484 Address Incomplete → ACK	SAM	→		→ INVITE	ACM	←		← 180 Ringing	SAM	→			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																								
IAM	→		→ INVITE ← 484 Address Incomplete → ACK																								
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SAM	→		→ INVITE																								
ACM	←		← 180 Ringing																								
SAM	→																										

<b>TP number</b>	TP_201_021	<b>Reference</b>	7.2.3.2.1a.3																				
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/																						
<b>Selection criteria</b>	PICS 6.2.3/1 AND PICS 6.2.1/3																						
<b>Test Purpose name</b>	Overlap dialling using the multiple INVITE method and preconditions used																						
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the continuity indicator is set to 'Continuity check performed on a previous circuit' or 'Continuity check required on this circuit' the INVITE requests are sent for all digits to be transferred and the Supported header contains the value <b>precondition</b> and <b>100rel</b> . If the COT message is received, an UPDATE request is sent to fulfil the preconditions.																						
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = continuity check required on this circuit or continuity check performed on previous circuit <b>COT:</b> Continuity indicator = continuity check successful																						
<b>SIP Parameter values</b>	<p><b>INVITE:</b> Request URI &lt;all the received digits in IAM and SAMs&gt;            From: tag=&lt;equal to initial INVITE&gt;            Call-ID: &lt;equal to initial INVITE&gt;            Supported: precondition, 100rel</p> <p>SDP      a=curr:qos local none                      a=curr:qos remote none                      a=des:qos mandatory local sendrecv                      a=des:qos none remote sendrecv                      OR                      a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel            SDP      a=curr:qos local none                      a=curr:qos remote none                      a=des:qos none local sendrecv                      OR                      a=des:qos optional local sendrecv                      a=des:qos mandatory remote sendrecv                      a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b></p> <p>SDP      a=curr:qos local sendrecv                      a=curr:qos remote none                      a=des:qos mandatory local sendrecv                      a=des:qos none remote sendrecv                      OR                      a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE            SDP      a=curr:qos local sendrecv                      a=curr:qos remote sendrecv                      a=des:qos optional local sendrecv                      OR                      a=des:qos optional local sendrecv                      a=des:qos mandatory remote sendrecv</p>																						
<b>Comments</b>	The SAMs should sent within the duration of timer T8																						
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"></th> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td style="text-align: center;">SAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td style="text-align: center;">SAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 200 OK (UPDATE)</td> </tr> <tr> <td style="text-align: center;">COT</td> <td style="text-align: center;">→</td> <td></td> <td></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 484 Address Incomplete → ACK	SAM	→		→ INVITE ← 484 Address Incomplete → ACK	SAM	→		→ INVITE ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 200 OK (UPDATE)	COT	→			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																				
IAM	→		→ INVITE ← 484 Address Incomplete → ACK																				
SAM	→		→ INVITE ← 484 Address Incomplete → ACK																				
SAM	→		→ INVITE ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 200 OK (UPDATE)																				
COT	→																						

<b>TP number</b>	TP_201_022	<b>Reference</b>	7.2.3.2.1a.3												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/														
<b>Selection criteria</b>	PICS 6.2.3/1														
<b>Test Purpose name</b>	Timer Ti/w3 expires, REL cause 28 is sent														
<b>Test Purpose</b>	Ensure that on expiry of timer Ti/w3 a REL is sent and the cause value is set to #28.														
<b>ISUP Parameter values</b>	REL: Cause = invalid number format (address incomplete)														
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI <all the received digits in IAM and SAMs> From: tag=<equal to initial INVITE> Call-ID: <equal to initial INVITE>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ Start Ti/w3</td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td>SAM</td> <td>→ Start Ti/w3</td> <td>→ INVITE ← 484 Address Incomplete → ACK</td> </tr> <tr> <td>REL</td> <td>← RLC</td> <td>Timeout Ti/w3 →</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ Start Ti/w3	→ INVITE ← 484 Address Incomplete → ACK	SAM	→ Start Ti/w3	→ INVITE ← 484 Address Incomplete → ACK	REL	← RLC	Timeout Ti/w3 →		
ISUP	MGCF	Mg													
IAM	→ Start Ti/w3	→ INVITE ← 484 Address Incomplete → ACK													
SAM	→ Start Ti/w3	→ INVITE ← 484 Address Incomplete → ACK													
REL	← RLC	Timeout Ti/w3 →													
			<b>Apply post test routine</b>												

<b>TP number</b>	TP_201_023	<b>Reference</b>	7.2.3.2.1.5						
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/								
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND PICS 6.2.4/7								
<b>Test Purpose name</b>	Mapping of USI and USI prime into PSTN XML BearerCapability element								
<b>Test Purpose</b>	Ensure that on receipt of an IAM that includes a USI and USI Prime parameter then the SUT: <ul style="list-style-type: none"><li>• Map the USI Prime into the second Bearer Capability stated in the XML BearerCapability element and</li><li>• The first offered codec is the CLEARMODE codec</li><li>• Map the USI into the first Bearer Capability stated in the XML BearerCapability element and</li><li>• The second offered codec is an Audio codec.</li></ul>								
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio USI prime = unrestricted digital info with T/A TMR Prime: 64 kBit/s preferred ATP(HLC Video Telephony)								
<b>SIP Parameter values</b>	<b>INVITE:</b> <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>mapped from USI< ... BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>mapped from USI prime< ... SDP: m=audio <proper port number> RTP/AVP CLEARMODE 8 ...								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying		
ISUP	MGCF	Mg							
IAM	→	→ INVITE ← 100 Trying							
			<b>Apply post test routine</b>						

<b>TP number</b>	TP_201_024	<b>Reference</b>	7.2.3.2.2.1								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>											
<b>Test Purpose name</b>	Called party number is mapped into Request URI in the sent INVITE request										
<b>Test Purpose</b>	Ensure that on receipt of an IAM the called party number is mapped into the Request URI of the sent INVITE request: <ul style="list-style-type: none"> <li>• If the nature of address indicator is set to 'National (significant) number' then the country code of the network in which the SUT is located and a leading '+' is inserted before the number digits received in the Called party number.</li> <li>• If the nature of address set to 'International number' a '+' is inserted before the number digits received in the Called party number.</li> </ul>										
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number = National (significant) number or International number										
<b>SIP Parameter values</b>	<b>INVITE: Request URI</b> sip: '+CC' <called party number digits>@hostportion; user=phone or tel: '+CC' <called party number digits> if the called party number is a <b>national number</b> sip: '+' <called party number digits>@hostportion; user=phone or tel: '+' <called party number digits> if the called party number is an <b>international number</b>										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3">Apply post test routine</td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	Apply post test routine			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
Apply post test routine											

<b>TP number</b>	TP_201_025	<b>Reference</b>	7.2.3.2.2.1								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>											
<b>Test Purpose name</b>	Called party number is mapped into To header in the sent INVITE request										
<b>Test Purpose</b>	Ensure that on receipt of an IAM the called party number is mapped into the To header URI of the sent INVITE request: <ul style="list-style-type: none"> <li>• If the nature of address indicator is set to 'National (significant) number' then the country code of the network in which the SUT is located and a leading '+' is inserted before the number digits received in the Called party number.</li> <li>• If the nature of address set to 'International number' a '+' is inserted before the number digits received in the Called party number.</li> </ul>										
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number = National (significant) number or International number										
<b>SIP Parameter values</b>	<b>INVITE: To</b> sip: '+CC' <called party number digits>@hostportion; user=phone or tel: '+CC' <called party number digits> if the called party number is a <b>national number</b> sip: '+' <called party number digits>@hostportion; user=phone or tel: '+' <called party number digits> if the called party number is an <b>international number</b>										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3">Apply post test routine</td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	Apply post test routine			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
Apply post test routine											

<b>TP number</b>	TP_201_026A	<b>Reference</b>	7.2.3.2.2.2, Table 10b.								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>	PICS 6.2.4/3										
<b>Test Purpose name</b>	Mapping of TMR speech into SDP										
<b>Test Purpose</b>	Ensure that on receipt of an IAM the <b>TMR speech</b> is mapped into the SDP m line and a attributes.										
<b>ISUP Parameter values</b>	IAM: TMR = speech										
<b>SIP Parameter values</b>	<p><b>INVITE:</b></p> <p>SDP</p> <p>m=audio &lt;port #&gt; RTP/AVP 0 [additional codes]</p> <p>a=rtpmap: 0 PCMU/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP 8 [additional codes]</p> <p>a=rtpmap: 8 PCMA/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP &lt;dynamic-PT&gt; [additional codes]</p> <p>a=rtpmap: &lt;dynamic-PT&gt; PCMU/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP &lt;dynamic-PT&gt; [additional codes]</p> <p>a=rtpmap: &lt;dynamic-PT&gt; PCMA/8000</p>										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_201_026B	<b>Reference</b>	7.2.3.2.2.2, Table 10b.								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>	PICS 6.2.4/4										
<b>Test Purpose name</b>	Mapping of TMR 3,1 kHz audio into SDP										
<b>Test Purpose</b>	Ensure that on receipt of an IAM the <b>TMR 3,1 kHz audio</b> is mapped into the SDP m line and a attributes.										
<b>ISUP Parameter values</b>	IAM: TMR = 3,1 kHz audio										
<b>SIP Parameter values</b>	<p><b>INVITE:</b></p> <p>SDP</p> <p>m=audio &lt;port #&gt; RTP/AVP 0 [additional codes]</p> <p>a=rtpmap: 0 PCMU/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP 8 [additional codes]</p> <p>a=rtpmap: 8 PCMA/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP &lt;dynamic-PT&gt; [additional codes]</p> <p>a=rtpmap: &lt;dynamic-PT&gt; PCMU/8000</p> <p>OR</p> <p>m=audio &lt;port #&gt; RTP/AVP &lt;dynamic-PT&gt; [additional codes]</p> <p>a=rtpmap: &lt;dynamic-PT&gt; PCMA/8000</p>										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_201_026C	<b>Reference</b>	7.2.3.2.2.2, Table 10b
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.4/2		
<b>Test Purpose name</b>	Mapping of TMR 64 kBit/s unrestricted into SDP		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the <b>TMR 64 kBit/s unrestricted</b> is mapped into the SDP m line and a attributes.		
<b>ISUP Parameter values</b>	IAM: TMR = 64 kBit/s unrestricted		
<b>SIP Parameter values</b>	INVITE: SDP m=audio <port #> RTP/AVP <dynamic-PT> a=rtpmap: <dynamic-PT> CLEARMODE/8000		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

Table 6.1.2.1-1: Void

<b>TP number</b>	TP_201_027	<b>Reference</b>	7.2.3.2.2.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	AMR codec included		
<b>Test Purpose</b>	Ensure that on receipt of an IAM an INVITE is sent. If the received IAM contains a TMR set to speech or 3,1 kHz audio, the SDP in the sent INVITE contains an AMR codec.		
<b>ISUP Parameter values</b>	IAM: TMR = speech or 3,1 kHz audio		
<b>SIP Parameter values</b>	INVITE: SDP: m=audio <proper port number> RTP/AVP ... Dynamic PT a = <rtpmap Dynamic PT> AMR		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

<b>TP number</b>	TP_201_028	<b>Reference</b>	7.2.3.2.2.2 Table 10b
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.4/3		
<b>Test Purpose name</b>	Mapping of USI parameter Information Transfer Capability speech		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the USI Information Transfer Capability <b>speech</b> and User Information Layer 1 Protocol Indicator "G.711 μ-law" or "G.711 A-law" is mapped into the SDP m-line <b>audio</b> codec PCMA or PCMU.		
<b>ISUP Parameter values</b>	<b>IAM:</b> User service information USI Information Transfer Capability <b>speech</b> Information Layer 1 Protocol Indicator G.711 μ-law or G.711 A-law		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=<media> RTP/AVP 8 a= rtpmap:8 PCMA/8000 or m=audio RTP/AVP 0 a= rtpmap:0 PCMU/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → INVITE ← 100 Trying <i>Apply post test routine</i>	<b>Mg</b>	

<b>TP number</b>	TP_201_028A	<b>Reference</b>	7.2.3.2.2.2 Table 10b
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.4/4		
<b>Test Purpose name</b>	Mapping of USI parameter Information Transfer Capability audio 3.1 kBit/s		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the USI Information Transfer Capability <b>audio</b> and User Information Layer 1 Protocol Indicator "G.711 μ-law" or "G.711 A-law" is mapped into the SDP m-line <b>audio</b> codec PCMA or PCMU.		
<b>ISUP Parameter values</b>	<b>IAM:</b> User service information USI Information Transfer Capability <b>audio</b> Information Layer 1 Protocol Indicator G.711 μ-law or G.711 A-law		
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP m=<media> RTP/AVP 8 a= rtpmap:8 PCMA/8000 or m=audio RTP/AVP 0 a= rtpmap:0 PCMU/8000		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → INVITE ← 100 Trying <i>Apply post test routine</i>	<b>Mg</b>	

<b>TP number</b>	TP_201_028B	<b>Reference</b>	7.2.3.2.2.2 Table 10b
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.4/6		
<b>Test Purpose name</b>	Mapping of USI parameter Information Transfer Capability 3,1 kHz audio and HLC Facsimile Group 2/3		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the <b>USI</b> Information Transfer Capability <b>3,1 kHz audio</b> and User Information Layer 1 Protocol Indicator "G.711 µ-law" or "G.711 A-law" and ATP HLC " <b>Facsimile Group 2/3</b> " is mapped into the SDP m-line <b>image</b> udptl or tcptl or G.711 codec PCM a-law/µ-law and V.152 attribute G.711 codec PCM a-law/µ-law without V.152 attribute.		
<b>ISUP Parameter values</b>	IAM: User service information		
<b>SIP Parameter values</b>	<p><b>INVITE:</b></p> <p>SDP</p> <p>m=image udptl t38 or m=image tcptl t38 or m=audio G.711 a=gpmd &lt;Payload Type&gt; vbd=yes or m=audio G.711</p>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

<b>TP number</b>	TP_201_028C	<b>Reference</b>	7.2.3.2.2.2 Table 10b
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.4/2		
<b>Test Purpose name</b>	Mapping of USI parameter Information Transfer Capability UDI		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the USI Information Transfer Capability <b>unrestricted digital information</b> is mapped into the SDP m-line <b>audio</b> codec CLEARMODE		
<b>ISUP Parameter values</b>	IAM: User service information USI Information Transfer Capability <b>Unrestricted digital information</b>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b></p> <p>SDP</p> <p>m=&lt;media&gt; RTP/AVP &lt;Dynamic payload type&gt; a=rtpmap: &lt;Dynamic payload type&gt; CLEARMODE/8000</p>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

Table 6.1.2.1-2: Void

<b>TP number</b>	TP_201_029	<b>Reference</b>	7.2.3.2.2.3A
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Mapping of Calling party's category into cpc parameter		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the calling party's category <b>CPC_value</b> is mapped into the 'cpc' parameter in the P-Asserted-Identity and the Accept-Language header in the sent INVITE as described in table 6.1.2.1-3.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party's category		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;">ISUP                            MGCF                            Mg</p> <p style="text-align: center;">IAM                            →                            → INVITE                                   ←                            ← 100 Trying</p> <p style="text-align: center;"><b>Apply post test routine</b></p>		

**Table 6.1.2.1-3: Mapping of Calling's party category into 'cpc' parameter and Accept-Language header**

<b>CPC_value</b>	<b>ISUP IAM parameter</b>	<b>SIP Parameters</b>	
		"cpc" URI parameter in P-Asserted-Identity	Accept-Language
VA_01	operator, language French	operator	fr
VA_02	operator, language English	operator	en
VA_03	operator, language German	operator	de
VA_04	operator, language Russian	operator	ru
VA_05	operator, language Spanish	operator	es
VA_06	ordinary calling subscriber	ordinary	
VA_07	Test call	test	
VA_08	Payphone	payphone	
VA_09	calling party's category unknown at this time	unknown	
VA_10	mobile terminal located in the home PLMN	mobile-hplmn	
VA_11	mobile terminal located in a visited PLMN	mobile-vplmn	

<b>TP number</b>	TP_201_029A	<b>Reference</b>	7.2.3.2.2.3A
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/24		
<b>Test Purpose name</b>	Mapping of Calling party's category into cpc parameter		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the calling party's category 'emergency service call per ANSI Standard' is mapped into the 'cpc' parameter value 'emergency' in the P-Asserted-Identity in the sent INVITE.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party's category = emergency service call per ANSI Standard		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: cpc= emergency		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;">ISUP                            MGCF                            Mg</p> <p style="text-align: center;">IAM                            →                            → INVITE                                   ←                            ← 100 Trying</p> <p style="text-align: center;"><b>Apply post test routine</b></p>		

<b>TP number</b>	TP_201_030	<b>Reference</b>	7.2.3.2.2.4
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/8		
<b>Test Purpose name</b>	HOP counter procedure supported		
<b>Test Purpose</b>	Ensure that on receipt of the HOP counter parameter, the value is mapped into the Max-Forwards header. The value of the Max-Forwards header is created from the HOP counter value by applying a given factor.		
<b>ISUP Parameter values</b>	IAM: HOP		
<b>SIP Parameter values</b>	INVITE: Max-Forwards		
<b>Comments</b>	The factor used to map from Hop Counter to Max-Forwards for a given call will depend on call origin, and will be provisioned at the O-MGCF based on network topology, trust domain rules, and bilateral agreement.		
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>            IAM                      →                            → INVITE                                  ←                            ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_201_031	<b>Reference</b>	7.2.3.2.2.5
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	The O-MGCF inserts an IMS Communication Service Identifier		
<b>Test Purpose</b>	For speech and video calls, the SUT shall insert an IMS Communication Service Identifier, indicating the IMS Multimedia Telephony Communication Service.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: Contact: icsci-ref Accept-Contact: P-Asserted-Service: urn:urn-7:3gpp-service.ims.icsci.mmTEL		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>            IAM                      →                            → INVITE                                  ←                            ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_201_032	<b>Reference</b>	7.2.3.2.2.6
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/23		
<b>Test Purpose name</b>	Support of P-Early-Media header		
<b>Test Purpose</b>	Ensure that on receipt of an IAM a P-Early-Media header is present in the sent INVITE request.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>            IAM                      →                            → INVITE                                  ←                            ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_201_033	<b>Reference</b>	7.2.3.2.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of High Layer Compatibility IE into PSTN XML HighLayerCompatibility		
<b>Test Purpose</b>	Ensure stat on receipt of an IAM and an ATP parameter is present containing a High Layer Compatibility IE a PSTN XML HighLayerCompatibility element is present derived according the HLC_VA as indicated in table 6.1.2.1-4.		
<b>ISUP Parameter values</b>	<b>IAM:</b> ATP High Layer Compatibility High Layer Characteristics = <b>HLC_VA</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

**Table 6.1.2.1-4: Mapping of ISUP ATP High layer compatibility into PSTN XML HighLayerCharacteristic**

<b>HLC_VA</b>	<b>DSS1 High layer characteristics identification</b>	<b>XML HighLayerCharacteristic</b>
HLC_VA_1	Telephony	'0000001'
HLC_VA_2	Facsimile Group 2/3	'0000100'
HLC_VA_3	Facsimile Group 4 Class I	'0100001'
HLC_VA_4	Facsimile service Group 4, Classes II and III	'0100100'
HLC_VA_5	Syntax based Videotex	'0110010'
HLC_VA_6	International Videotex interworking via gateways or interworking units	'0110011'
HLC_VA_7	Telex service	'0110101'
HLC_VA_8	FTAM application	'1000010'

<b>TP number</b>	TP_201_034	<b>Reference</b>	7.2.3.2.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Low Layer Compatibility IE into PSTN XML LowLayerCompatibility		
<b>Test Purpose</b>	Ensure stat on receipt of an IAM and an ATP parameter is present containing a Low Layer Compatibility IE a PSTN XML LowLayerCompatibility element is present derived according the ITC_VA as indicated in table 6.1.2.1-5.		
<b>ISUP Parameter values</b>	<b>IAM:</b> ATP Low Layer Compatibility InformationTransferCapability = ITC_VA		
<b>SIP Parameter values</b>	<b>INVITE:</b> <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility> LLOctet3> CodingStandard>00< InformationTransferCapability>ITC_VA< LLOctet4> TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

**Table 6.1.2.1-5: Mapping of ISUP ATP Low Layer Compatibility into PSTN XML LowLayerCompatibility**

ITC_VA	LLC Information transfer capability	XML LLC InformationTransferCapability
ITC_VA_1	Speech	'00000'
ITC_VA_2	3,1 kHz audio	'10000'
ITC_VA_3	Unrestricted digital info	'01000'
ITC_VA_4	7 kHz audio	'10001'

<b>TP number</b>	TP_201_035	<b>Reference</b>	7.2.3.2.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Bearer Capability IE into PSTN XML BearerCapability		
<b>Test Purpose</b>	Ensure stat on receipt of an IAM and an USI parameter is present, a PSTN XML BearerCapability element is present derived according the ITC_value as indicated in table 6.1.2.1-6.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI Information Transfer Capability = ITC_value		
<b>SIP Parameter values</b>	<b>INVITE:</b> <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability>ITC_value< BCoctet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

**Table 6.1.2.1-6: Mapping of ISUP User Service Information into PSTN XML BearerCapability**

<b>ITC_value</b>	<b>USI Information transfer capability</b>	<b>XML InformationTransferCapability</b>
VA_01	Speech	'00000'
VA_02	3,1 kHz audio	'10000'
VA_03	unrestricted digital information	'01000'

<b>TP number</b>	TP_201_036	<b>Reference</b>	7.2.3.2.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/22		
<b>Test Purpose name</b>	Mapping of UTI IE into PSTN XML HighLayerCompatibility		
<b>Test Purpose</b>	Ensure stat on receipt of an IAM and an User Teleservice Information parameter is present, a PSTN XML HighLayerCompatibility element is present derived according the HLC_value as indicated in table 6.1.2.1-7.		
<b>ISUP Parameter values</b>	IAM: UTI High Layer Characteristics> <b>HLC_value</b>		
<b>SIP Parameter values</b>	INVITE: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_value</b> <		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

**Table 6.1.2.1-7: Mapping of User Teleservice Information into PSTN XML HighLayerCharacteristic**

<b>HLC_value</b>	<b>DSS1 High layer characteristics identification</b>	<b>XML HighLayerCharacteristic</b>
VA_01	Telephony	'0000001'
VA_02	Facsimile Group 2/3	'0000100'
VA_03	Facsimile Group 4 Class I	'0100001'
VA_04	Facsimile service Group 4, Classes II and III	'0100100'
VA_05	Syntax based Videotex	'0110010'
VA_06	International Videotex interworking via gateways or interworking units	'0110011'
VA_07	Telex service	'0110101'
VA_08	FTAM application	'1000010'
VA_09	Videotelephony	'1100000'

<b>TP number</b>	TP_201_037	<b>Reference</b>	7.2.3.2.2.8
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Forward call indicator into PSTN XML ProgressIndicator		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the ISDN User Part indicator and the ISDN access indicator of the Forward call indicator are mapped into a PSTNXML ProgressIndicator element according the roles PI_value in table 6.1.2.1-8.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Forward call indicator ISDN User Part indicator ISDN access indicator		
<b>SIP Parameter values</b>	<b>INVITE:</b> PSTM XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< Location>yyyy< ProgressOctet4 ProgressDescription>PI_value<		
<b>Comments</b>	The Progress indicator value 6 is not specified in Q.931		
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

**Table 6.1.2.1-8: Mapping of Forward call indicator into PSTN XML ProgressIndicator**

<b>PI_value</b>	<b>Forward call indicators parameter</b>		<b>PSTN XML body with Progress indicator No.</b>	
	<b>ISDN User Part indicator</b>	<b>ISDN access indicator</b>		
VA_01	0 (ISDN User Part not used all the way)		'0000001'	Call is not end-to-end ISDN; further call progress information may be available in-band
VA_02	1 ("ISDN User Part used all the way")	0 ("originating access non - ISDN")	'0000011'	Origination address is non-ISDN
VA_03	1 ("ISDN User Part used all the way")	1 ("originating access ISDN")	'0000110'	

<b>TP number</b>	TP_201_038	<b>Reference</b>	7.2.3.2.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of Progress Indicator IE into PSTN XML ProgressIndicator		
<b>Test Purpose</b>	Ensure stat on receipt of an IAM and an ATP parameter is present containing a Progress Indicator IE a PSTN XML ProgressIndicator element is present derived according the PI_VA as indicated in table 6.1.2.1-9.		
<b>ISUP Parameter values</b>	<b>IAM:</b> ATP Progress Indicator Progress Description = PI_VA		
<b>SIP Parameter values</b>	<b>INVITE:</b> <?xml version="1.0" encoding="utf-8"?> PSTN <b>ProgressIndicator</b> ProgressOctet3 CodingStandard>00< Location>0000< ProgressOctet4 ProgressDescription>PI_VA<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg INVITE ← 100 Trying

**Table 6.1.2.1-9: Mapping of ISUP ATP Progress Indicator into PSTN XML ProgressIndicator**

PI_VA	ATP Progress Indicator value	XML ProgressIndicator ProgressDescription
PI_VA_1	Call is not end-to-end ISDN; further call progress information may be available in-band	'0000001'
PI_VA_2	Destination address is non-ISDN	'0000010'
PI_VA_3	Origination address is non-ISDN	'0000011'
PI_VA_4	Call has returned to the ISDN	'0000100'
PI_VA_5	Interworking has occurred and has resulted in a telecommunication service change	'0000101'
PI_VA_6	In-band information or an appropriate pattern is now available	'0001000'

<b>TP number</b>	TP_201_039	<b>Reference</b>	7.2.3.2.2A1.1								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>	PICS 6.2.2/1										
<b>Test Purpose name</b>	Number Portability Separate Directory Number Addressing Method is used										
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM and the Called Party Number is present and the <b>Nature of address indicator</b> is set to: "Network routing number in national (significant) number format" or "National (significant) number" or "Network routing number in network specific number format" and a Called Directory Number, an INVITE is sent.</p> <p>The <b>userpart</b> of the <b>request URI</b> is derived from the Called Directory Number. '+CC' is inserted before the digitstring:</p> <ul style="list-style-type: none"> <li>• The <b>rn parameter</b> of the <b>request URI</b> is derived from the Called Party Number. '+CC' is inserted before the digitstring.</li> <li>• The <b>npdi</b> URI parameter is added to the <b>request URI</b>.</li> <li>• The userpart of the <b>To header</b> field is derived from the Called Directory Number. '+CC' is inserted before the digitstring:</li> </ul> <p>The To header does not contain the npdi and rn parameters.</p>										
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Called party number "National (significant) number" Called Directory Number</p> <p><b>Nature of address indicator:</b> "Network routing number in national (significant) number format" or "National (significant) number" or "Network routing number in network specific number format"</p>										
<b>SIP Parameter values</b>	INVITE: Request line <+CC Called Directory Number>; rn= +CC Called party number;npdi										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_201_040	<b>Reference</b>	7.2.3.2.2A1.2								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/										
<b>Selection criteria</b>	PICS 6.2.2/2										
<b>Test Purpose name</b>	Number Portability Concatenated Addressing Method is used										
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM and the Called Directory Number is not present and the <b>Nature of address indicator of the Called party number</b> is set to: "Network routing number concatenated with called directory number" or "National (significant) number", an INVITE is sent.</p> <p>The <b>userpart</b> of the <b>request URI</b> is derived from the Called Party Number - the prefix representing the Portability routing number is removed. '+CC' is inserted before the digitstring:</p> <ul style="list-style-type: none"> <li>• The <b>rn parameter</b> of the <b>request URI</b> is derived from the Called Party Number. The digits follow the prefix representing the Portability Routing Number are removed from the digitstring. '+CC' is inserted before the digitstring.</li> <li>• The <b>npdi</b> URI parameter is added to the <b>request URI</b>.</li> </ul> <p>The userpart of the <b>To header</b> field is derived from the Called Party Number- the prefix representing the Portability routing number is removed. '+CC' is inserted before the digitstring:</p> <ul style="list-style-type: none"> <li>• The To header does not contain the npdi and rn parameters.</li> </ul>										
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Called party number</p> <p><b>Nature of address indicator:</b> "Network routing number concatenated with called directory number" or "National (significant) number"</p>										
<b>SIP Parameter values</b>	INVITE: Request line <+CC Called Party Number>; rn= <+CC Portability Routing Number>;npdi										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_201_041	<b>Reference</b>	7.2.3.2.2A1.3									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>	PICS 6.2.2/3											
<b>Test Purpose name</b>	Number Portability Separate Network Routing Number Addressing Method is used											
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM and the Network Routing Number is present and the <b>Nature of address indicator</b> is set to: "Network routing number in national (significant) number format" or "Network routing number in network specific number format" and a Called Party Number, an INVITE is sent.</p> <p>The <b>userpart</b> of the <b>request URI</b> is derived from the Called Party Number. '+CC' is inserted before the digitstring:</p> <ul style="list-style-type: none"> <li>• The <b>rn parameter</b> of the <b>request URI</b> is derived from the Network Routing Number. '+CC' is inserted before the digitstring.</li> <li>• The <b>npdi</b> URI parameter is added to the <b>request URI</b>.</li> </ul> <p>The userpart of the <b>To header</b> field is derived from the Called Party Number. '+CC' is inserted before the digitstring:</p> <ul style="list-style-type: none"> <li>• The <b>To header</b> does not contain the npdi and rn parameters.</li> </ul>											
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number "National (significant) number" Network Routing Number <b>Nature of address indicator:</b> "Network routing number in national (significant) number format" or "National (significant) number" or "Network routing number in network specific number format"											
<b>SIP Parameter values</b>	<b>INVITE:</b> Request line <+CC Called Party Number>; rn= <+CC Network Routing Number>;npdi											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_201_042	<b>Reference</b>	7.2.3.2.2B.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/											
<b>Selection criteria</b>	PICS 6.2.2/5 AND PICS 6.2.2/8											
<b>Test Purpose name</b>	Carrier selection: Mapping of ISUP 'Transit Network Selection' parameter into cic URI parameter											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Transit Network Selection parameter is present, the value of the Transit Network Selection parameter is sent in the <b>cic</b> URI parameter of the <b>Request URI</b> of the sent INVITE request.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Transit Network Selection											
<b>SIP Parameter values</b>	<b>INVITE:</b> Request URI sip: <called party number;cic=TNS value											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_201_043	<b>Reference</b>	7.2.3.2.2C
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_INVITE/		
<b>Selection criteria</b>	PICS 6.1.1/2		
<b>Test Purpose name</b>	Mapping of Mobile Equipment Identifier into a 'gsma' imei instance in the Contact header		
<b>Test Purpose</b>	<p>Ensure when an IAM is received and an Application Transport parameter is present containing a Mobile Equipment Identifier encapsulated content an INVITE request is sent. The INVITE request contains in the Contact header field an instance-id is a SIP Contact header field parameter set as an IMEI or an IMEISV as present in the MEI content in the Application Transport parameter.</p>		
<b>ISUP Parameter values</b>	<p><b>IAM:</b>            APP            application context identifier = '0000111'              '00000001' (Mobile Equipment Identifier: MEI)            Length indicator            Compatibility information            Mobile station Equipment Identity [TAC] [SNR] [CD/SD] (IMEI)            or            International Mobile station Equipment Identity and Software Version Number [TAC] [SNR] [SVN] (IMEISV)</p>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b>            Contact: [contact address];+sip.instance="urn:gsma:imei:[TAC]-[SNR]-[CD/SD]&gt;"            or            Contact: [contact address];+sip.instance="urn:gsma:imei:[TAC]-[SNR]-0;svn=[SVN]&gt;"</p>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

### 6.1.2.2 Receipt of CONTINUITY

<b>TP number</b>	TP_202_001	<b>Reference</b>	7.2.3.2.3									
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_COT/											
<b>Selection criteria</b>	PICS 6.2.1/3											
<b>Test Purpose name</b>	COT received after INVITE was sent											
<b>Test Purpose</b>	When the requested preconditions in the IMS have been met and if outstanding continuity procedures have successfully been completed (COT with the Continuity Indicators parameter set to 'continuity check successful' is received), a SDP offer in a SIP UPDATE request shall be sent for each early SIP dialogue confirming that all the required preconditions have been met.											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>	<p><b>INVITE:</b></p> <p>Supported: precondition, 100rel  SDP      a=curr:qos local none            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos none remote sendrecv            OR            a=des:qos optional remote sendrecv</p> <p>183: Require: 100rel  SDP      a=curr:qos local none            a=curr:qos remote none            a=des:qos none local sendrecv            OR            a=des:qos optional local sendrecv            a=des:qos mandatory remote sendrecv            a=conf:qos remote sendrecv</p> <p><b>UPDATE:</b></p> <p>SDP      a=curr:qos local sendrecv            a=curr:qos remote none            a=des:qos mandatory local sendrecv            a=des:qos none remote sendrecv            OR            a=des:qos optional remote sendrecv</p> <p>200 OK UPDATE  SDP      a=curr:qos local sendrecv            a=curr:qos remote sendrecv            a=des:qos optional local sendrecv            OR            a=des:qos optional local sendrecv            a=des:qos mandatory remote sendrecv</p>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">ISUP</th> <th style="text-align: center; width: 10%;">MGCF</th> <th style="text-align: right; width: 60%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: right;"> → INVITE  ← 100 Trying  ← 183 Session Progress  → PRACK  ← 200 OK (PRACK) </td> </tr> <tr> <td>COT</td> <td style="text-align: center;">→</td> <td style="text-align: right;"> → UPDATE  ← 200 OK(UPDATE) </td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK)	COT	→	→ UPDATE ← 200 OK(UPDATE)	<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK)										
COT	→	→ UPDATE ← 200 OK(UPDATE)										

### 6.1.2.3 Sending of ACM and awaiting answer indication

<b>TP number</b>	TP_203_001	<b>Reference</b>	7.2.3.2.4																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																							
<b>Selection criteria</b>																								
<b>Test Purpose name</b>	Detection of end of address signalling by the expiry of Timer T i/w1																							
<b>Test Purpose</b>	Ensure that after expiry of Timer T i/w1 after the last address signalling information was received, an ACM is sent and the Called party's status indicator is set to 'no indication'.																							
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = no indication																							
<b>SIP Parameter values</b>																								
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>T i/w1 running</td> </tr> <tr> <td>SAM</td> <td>→</td> <td>T i/w1 running</td> </tr> <tr> <td>SAM</td> <td>→</td> <td>T i/w1 running</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>T i/w1 expired</td> </tr> <tr> <td></td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	T i/w1 running	SAM	→	T i/w1 running	SAM	→	T i/w1 running	ACM	←	T i/w1 expired			→ INVITE			← 100 Trying		
ISUP	MGCF	Mg																						
IAM	→	T i/w1 running																						
SAM	→	T i/w1 running																						
SAM	→	T i/w1 running																						
ACM	←	T i/w1 expired																						
		→ INVITE																						
		← 100 Trying																						
		<b>Apply post test routine</b>																						

<b>TP number</b>	TP_203_002	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	An ACM is sent after a 180 Ringing was received														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing provisional response without P-Early-Media header, the SUT sends an ACM. The Called party's status indicator is set to 'subscriber free'. The ringing tone is sent by the SUT.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = subscriber free														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td>←</td> <td>← 180 Ringing</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying		←	← 180 Ringing		
ISUP	MGCF	Mg													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
	←	← 180 Ringing													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_203_003	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/23														
<b>Test Purpose name</b>	180 received, a P-Early-Media header is present														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing provisional response with P-Early-Media header does not authorize the backward early media, the SUT sends an ACM. The Called party's status indicator is set to 'subscriber free'. The ringing tone is sent by the SUT.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = subscriber free														
<b>SIP Parameter values</b>	180: P-Early-Media: inactive														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td>←</td> <td>← 180 Ringing</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying		←	← 180 Ringing		
ISUP	MGCF	Mg													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
	←	← 180 Ringing													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_203_004	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACN/														
<b>Selection criteria</b>	PICS 6.2.1/14 AND PICS 6.2.1/23														
<b>Test Purpose name</b>	180 received, a P-Early-Media header not authorize early media is present														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing provisional response with P-Early-Media header does not authorize the backward early media, the SUT sends an ACM. The Called party's status indicator is set to 'subscriber free'. Based on local knowledge that the call is transited to a PSTN network the SUT does not generate the awaiting answer indication.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = subscriber free														
<b>SIP Parameter values</b>	180 P-Early-Media: inactive														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td><i>Early media</i></td> <td>←</td> <td>← <i>Early media</i></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 180 Ringing	<i>Early media</i>	←	← <i>Early media</i>		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 180 Ringing													
<i>Early media</i>	←	← <i>Early media</i>													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_203_005	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACN/														
<b>Selection criteria</b>	PICS 6.2.1/23 AND (PICS 6.3.2/5 OR PICS 6.3.2/27)														
<b>Test Purpose name</b>	181 received, a P-Early-Media header authorize early media is present														
<b>Test Purpose</b>	Ensure that on receipt of a 181 Call is Being Forwarded and a P-Early-Media is present authorizing backward early media, an ACM is sent. The Called party's status indicator is set to 'no indication' and an optional backward call indicator is present, the In-band information indicator is set to 'in-band information or appropriate pattern is now available'. The SUT does not generate the awaiting answer indication.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = no indication oBCi = in-band information or appropriate pattern is now available														
<b>SIP Parameter values</b>	181 P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call is Being Forwarded</td> </tr> <tr> <td><i>Early media</i></td> <td>←</td> <td>← <i>Early media</i></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 181 Call is Being Forwarded	<i>Early media</i>	←	← <i>Early media</i>		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 181 Call is Being Forwarded													
<i>Early media</i>	←	← <i>Early media</i>													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_203_006	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACN/														
<b>Selection criteria</b>	PICS 6.2.1/23														
<b>Test Purpose name</b>	183 received, a P-Early-Media header authorize early media is present														
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress and a P-Early-Media header is present authorizing backward early media, an ACM is sent. The Called party's status indicator is set to 'no indication' and an optional backward call indicator is present, the In-band information indicator is set to 'in-band information or appropriate pattern is now available'. The SUT does not generate the awaiting answer indication.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = no indication oBCi = in-band information or appropriate pattern is now available														
<b>SIP Parameter values</b>	183 P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 183 Session Progress</td> </tr> <tr> <td><i>Early media</i></td> <td>←</td> <td>← <i>Early media</i></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 183 Session Progress	<i>Early media</i>	←	← <i>Early media</i>		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 183 Session Progress													
<i>Early media</i>	←	← <i>Early media</i>													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_203_006A	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/9														
<b>Test Purpose name</b>	183 received, a Reason header present														
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress and a Reason header is present, an ACM is sent. The Called party's status indicator is set to 'no indication' and a Cause indicator parameter is present, the 'Cause value' set to the 'cause' value of the Reason header in the received 183 Session Progress.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = no indication Cause indicators Cause value [cause value]														
<b>SIP Parameter values</b>	183 Reason: Q850;cause=[cause value]														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 183 Session Progress</td> </tr> <tr> <td><i>Early media</i></td> <td>←</td> <td>← <i>Early media</i></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 183 Session Progress	<i>Early media</i>	←	← <i>Early media</i>	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 183 Session Progress													
<i>Early media</i>	←	← <i>Early media</i>													

<b>TP number</b>	TP_203_007	<b>Reference</b>	7.2.3.2.4									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	ACM is sent after T i/w2 was expired											
<b>Test Purpose</b>	Ensure that after expiry of timer T i/w2 an ACM is sent. The Called party's status indicator is set to 'no indication'.											
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party's status indicator = no indication											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w2 started</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>← T i/w2 expired</td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w2 started	→ INVITE ← 100 Trying	ACM	← T i/w2 expired		<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→ T i/w2 started	→ INVITE ← 100 Trying										
ACM	← T i/w2 expired											

<b>TP number</b>	TP_203_008	<b>Reference</b>	7.2.3.2.4									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/15											
<b>Test Purpose name</b>	MGW plays out early media associated with the Alert-Info header											
<b>Test Purpose</b>	Ensure that the MGW plays an early media file which is associated with the URL in the Alert-Info header contained in a received 180 Ringing response.											
<b>ISUP Parameter values</b>												
<b>SIP Parameter values</b>	180: Alert-Info: < Media resource URL>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 180 Ringing	<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
ACM	←	← 180 Ringing										

<b>TP number</b>	TP_203_009	<b>Reference</b>	7.2.3.2.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/17 AND PICS 6.2.1/23														
<b>Test Purpose name</b>	The SUT terminates the sending of awaiting answer indication														
<b>Test Purpose</b>	Ensure that the SUT terminates the sending of awaiting answer indication as indicated in a P-Early-Media received in a 183 Session Progress and the P-Early-Media header does not authorize backward early media. The sending awaiting answer indication is disabled.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>	183 : P-Early-Media: inactive														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w2 started</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>← T i/w2 expired <i>Ringing tone</i></td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 183 Session Progress</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w2 started	→ INVITE	ACM	← T i/w2 expired <i>Ringing tone</i>	← 100 Trying			← 183 Session Progress	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM	→ T i/w2 started	→ INVITE													
ACM	← T i/w2 expired <i>Ringing tone</i>	← 100 Trying													
		← 183 Session Progress													

<b>TP number</b>	TP_203_010	<b>Reference</b>	7.2.3.2.4															
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																	
<b>Selection criteria</b>	PICS 6.2.1/16 AND PICS 6.2.1/23																	
<b>Test Purpose name</b>	The SUT initiates the sending of awaiting answer indication																	
<b>Test Purpose</b>	Ensure that the SUT initiates the sending of awaiting answer indication as indicated in a P-Early-Media received in a 183 Session Progress and the P-Early-Media header authorizes backward early media.																	
<b>ISUP Parameter values</b>																		
<b>SIP Parameter values</b>	183 : P-Early-Media: sendonly																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td>←</td> <td>← 183 Session Progress</td> </tr> <tr> <td></td> <td>←</td> <td>← <i>Early media</i></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying		←	← 183 Session Progress		←	← <i>Early media</i>	<b>Apply post test routine</b>	
ISUP	MGCF	Mg																
IAM	→	→ INVITE																
ACM	←	← 100 Trying																
	←	← 183 Session Progress																
	←	← <i>Early media</i>																

<b>TP number</b>	TP_203_011	<b>Reference</b>	7.2.3.2.5.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in ACM TMR speech or 3,1 kHz audio														
<b>Test Purpose</b>	IAM with Transmission Medium Requirement indicator=speech or 3,1 kHz received. Ensure that on receipt of a 180 Ringing response, an ACM is sent and the Backward call indicator is set to the following values: <ul style="list-style-type: none"><li>• Charge indicator = charge (10)</li><li>• Called party's status indicator = subscriber free (01)</li><li>• Called party's category indicator = no indication (00)</li><li>• End-to-end method indicator = no end-to-end method available (00)</li><li>• Interworking indicator = interworking encountered (1)</li><li>• End-to-end information indicator = no end-to-end information available (0)</li><li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li><li>• ISDN access indicator = terminating access non-ISDN (0)</li><li>• Echo control device indicator = incoming echo control device included (1).</li></ul>														
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = speech or 3,1 kHz														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying			← 180 Ringing	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
		← 180 Ringing													

<b>TP number</b>	TP_203_012	<b>Reference</b>	7.2.3.2.5.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.3.2/5 OR PICS 6.3.2/27											
<b>Test Purpose name</b>	181 received, coding of Backward call indicator in ACM TMR speech or 3,1 kHz audio											
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=speech or 3,1 kHz received.</p> <p>Ensure that on receipt of a 181 Call is Being forwarded response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device included (1).</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = speech or 3,1 kHz											
<b>SIP Parameter values</b>												
<b>Comments</b>												
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ISUP	MGCF	Mg										
IAM	→	→ INVITE										
ACM	←	← 100 Trying ← 181 Call is Being forwarded										

<b>TP number</b>	TP_203_013	<b>Reference</b>	7.2.3.2.5.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/23											
<b>Test Purpose name</b>	183 received, coding of Backward call indicator in ACM TMR speech or 3,1 kHz audio											
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=speech or 3,1 kHz received.</p> <p>Ensure that on receipt of a 183 Session Progress response containing a P-Early-Media header, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device included (1).</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = speech or 3,1 kHz											
<b>SIP Parameter values</b>	183: P-Early-Media: <backward early media authorized>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying ← 183 Session Progress</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying ← 183 Session Progress	<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→	→ INVITE										
ACM	←	← 100 Trying ← 183 Session Progress										

<b>TP number</b>	TP_203_014	<b>Reference</b>	7.2.3.2.5.1																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																		
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18																		
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted																		
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 180 Ringing response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>																		
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 64 kBit/s unrestricted																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> <td></td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE				← 100 Trying		ACM	←	← 180 Ringing	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																	
		← 100 Trying																	
ACM	←	← 180 Ringing																	

<b>TP number</b>	TP_203_015	<b>Reference</b>	7.2.3.2.5.1																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																		
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18 AND PICS 6.3.2/5 OR PICS 6.3.2/27																		
<b>Test Purpose name</b>	181 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted																		
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 181 Call is Being forwarded response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>																		
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	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																	
		← 100 Trying																	
ACM	←	← 181 Call is Being forwarded																	

<b>TP number</b>	TP_203_016	<b>Reference</b>	7.2.3.2.5.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18 AND PICS 6.2.1/23														
<b>Test Purpose name</b>	183 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 183 Session Progress response containing a P-Early-Media header, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted														
<b>SIP Parameter values</b>	183: P-Early-Media: <backward early media authorized>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 183 Session Progress</td> </tr> </tbody> </table>		ISUP	MGCF	Mg	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 183 Session Progress	<b>Apply post test routine</b>	
	ISUP	MGCF	Mg												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 183 Session Progress												

<b>TP number</b>	TP_203_017	<b>Reference</b>	7.2.3.2.5.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18														
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 180 Ringing response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = <b>no interworking encountered (0)</b></li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li> <li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted														
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 180 Ringing</td> </tr> </tbody> </table>		ISUP	MGCF	Mg	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 180 Ringing	<b>Apply post test routine</b>	
	ISUP	MGCF	Mg												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 180 Ringing												

<b>TP number</b>	TP_203_018	<b>Reference</b>	7.2.3.2.5.1																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																		
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18 AND PICS 6.3.2/5 OR PICS 6.3.2/27																		
<b>Test Purpose name</b>	181 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted																		
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 181 Call is Being forwarded response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = <b>no interworking encountered (0)</b></li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li> <li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>																		
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 64 kBit/s unrestricted																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> <td></td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call is Being forwarded</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE				← 100 Trying		ACM	←	← 181 Call is Being forwarded	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																	
		← 100 Trying																	
ACM	←	← 181 Call is Being forwarded																	

<b>TP number</b>	TP_203_019	<b>Reference</b>	7.2.3.2.5.1																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																		
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18 AND PICS 6.2.1/23																		
<b>Test Purpose name</b>	183 received, coding of Backward call indicator in ACM TMR 64 kBit/s unrestricted																		
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 183 Session Progress response containing a P-Early-Media header, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = <b>no interworking encountered (0)</b></li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li> <li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>																		
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 64 kBit/s unrestricted																		
<b>SIP Parameter values</b>	183: P-Early-Media: <backward early media authorized>																		
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> <td></td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 183 Session Progress</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE				← 100 Trying		ACM	←	← 183 Session Progress	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																	
		← 100 Trying																	
ACM	←	← 183 Session Progress																	

<b>TP number</b>	TP_203_020	<b>Reference</b>	7.2.3.2.5.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in ACM HLC "Facsimile Group 2/3"											
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=3,1 kHz and High Layer Compatibility= Facsimile Group 2/3 received. Ensure that on receipt of a 180 Ringing response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming <b>echo control device not included (0)</b>.</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 3,1 kHz High Layer Compatibility = Facsimile Group 2/3											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	ACM	←		<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing										
ACM	←											

<b>TP number</b>	TP_203_021	<b>Reference</b>	7.2.3.2.5.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.3.2/5 OR PICS 6.3.2/27											
<b>Test Purpose name</b>	181 received, coding of Backward call indicator in ACM HLC "Facsimile Group 2/3"											
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=3,1 kHz and High Layer Compatibility= Facsimile Group 2/3 received. Ensure that on receipt of a 181 Call is Being forwarded response, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>incoming echo control device not included (0)</b>.</li> </ul>											
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 3,1 kHz High Layer Compatibility = Facsimile Group 2/3											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call is Being forwarded</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 181 Call is Being forwarded	<b>Apply post test routine</b>	
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
ACM	←	← 181 Call is Being forwarded										

<b>TP number</b>	TP_203_022	<b>Reference</b>	7.2.3.2.5.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	183 received, coding of Backward call indicator in ACM HLC "Facsimile Group 2/3"														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator=3,1 kHz and High Layer Compatibility= Facsimile Group 2/3 received. Ensure that on receipt of a 183 Session Progress response containing a P-Early-Media header, an ACM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>incoming echo control device not included (0)</b></li> </ul>														
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = 3,1 kHz High Layer Compatibility = Facsimile Group 2/3														
<b>SIP Parameter values</b>	183: P-Early-Media: <backward early media authorized>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 183 Session Progress</td> </tr> </tbody> </table> <p><b>Apply post test routine</b></p>				ISUP	MGCF	Mg	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 183 Session Progress
	ISUP	MGCF	Mg												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 183 Session Progress												

<b>TP number</b>	TP_203_023	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 into Backward call indicator in ACM														
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 1 is mapped into the Backward call indicator present in the ACM:</p> <p>ISDN User Part indicator</p> <ul style="list-style-type: none"> <li>• ISDN User Part not used all the way (0).</li> </ul>														
<b>ISUP Parameter values</b>	ACM: ISDN User Part indicator <b>ISDN User Part not used all the way</b>														
<b>SIP Parameter values</b>	<p>180: &lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     ProgressIndicator     ProgressOctet3         CodingStandard&gt;00&lt;     ProgressOctet4         ProgressDescription&gt;0000001&lt;</p>														
<b>Comments</b>	Progress Information: 'Call is not end-to-end ISDN: further call progress information may be available in-band'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p><b>Apply post test routine</b></p>				ISUP	MGCF	Mg	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 180 Ringing
	ISUP	MGCF	Mg												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 180 Ringing												

<b>TP number</b>	TP_203_024	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 180 into Backward call indicator in ACM											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 2 is mapped into the Backward call indicator present in the ACM:</p> <p>ISDN User Part indicator</p> <ul style="list-style-type: none"> <li>• ISDN User Part used all the way (1)</li> </ul> <p>ISDN access indicator</p> <ul style="list-style-type: none"> <li>• Terminating access non-ISDN (0).</li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access non-ISDN</b>											
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000010<											
<b>Comments</b>	Progress Information: 'Destination address is non-ISDN'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying ← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying ← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
ACM	←	← 100 Trying ← 180 Ringing										

<b>TP number</b>	TP_203_025	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 7 in 180 into Backward call indicator in ACM											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 7 is mapped into the Backward call indicator present in the ACM:</p> <p>ISDN User Part indicator</p> <ul style="list-style-type: none"> <li>• ISDN User Part used all the way (1)</li> </ul> <p>ISDN access indicator</p> <ul style="list-style-type: none"> <li>• Terminating access ISDN (1)</li> </ul> <p>Interworking indicator</p> <ul style="list-style-type: none"> <li>• no interworking encountered (0).</li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access ISDN</b> Interworking indicator <b>no interworking encountered</b>											
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000111<											
<b>Comments</b>	Progress Information: value not specified. Meaning 'terminating user is ISDN'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying ← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying ← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
ACM	←	← 100 Trying ← 180 Ringing										

<b>TP number</b>	TP_203_026	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 180 into optional Backward call indicator in ACM														
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 8 is mapped into the Optional backward call indicator present in the ACM:</p> <ul style="list-style-type: none"> <li>Optional backward call indicators</li> <li>In-band information indicator <ul style="list-style-type: none"> <li>• in-band information or an appropriate pattern is now available.</li> </ul> </li> </ul>														
<b>ISUP Parameter values</b>	<b>ACM:</b> Optional backward call indicators In-band information indicator in-band information or an appropriate pattern is now available"														
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0001000<														
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 180 Ringing
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 180 Ringing												

<b>TP number</b>	TP_203_027	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 183 into Backward call indicator in ACM														
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the PSTN XML ProgressIndicator is present, the value 1 is mapped into the Backward call indicator present in the ACM:</p> <ul style="list-style-type: none"> <li>ISDN User Part indicator</li> <li>• ISDN User Part not used all the way (0).</li> </ul>														
<b>ISUP Parameter values</b>	<b>ACM:</b> ISDN User Part indicator <b>ISDN User Part not used all the way</b>														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000001<														
<b>Comments</b>	Progress Information: 'Call is not end-to-end ISDN: further call progress information may be available in-band'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 183 Session Progress</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 183 Session Progress
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 183 Session Progress												

<b>TP number</b>	TP_203_028	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1															
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																	
<b>Selection criteria</b>	PICS 6.2.1/5																	
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 183 into Backward call indicator in ACM																	
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the PSTN XML ProgressIndicator is present, the value 2 is mapped into the Backward call indicator present in the ACM:</p> <p>ISDN User Part indicator</p> <ul style="list-style-type: none"> <li>• ISDN User Part used all the way (1)</li> </ul> <p>ISDN access indicator</p> <ul style="list-style-type: none"> <li>• Terminating access non-ISDN (0).</li> </ul>																	
<b>ISUP Parameter values</b>	<b>ACM:</b> ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access non-ISDN</b>																	
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000010<																	
<b>Comments</b>	Progress Information: 'Destination address is non-ISDN'.																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 183 Session Progress</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying			← 183 Session Progress			<b>Apply post test routine</b>
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																
ACM	←	← 100 Trying																
		← 183 Session Progress																
		<b>Apply post test routine</b>																

<b>TP number</b>	TP_203_029	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1															
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/																	
<b>Selection criteria</b>	PICS 6.2.1/5																	
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 7 in 183 into Backward call indicator in ACM																	
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the PSTN XML ProgressIndicator is present, the value 7 is mapped into the Backward call indicator present in the ACM:</p> <p>ISDN User Part indicator</p> <ul style="list-style-type: none"> <li>• ISDN User Part used all the way (1)</li> </ul> <p>ISDN access indicator</p> <ul style="list-style-type: none"> <li>• Terminating access ISDN (1)</li> </ul> <p>Interworking indicator</p> <ul style="list-style-type: none"> <li>• no interworking encountered (0).</li> </ul>																	
<b>ISUP Parameter values</b>	<b>ACM:</b> ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access non-ISDN</b> Interworking indicator <b>no interworking encountered</b>																	
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000111<																	
<b>Comments</b>	Progress Information: value not specified. Meaning 'terminating user is ISDN'																	
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<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																
ACM	←	← 100 Trying																
		← 183 Session Progress																
		<b>Apply post test routine</b>																

<b>TP number</b>	TP_203_030	<b>Reference</b>	7.2.3.2.5.1 Table 7.2.3.2.5.1.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 183 into Backward call indicator in ACM											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the PSTN XML ProgressIndicator is present, the value 8 is mapped into the Optional backward call indicator present in the ACM:</p> <ul style="list-style-type: none"> <li>Optional backward call indicators</li> <li>In-band information indicator <ul style="list-style-type: none"> <li>• in-band information or an appropriate pattern is now available.</li> </ul> </li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Optional backward call indicators In-band information indicator in-band information or an appropriate pattern is now available"											
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00  ProgressOctet4 ProgressDescription>0001000 											
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 183 Session Progress</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress	ACM	←	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress										
ACM	←											

<b>TP number</b>	TP_203_031	<b>Reference</b>	7.2.3.2.5.2									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	Mapping of P-Early-Media header in 183 into Optional backward call indicator in ACM											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the P-Early-Media header authorizing backward early media is mapped into the Backward call indicator present in the ACM:</p> <ul style="list-style-type: none"> <li>Optional backward call indicators</li> <li>In-band information indicator <ul style="list-style-type: none"> <li>• in-band information or an appropriate pattern is now available.</li> </ul> </li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Optional backward call indicators In-band information indicator in-band information or an appropriate pattern is now available"											
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly											
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 183 Session Progress</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress	ACM	←	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress										
ACM	←											

<b>TP number</b>	TP_203_032	<b>Reference</b>	7.2.3.2.5.2											
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/													
<b>Selection criteria</b>														
<b>Test Purpose name</b>	Mapping of P-Early-Media header in 181 into Optional backward call indicator in ACM													
<b>Test Purpose</b>	Ensure that on receipt of a 181 Call is Being Forwarded and the P-Early-Media authorizing backward early media is mapped into the Backward call indicator present in the ACM: Optional backward call indicators In-band information indicator • in-band information or an appropriate pattern is now available.													
<b>ISUP Parameter values</b>	<b>ACM:</b> Optional backward call indicators In-band information indicator in-band information or an appropriate pattern is now available"													
<b>SIP Parameter values</b>	181: P-Early-Media: sendonly													
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 181 Call is Being Forwarded</td> </tr> </tbody> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM →		→ INVITE			← 100 Trying	ACM ←		← 181 Call is Being Forwarded	<b>Apply post test routine</b>
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM →		→ INVITE												
		← 100 Trying												
ACM ←		← 181 Call is Being Forwarded												

<b>TP number</b>	TP_203_033	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1											
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/													
<b>Selection criteria</b>	PICS 6.2.1/5													
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 180 into the Access Transport Parameter													
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 1 is mapped into the Access Transport Parameter containing the Progress Indicator value 1 in the ACM: Access Transport Parameter Progress Indicator • Progress Description='0000001'.													
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0000001'													
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000001<													
<b>Comments</b>	Progress Information: 'Call is not end-to-end ISDN: further call progress information may be available in-band'.													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM →		→ INVITE			← 100 Trying	ACM ←		← 180 Ringing	<b>Apply post test routine</b>
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM →		→ INVITE												
		← 100 Trying												
ACM ←		← 180 Ringing												

<b>TP number</b>	TP_203_034	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 180 into the Access Transport Parameter														
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 2 is mapped into the Access Transport Parameter containing the Progress Indicator value 2 in the ACM:</p> <p>Access Transport Parameter</p> <ul style="list-style-type: none"> <li>Progress Indicator</li> <li>• Progress Description='0000010'.</li> </ul>														
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0000010'														
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000010<														
<b>Comments</b>	Progress Information: 'Destination address is non-ISDN'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying			← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
		← 180 Ringing													

<b>TP number</b>	TP_203_035	<b>Reference</b>	7.2.3.2.5.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	PSTN XML ProgressIndicator 7 in 180 is not mapped into the Access Transport Parameter														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 7 is not mapped into the Access Transport Parameter in the ACM.														
<b>ISUP Parameter values</b>	<b>ACM:</b> No Access Transport Parameter present														
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000111<														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying			← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
		← 180 Ringing													

<b>TP number</b>	TP_203_036	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 180 into the Access Transport Parameter											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 180 Ringing and the PSTN XML ProgressIndicator is present, the value 8 is mapped into the Access Transport Parameter containing the Progress Indicator value 8 in the ACM:</p> <p>Access Transport Parameter</p> <ul style="list-style-type: none"> <li>Progress Indicator           <ul style="list-style-type: none"> <li>• Progress Description='0001000'.</li> </ul> </li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0001000'											
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0001000<											
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying										
ACM	←	← 180 Ringing										

<b>TP number</b>	TP_203_037	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/9											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 183 into the Access Transport Parameter											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the P-Early-Media header and PSTN XML ProgressIndicator is present, the value 1 is mapped into the Access Transport Parameter containing the Progress Indicator value 1 in the ACM:</p> <p>Access Transport Parameter</p> <ul style="list-style-type: none"> <li>Progress Indicator           <ul style="list-style-type: none"> <li>• Progress Description='0000001'.</li> </ul> </li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0000001'											
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000001<											
<b>Comments</b>	Progress Information: 'Call is not end-to-end ISDN: further call progress information may be available in-band'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 183 Session Progress</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 183 Session Progress
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying										
ACM	←	← 183 Session Progress										

<b>TP number</b>	TP_203_038	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/9														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 183 into the Access Transport Parameter														
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the P-Early-Media header and PSTN XML ProgressIndicator is present, the value 2 is mapped into the Access Transport Parameter containing the Progress Indicator value 2 in the ACM:</p> <p>Access Transport Parameter</p> <ul style="list-style-type: none"> <li>• Progress Indicator</li> <li>• Progress Description='0000010'.</li> </ul>														
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0000010'														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0000010<														
<b>Comments</b>	Progress Information: 'Destination address is non-ISDN'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 183 Session Progress</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 183 Session Progress
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 183 Session Progress												

<b>TP number</b>	TP_203_039	<b>Reference</b>	7.2.3.2.5.4												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/														
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/9														
<b>Test Purpose name</b>	PSTN XML ProgressIndicator 7 in 183 is not mapped into the Access Transport Parameter														
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress and the PSTN XML ProgressIndicator is present, the value 7 is not mapped into the Access Transport Parameter in the ACM.														
<b>ISUP Parameter values</b>	<b>ACM:</b> No Access Transport Parameter present														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>000011<														
<b>Comments</b>	Progress Information: value not specified. Meaning 'terminating user is ISDN'.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 183 Session Progress</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying	ACM	←		← 183 Session Progress
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying												
ACM	←		← 183 Session Progress												

<b>TP number</b>	TP_203_040	<b>Reference</b>	7.2.3.2.5.4 Table 7.2.3.2.5.4.1									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.1/9											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 183 into the Access Transport Parameter											
<b>Test Purpose</b>	<p>Ensure that on receipt of a 183 Session Progress and the P-Early-Media header and PSTN XML ProgressIndicator is present, the value 8 is mapped into the Access Transport Parameter containing the Progress Indicator value 8 in the ACM:</p> <p>Access Transport Parameter</p> <ul style="list-style-type: none"> <li>• Progress Indicator</li> <li>• Progress Description='0001000'.</li> </ul>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Access Transport Progress Indicator Progress Description='0001000'											
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet3 CodingStandard>00< ProgressOctet4 ProgressDescription>0001000<											
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 183 Session Progress</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress	ACM	←	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress										
ACM	←											

<b>TP number</b>	TP_203_041	<b>Reference</b>	2.5/ [7]									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ACM/											
<b>Selection criteria</b>	PICS 6.2.1/5 AND PICS 6.2.4/1 AND NOT PICS 6.2.4/8											
<b>Test Purpose name</b>	Fallback performed in SUT											
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing an TMR prime and an USI Prime and the TMR is set to '64 kBit/s preferred' and the succeeding (SIP) network does not have the capability of performing fallback, an ACM is sent and the TMU parameter is set to the value of the TMR prime parameter received in the IAM.											
<b>ISUP Parameter values</b>	<b>ACM:</b> Transmission Medium Used speech or 3,1 kHz audio											
<b>SIP Parameter values</b>												
<b>Comments</b>	Progress Information 'In-band information or an appropriate pattern is now available'.											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE ← 100 Trying										
ACM	←	← 180 Ringing										

### 6.1.2.4 Sending of the Call Progress message (CPG)

<b>TP number</b>	TP_204_001	<b>Reference</b>	7.2.3.2.6.0																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	A CPG is sent when a 180 is received and an ACM was sent before																				
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing a CPG message is sent when an ACM was sent before.																				
<b>ISUP Parameter values</b>	<b>ACM:</b> BCi Called party status = no indication <b>CPG:</b> Event indication = ALERTING																				
<b>SIP Parameter values</b>																					
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	←	← 100 Trying			← 180 Ringing			<b>Apply post test routine</b>		
ISUP	MGCF	Mg																			
IAM	→ T i/w1 started																				
ACM	← T i/w1 expired	→ INVITE																			
CPG	←	← 100 Trying																			
		← 180 Ringing																			
		<b>Apply post test routine</b>																			

<b>TP number</b>	TP_204_002	<b>Reference</b>	7.2.3.2.6.0																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																							
<b>Selection criteria</b>																								
<b>Test Purpose name</b>	181 received, CPG is sent																							
<b>Test Purpose</b>	Ensure that on receipt of a 181 Call is Being Forwarded a CPG is sent. The Event information parameter in the CPG is set to 'progress'.																							
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indication = progress																							
<b>SIP Parameter values</b>	181: P-Early-Media: sendonly																							
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG</td> <td>←</td> <td>← 181 Call is Being Forwarded</td> </tr> <tr> <td></td> <td></td> <td>early media</td> </tr> <tr> <td></td> <td></td> <td>early media</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	CPG	←	← 181 Call is Being Forwarded			early media			early media			<b>Apply post test routine</b>		
ISUP	MGCF	Mg																						
IAM	→	→ INVITE																						
ACM	←	← 180 Ringing																						
CPG	←	← 181 Call is Being Forwarded																						
		early media																						
		early media																						
		<b>Apply post test routine</b>																						

<b>TP number</b>	TP_204_003	<b>Reference</b>	7.2.3.2.6.0																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	Early media is not authorized if no P-Early-Media header is present in the 180																				
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing a CPG is sent. If the 180 Ringing does not contain a P-Early-Media header authorizing early media, the SUT initiates sending of awaiting answer indication.																				
<b>ISUP Parameter values</b>																					
<b>SIP Parameter values</b>	180: no P-Early-Media header present																				
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>ringing tone</td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	←	← 180 Ringing			ringing tone			<b>Apply post test routine</b>		
ISUP	MGCF	Mg																			
IAM	→ T i/w1 started																				
ACM	← T i/w1 expired	→ INVITE																			
CPG	←	← 180 Ringing																			
		ringing tone																			
		<b>Apply post test routine</b>																			

<b>TP number</b>	TP_204_004	<b>Reference</b>	7.2.3.2.6												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Early media is not authorized if P-Early-Media header does not authorize early media in the 180														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing a CPG is sent. If the 180 Ringing contains a P-Early-Media header not authorizing early media, the SUT initiates sending of awaiting answer indication.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>	180: P-Early-Media: inactive														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>← <i>ringing tone</i></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	← <i>ringing tone</i>	← 180 Ringing
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE													
CPG	← <i>ringing tone</i>	← 180 Ringing													

<b>TP number</b>	TP_204_005	<b>Reference</b>	7.2.3.2.6.0												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Early media is authorized if P-Early-Media header authorize early media in the 180														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing a CPG is sent. If the 180 Ringing contains a P-Early-Media header authorizing early media, the SUT terminates sending of awaiting answer indication and connects through the early media in backward direction.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>	180: P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>← <i>early media</i></td> <td>← 180 Ringing                           <i>early media</i></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	← <i>early media</i>	← 180 Ringing <i>early media</i>
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE													
CPG	← <i>early media</i>	← 180 Ringing <i>early media</i>													

<b>TP number</b>	TP_204_006	<b>Reference</b>	7.2.3.2.6.0												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/														
<b>Selection criteria</b>	PICS 6.2.1/14														
<b>Test Purpose name</b>	The SUT has the knowledge that the call is transited to a PSTN network, the awaiting answer indication is not generated														
<b>Test Purpose</b>	Ensure that the SUT does not generate the awaiting answer indication if it has the local knowledge that the call is transited to a PSTN network and the early media is not authorized.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>← <i>early media</i></td> <td>← 100 Trying                           <i>early media</i> ← 180 Ringing                           <i>early media</i></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	← <i>early media</i>	← 100 Trying <i>early media</i> ← 180 Ringing <i>early media</i>
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE													
CPG	← <i>early media</i>	← 100 Trying <i>early media</i> ← 180 Ringing <i>early media</i>													

<b>TP number</b>	TP_204_007	<b>Reference</b>	7.2.3.2.6.0						
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/								
<b>Selection criteria</b>									
<b>Test Purpose name</b>	Early media is authorized if P-Early-Media header authorize early media in the 183								
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress a CPG is sent. If the 183 Session Progress contains a P-Early-Media header authorizing early media, the SUT terminates sending of awaiting answer indication and connects through the early media in backward direction.								
<b>ISUP Parameter values</b>									
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM → ACM ← CPG ←</td> <td>early media</td> <td>→ INVITE ← 180 Ringing ← 183 Session Progress early media</td> </tr> </tbody> </table>			ISUP	MGCF	Mg	IAM → ACM ← CPG ←	early media	→ INVITE ← 180 Ringing ← 183 Session Progress early media
ISUP	MGCF	Mg							
IAM → ACM ← CPG ←	early media	→ INVITE ← 180 Ringing ← 183 Session Progress early media							
	<b>Apply post test routine</b>								

<b>TP number</b>	TP_204_008	<b>Reference</b>	7.2.3.2.6.0						
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/								
<b>Selection criteria</b>									
<b>Test Purpose name</b>	Early media is authorized if P-Early-Media header authorize early media in the 181								
<b>Test Purpose</b>	Ensure that on receipt of a 181 Call is Being Forwarded a CPG is sent. If the 181 Call is Being Forwarded contains a P-Early-Media header authorizing early media, the SUT terminates sending of awaiting answer indication and connects through the early media in backward direction.								
<b>ISUP Parameter values</b>									
<b>SIP Parameter values</b>	181: P-Early-Media: sendonly								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM → ACM ← CPG ←</td> <td>early media</td> <td>→ INVITE ← 180 Ringing ← 181 Call is Being Forwarded early media</td> </tr> </tbody> </table>			ISUP	MGCF	Mg	IAM → ACM ← CPG ←	early media	→ INVITE ← 180 Ringing ← 181 Call is Being Forwarded early media
ISUP	MGCF	Mg							
IAM → ACM ← CPG ←	early media	→ INVITE ← 180 Ringing ← 181 Call is Being Forwarded early media							
	<b>Apply post test routine</b>								

<b>TP number</b>	TP_204_009	<b>Reference</b>	7.2.3.2.6.0						
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/								
<b>Selection criteria</b>									
<b>Test Purpose name</b>	The SUT change the authorization of early media as indicated in the P-Early-Media received in 180								
<b>Test Purpose</b>	Ensure that the SUT terminates the sending of awaiting answer indication and connect through early media if the P-Early-Media header indicates authorization in the received 180 Ringing response and early media was not authorized before.								
<b>ISUP Parameter values</b>									
<b>SIP Parameter values</b>	183: P-Early-Media: inactive 180: P-Early-Media: sendonly								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM → ACM ← CPG ←</td> <td>ringing tone early media</td> <td>→ INVITE ← 183 Session Progress ← 180 Ringing early media</td> </tr> </tbody> </table>			ISUP	MGCF	Mg	IAM → ACM ← CPG ←	ringing tone early media	→ INVITE ← 183 Session Progress ← 180 Ringing early media
ISUP	MGCF	Mg							
IAM → ACM ← CPG ←	ringing tone early media	→ INVITE ← 183 Session Progress ← 180 Ringing early media							
	<b>Apply post test routine</b>								

<b>TP number</b>	TP_204_010	<b>Reference</b>	7.2.3.2.6.0
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	The SUT change the authorization of early media as indicated in the P-Early-Media received in 180		
<b>Test Purpose</b>	Ensure that the SUT initiates the sending of awaiting answer indication and removes authorization of early media if the P-Early-Media header indicates <b>no authorization</b> of early media received in the 180 Ringing and early media was authorized before.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly 180: P-Early-Media: inactive		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                        →                            → INVITE          ACM                        ←                            ← 183 Session Progress                                      <i>early media</i>                    <i>early media</i>          CPG                        ←                            ← 180 Ringing                                      <i>ringing tone</i>                    <i>ringing tone</i> </p>	<b>Apply post test routine</b>	

<b>TP number</b>	TP_204_010A	<b>Reference</b>	7.2.3.2.6.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/9		
<b>Test Purpose name</b>	Reason header received in 183 is mapped into Cause indicator parameter in CPG		
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress containing a Reason header a CPG is sent. The cause value indicator of the Cause indicators parameter in the CPG is set to the value of the cause parameter of the Reason header in the received 183 Session Progress.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicators in-band info or appropriate pattern now available Cause indicators Cause value [cause value]		
<b>SIP Parameter values</b>	183: Reason: Q850;cause=[cause value]		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                        →                            → INVITE          ACM                        ←                            ← 180 Ringing          CPG                        ←                            ← 183 Session Progress                                      <i>cause value</i>                    <i>cause value</i> </p>	<b>Apply post test routine</b>	

<b>TP number</b>	TP_204_011	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 183 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in a 183 Session Progress, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #1.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000001'		
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported  183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 180 Ringing ← 183 Session Progress	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_012	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 183 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in a 183 Session Progress, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #2.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000010'		
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported  183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 180 Ringing ← 183 Session Progress	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_013	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1														
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																
<b>Selection criteria</b>	PICS 6.2.1/5																
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in 183 into ATP in the CPG																
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in a 183 Session Progress, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #4.																
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000100'																
<b>SIP Parameter values</b>	<p>INVITE: P-Early-Media: supported</p> <p>180: &lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     ProgressIndicator     ProgressOctet4     ProgressDescription&gt;0000001&lt;</p> <p>or</p> <p>        ProgressDescription&gt;0000010&lt;</p> <p>183: &lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     ProgressIndicator     ProgressOctet4     ProgressDescription&gt;0000100&lt;</p>																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td></td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">CPG</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">← 183 Session Progress</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	ACM	←		← 180 Ringing	CPG	←		← 183 Session Progress
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>														
IAM	→		→ INVITE														
ACM	←		← 180 Ringing														
CPG	←		← 183 Session Progress														

<b>TP number</b>	TP_204_014	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	No mapping of PSTN XML ProgressIndicator 7 in 183 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 7 in a 183 Session Progress, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #4.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000100'		
<b>SIP Parameter values</b>	INVITE: P-Early-Media: supported  180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001< or ProgressDescription>0000010<  183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000111<		
<b>Comments</b>			
<b>Message flows</b>	ISUP	MGCF	Mg
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	CPG ←	← 183 Session Progress	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_015	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 183 into Event information in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 8 in a 183 Session Progress, a CPG is sent and Event information parameter is set to 'In-band information or appropriate pattern is now available'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event information = In-band information or appropriate pattern is now available		
<b>SIP Parameter values</b>	183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0001000<		
<b>Comments</b>			
<b>Message flows</b>	ISUP	MGCF	Mg
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	CPG ←	← 183 Session Progress	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_017	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 180 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in a 180 Ringing, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #1.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000001'		
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → T i/w1 started	Mg
	ACM CPG	← T i/w1 expired      → INVITE ← 180 Ringing	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_018	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 180 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in a 180 Ringing, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #2.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000010'		
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → T i/w1 started	Mg
	ACM CPG	← T i/w1 expired      → INVITE ← 180 Ringing	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_019	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in 180 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in a 180 Ringing a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #4.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000100'		
<b>SIP Parameter values</b>	183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001< or ProgressDescription>0000010<  180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → ACM CPG	Mg → INVITE ← 183 Session Progress ← 180 Ringing
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_020	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	No mapping of PSTN XML ProgressIndicator 7 in 180 into ATP in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 7 in a 180 Ringing, a CPG is sent and an Access Transport Parameter is present containing a Progress Indicator #4.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Access Transport Progress Indicator Progress Description='0000100'		
<b>SIP Parameter values</b>	183: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001< or ProgressDescription>0000010<  180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000111<		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → ACM CPG	Mg → INVITE ← 183 Session Progress ← 180 Ringing
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_021	<b>Reference</b>	7.2.3.2.6.1 Table 7.2.3.2.6.1.3
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 8 in 180 into Event information in the CPG		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 8 in a 180 Ringing, a CPG is sent and Event information parameter is set to 'In-band information or appropriate pattern is now available'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event information = In-band information or appropriate pattern is now available		
<b>SIP Parameter values</b>	180: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0001000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> → T i/w1 started	<b>Mg</b>
	ACM	← T i/w1 expired	→ INVITE
	CPG	←	← 180 Ringing
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_023	<b>Reference</b>	7.2.3.2.7
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Mapping of P-Early-Media header into Event information parameter in CPG		
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress and a P-Early-Media header is present authorizing early media, a CPG is sent. The Event information parameter is set to 'In-band information or appropriate pattern is now available'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event information = In-band information or appropriate pattern is now available		
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> → T i/w1 started	<b>Mg</b>
	ACM	← T i/w1 expired	→ INVITE
	CPG	←	← 183 Session Progress
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_204_024	<b>Reference</b>	7.2.3.2.7.4																				
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																						
<b>Selection criteria</b>	NOT PICS 6.2.1/18																						
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in CPG TMR speech or 3,1 kHz audio																						
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = speech or 3,1 kHz received.            Ensure that on receipt of a 180 Ringing response, a CPG is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = incoming echo control device included (1).</li> </ul>																						
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = speech or 3,1 kHz <b>ACM:</b> Backward call indicator Called party's status indicator = no indication																						
<b>SIP Parameter values</b>																							
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td>CPG</td> <td>← 180 Ringing</td> <td>←</td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="2" style="text-align: right;"><b>Apply post test routine</b></td> </tr> </tbody> </table>				ISUP	MGCF	Mg	IAM	→ T i/w1 started			ACM	← T i/w1 expired	→ INVITE		CPG	← 180 Ringing	←				<b>Apply post test routine</b>	
	ISUP	MGCF	Mg																				
IAM	→ T i/w1 started																						
ACM	← T i/w1 expired	→ INVITE																					
CPG	← 180 Ringing	←																					
		<b>Apply post test routine</b>																					

<b>TP number</b>	TP_204_025	<b>Reference</b>	7.2.3.2.7.4																				
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/																						
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18																						
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in CPG TMR 64 kBit/s unrestricted																						
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received.            Ensure that on receipt of a 180 Ringing response, a CPG is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>incoming echo control device not included (0)</b>.</li> </ul>																						
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted <b>ACM:</b> Backward call indicator Called party's status indicator = no indication																						
<b>SIP Parameter values</b>																							
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> <td></td> </tr> <tr> <td>CPG</td> <td>← 180 Ringing</td> <td>←</td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="2" style="text-align: right;"><b>Apply post test routine</b></td> </tr> </tbody> </table>				ISUP	MGCF	Mg	IAM	→ T i/w1 started			ACM	← T i/w1 expired	→ INVITE		CPG	← 180 Ringing	←				<b>Apply post test routine</b>	
	ISUP	MGCF	Mg																				
IAM	→ T i/w1 started																						
ACM	← T i/w1 expired	→ INVITE																					
CPG	← 180 Ringing	←																					
		<b>Apply post test routine</b>																					

<b>TP number</b>	TP_204_026	<b>Reference</b>	7.2.3.2.7.4													
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/															
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18															
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in CPG TMR 64 kBit/s unrestricted															
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received. Ensure that on receipt of a 180 Ringing response, a CPG is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = <b>no interworking encountered (0)</b></li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li> <li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li> <li>• Echo control device indicator = incoming echo control device not included (0).</li> </ul>															
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted</p> <p><b>ACM:</b> Backward call indicator Called party's status indicator = no indication</p>															
<b>SIP Parameter values</b>																
<b>Comments</b>																
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>← 180 Ringing</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="font-weight: bold; font-style: italic;">Apply post test routine</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	← 180 Ringing				Apply post test routine
ISUP	MGCF	Mg														
IAM	→ T i/w1 started															
ACM	← T i/w1 expired	→ INVITE														
CPG	← 180 Ringing															
		Apply post test routine														

<b>TP number</b>	TP_204_027	<b>Reference</b>	7.2.3.2.7.4													
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CPG/															
<b>Selection criteria</b>																
<b>Test Purpose name</b>	180 received, coding of Backward call indicator in CPG HLC "Facsimile Group 2/3"															
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 3,1 kHz and High Layer Compatibility = Facsimile Group 2/3 received. Ensure that on receipt of a 180 Ringing response, a CPG is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>incoming echo control device not included (0)</b>.</li> </ul>															
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Transmission Medium Requirement indicator = 3,1 kHz</p> <p>High Layer Compatibility = Facsimile Group 2/3</p> <p><b>ACM:</b> Backward call indicator Called party's status indicator = no indication</p>															
<b>SIP Parameter values</b>																
<b>Comments</b>																
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE</td> </tr> <tr> <td>CPG</td> <td>← 180 Ringing</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="font-weight: bold; font-style: italic;">Apply post test routine</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE	CPG	← 180 Ringing				Apply post test routine
ISUP	MGCF	Mg														
IAM	→ T i/w1 started															
ACM	← T i/w1 expired	→ INVITE														
CPG	← 180 Ringing															
		Apply post test routine														

### 6.1.2.5 Sending of the Answer Message (ANM)

<b>TP number</b>	TP_205_001	<b>Reference</b>	7.2.3.2.8												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Sending of ANM when 200 OK INVITE was received														
<b>Test Purpose</b>	Ensure that upon receipt of the first 200 OK (INVITE), if the Address Complete Message (ACM) has already been sent, the SUT sends the Answer Message (ANM).														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	ACM	←		ANM	←	← 200 OK (INVITE) → ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing													
ACM	←														
ANM	←	← 200 OK (INVITE) → ACK													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_205_002	<b>Reference</b>	7.2.3.2.8												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in ANM TMR speech or 3,1 kHz audio														
<b>Test Purpose</b>	IAM with Transmission Medium Requirement indicator = speech or 3,1 kHz received. Ensure that on receipt of a 200 OK INVITE final response, an ANM is sent and the Backward call indicator is set to the following values: <ul style="list-style-type: none"><li>• Charge indicator = charge (10)</li><li>• Called party's status indicator = no indication (00)</li><li>• Called party's category indicator = no indication (00)</li><li>• End-to-end method indicator = no end-to-end method available (00)</li><li>• Interworking indicator = interworking encountered (1)</li><li>• End-to-end information indicator = no end-to-end information available (0)</li><li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li><li>• ISDN access indicator = terminating access non-ISDN (0)</li><li>• Echo control device indicator = Incoming echo control device included (1).</li></ul>														
<b>ISUP Parameter values</b>	IAM: Transmission Medium Requirement indicator = speech or 3,1 kHz ACM: Backward call indicator Called party's status indicator = no indication														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ T i/w1 started</td> <td></td> </tr> <tr> <td>ACM</td> <td>← T i/w1 expired</td> <td>→ INVITE ← 183 Session Progress</td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress	ANM	←	← 200 OK (INVITE) → ACK		
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress													
ANM	←	← 200 OK (INVITE) → ACK													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_205_003	<b>Reference</b>	7.2.3.2.8												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18														
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in ANM TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received. Ensure that on receipt of a 200 OK INVITE final response, an ANM is sent and the Backward call indicator is set to the following values: <ul style="list-style-type: none"><li>• Charge indicator = charge (10)</li><li>• Called party's status indicator = no indication (00)</li><li>• Called party's category indicator = no indication (00)</li><li>• End-to-end method indicator = no end-to-end method available (00)</li><li>• Interworking indicator = interworking encountered (1)</li><li>• End-to-end information indicator = no end-to-end information available (0)</li><li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li><li>• ISDN access indicator = terminating access non-ISDN (0)</li><li>• Echo control device indicator = <b>Incoming echo control device not included (0)</b>.</li></ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted <b>ACM:</b> Backward call indicator Called party's status indicator = no indication														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→ T i/w1 started</td> <td></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">← T i/w1 expired</td> <td style="text-align: center;">→ INVITE ← 183 Session Progress</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress	ANM	←	← 200 OK (INVITE) → ACK	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress													
ANM	←	← 200 OK (INVITE) → ACK													

<b>TP number</b>	TP_205_004	<b>Reference</b>	7.2.3.2.8												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18														
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in ANM TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received. Ensure that on receipt of a 200 OK INVITE final response, an ANM is sent and the Backward call indicator is set to the following values: <ul style="list-style-type: none"><li>• Charge indicator = charge (10)</li><li>• Called party's status indicator = no indication (00)</li><li>• Called party's category indicator = no indication (00)</li><li>• End-to-end method indicator = no end-to-end method available (00)</li><li>• Interworking indicator = <b>no interworking encountered (0)</b></li><li>• End-to-end information indicator = no end-to-end information available (0)</li><li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li><li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li><li>• Echo control device indicator = Incoming echo control device not included (0).</li></ul>														
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted <b>ACM:</b> Backward call indicator Called party's status indicator = no indication														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→ T i/w1 started</td> <td></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">← T i/w1 expired</td> <td style="text-align: center;">→ INVITE ← 183 Session Progress</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress	ANM	←	← 200 OK (INVITE) → ACK	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress													
ANM	←	← 200 OK (INVITE) → ACK													

<b>TP number</b>	TP_205_005	<b>Reference</b>	7.2.3.2.8												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in ANM HLC "Facsimile Group 2/3"														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 3,1 kHz and High Layer Compatibility = Facsimile Group 2/3 received. Ensure that on receipt of a 200 OK INVITE final response, an ANM is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = subscriber free (01)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>Incoming echo control device not included (0)</b></li> </ul>														
<b>ISUP Parameter values</b>	<p><b>ISAM:</b> Transmission Medium Requirement indicator = 3,1 kHz High Layer Compatibility = Facsimile Group 2/3</p> <p><b>ACM:</b> Backward call indicator Called party's status indicator = no indication</p>														
<b>SIP Parameter values</b>	183: P-Early-Media: sendonly														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→ T i/w1 started</td> <td></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">← T i/w1 expired</td> <td style="text-align: center;">→ INVITE ← 183 Session Progress</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→ T i/w1 started		ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress	ANM	←	← 200 OK (INVITE) → ACK
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM	→ T i/w1 started														
ACM	← T i/w1 expired	→ INVITE ← 183 Session Progress													
ANM	←	← 200 OK (INVITE) → ACK													

<b>TP number</b>	TP_205_006	<b>Reference</b>	7.2.3.2.9.2												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/														
<b>Selection criteria</b>	PICS 6.2.1/5														
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 200 OK into ATP in the ANM														
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in a 200 OK INVITE, an ANM is sent and an Access Transport Parameter is present containing a Progress Indicator #1.														
<b>ISUP Parameter values</b>	<p><b>ANM:</b> Access Transport Progress Indicator Progress Description='0000001'</p>														
<b>SIP Parameter values</b>	<p>200 OK: &lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     ProgressIndicator     ProgressOctet4     ProgressDescription&gt;0000001&lt;</p>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE ← 100 Trying</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	ACM	←	← 180 Ringing	ANM	←	← 200 OK (INVITE) → ACK
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 180 Ringing													
ANM	←	← 200 OK (INVITE) → ACK													

<b>TP number</b>	TP_205_007	<b>Reference</b>	7.2.3.2.9.2																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/																		
<b>Selection criteria</b>	PICS 6.2.1/5																		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 200 OK into ATP in the ANM																		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in a 200 OK INVITE, an ANM is sent and an Access Transport Parameter is present containing a Progress Indicator #2.																		
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport Progress Indicator Progress Description='0000010'																		
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<																		
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>		IAM	→		→ INVITE ← 100 Trying	ACM	←		← 180 Ringing	ANM	←		← 200 OK (INVITE) → ACK	<b>Mg</b>	
	<b>ISUP</b>	<b>MGCF</b>																	
IAM	→		→ INVITE ← 100 Trying																
ACM	←		← 180 Ringing																
ANM	←		← 200 OK (INVITE) → ACK																
	<b>Apply post test routine</b>																		

<b>TP number</b>	TP_205_008	<b>Reference</b>	7.2.3.2.9.2																
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/																		
<b>Selection criteria</b>	PICS 6.2.1/5																		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in 200 OK into ATP in the ANM																		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in a 200 OK INVITE, an ANM is sent and an Access Transport Parameter is present containing a Progress Indicator #4.																		
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport Progress Indicator Progress Description='0000100'																		
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<																		
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>		IAM	→		→ INVITE ← 100 Trying	ACM	←		← 180 Ringing	ANM	←		← 200 OK (INVITE) → ACK	<b>Mg</b>	
	<b>ISUP</b>	<b>MGCF</b>																	
IAM	→		→ INVITE ← 100 Trying																
ACM	←		← 180 Ringing																
ANM	←		← 200 OK (INVITE) → ACK																
	<b>Apply post test routine</b>																		

<b>TP number</b>	TP_205_009	<b>Reference</b>	7.2.3.2.9.2											
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/													
<b>Selection criteria</b>	PICS 6.2.1/5													
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 5 in 200 OK into ATP in the ANM													
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 5 in a 200 OK INVITE, an ANM is sent and an Access Transport Parameter is present containing a Progress Indicator #5.													
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio <b>ANM:</b> Access Transport Progress Indicator Progress Description='0000101'													
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000101<													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	ACM	←		ANM	←	← 200 OK (INVITE) → ACK	
ISUP	MGCF	Mg												
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing												
ACM	←													
ANM	←	← 200 OK (INVITE) → ACK												

<b>TP number</b>	TP_205_010	<b>Reference</b>	7.2.3.2.9.2											
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/													
<b>Selection criteria</b>	PICS 6.2.1/5													
<b>Test Purpose name</b>	No mapping of PSTN XML ProgressIndicator 7 in 200 OK into ATP in the ANM													
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 7 in a 200 OK INVITE, an ANM is sent and <b>no</b> Access Transport Parameter is present containing a Progress Indicator #7. The Backward call indicator is set to the following values:  ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access ISDN</b> Interworking indicator <b>no interworking encountered.</b>													
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport not present Backward call indicator ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access ISDN</b> Interworking indicator <b>no interworking encountered</b>													
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000111<													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	ACM	←		ANM	←	← 200 OK (INVITE) → ACK	
ISUP	MGCF	Mg												
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing												
ACM	←													
ANM	←	← 200 OK (INVITE) → ACK												

<b>TP number</b>	TP_205_011	<b>Reference</b>	7.2.3.2.9.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML HighLayerCompatibility in 200 OK into ATP in ANM		
<b>Test Purpose</b>	Ensure that on receipt of 200 OK INVITE and a PSTN XML HighLayerCompatibility element is present an ANM is sent and an Access Transport Parameter is present containing a High layer compatibility IE and the value is set to the value HLC_VA as indicated in table 6.1.2.5-1.		
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport High layer compatibility High layer characteristics identification = <b>HLC_VA</b>		
<b>SIP Parameter values</b>	200 OK: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	<b>Apply post test routine</b>		

**Table 6.1.2.5-1: Mapping of PSTN XML HighLayerCharacteristic into ISUP ATP  
High layer compatibility**

HLC_VA	XML HighLayerCharacteristic	DSS1 High layer characteristics identification
HLC_VA_1	'0000001'	Telephony
HLC_VA_2	'0000100'	Facsimile Group 2/3
HLC_VA_3	'0100001'	Facsimile Group 4 Class I
HLC_VA_4	'0100100'	Facsimile service Group 4, Classes II and III
HLC_VA_5	'0110010'	Syntax based Videotex
HLC_VA_6	'0110011'	International Videotex interworking via gateways or interworking units
HLC_VA_7	'0110101'	Telex service
HLC_VA_8	'1000010'	FTAM application
HLC_VA_9	'1100000'	Videotelephony

<b>TP number</b>	TP_205_012	<b>Reference</b>	7.2.3.2.9.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_ANM/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability in 200 OK into ATP in ANM		
<b>Test Purpose</b>	Ensure that on receipt of 200 OK INVITE and a PSTN XML BearerCapability element is present, an ANM is sent and an Access Transport Parameter is present containing a Bearer Capability IE and the value is set to the value ITC_value as indicated in table 6.1.2.5-1.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio <b>ANM:</b> Access Transport Bearer Capability Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < BCoctet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← ANM ←	<b>MGCF</b> → INVITE ← 100 Trying ← 180 Ringing ← 200 OK (INVITE) → ACK	<b>Mg</b>
	<b>Apply post test routine</b>		

**Table 6.1.2.5-2: Mapping of PSTN XML BearerCapability into ISUP ATP Bearer Capability**

<b>ITC_value</b>	<b>XML InformationTransferCapability</b>	<b>BC Information transfer capability</b>
VA_01	'00000'	speech
VA_02	'10000'	3,1 kHz audio

TP number	TP_205_013	Reference	7.2.3.2.9.3																							
TSS reference	ISUP-SIP/Basic call/Sending_of_ANM/																									
Selection criteria	PICS 6.2.1/5																									
Test Purpose name	Mapping of PSTN XML BearerCapability into Transmission medium used parameter																									
Test Purpose	Ensure that on receipt of a PSTN XML BearerCapability element in a 200 OK INVITE a Transmission Medium Used parameter is present in the sent ANM message. The value of the PSTN XML InformationTransferCapability value TMU_VA_BC is mapped into the value of the Transmission Medium Used parameter TMU_VA_TMU as described in table 6.1.2.5-3.																									
ISUP Parameter values	<p><b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio</p> <p><b>ANM:</b> TMU: TMU_VA_TMU</p>																									
SIP Parameter values	<p><b>INVITE:</b></p> <pre>&lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     BearerCapability         BCocet3             CodingStandard&gt;00&lt;             InformationTransferCapability&gt;mapped from USI&lt;             ...         BearerCapability         BCocet3             CodingStandard&gt;00&lt;             InformationTransferCapability&gt;mapped from USI prime&lt;             ... 200 OK: &lt;?xml version="1.0" encoding="utf-8"?&gt; PSTN     BearerCapability         BCocet3             CodingStandard&gt;00&lt;             InformationTransferCapability&gt;<b>TMU_VA_BC</b>&lt;             ...</pre>																									
Comments																										
Message flows	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">100 Trying</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→</td> <td style="text-align: center;">200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→</td> <td style="text-align: center;">ACK</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→	INVITE	ACM	←	←	100 Trying	ANM	←	←	180 Ringing			→	200 OK (INVITE)			→	ACK	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																							
IAM	→	→	INVITE																							
ACM	←	←	100 Trying																							
ANM	←	←	180 Ringing																							
		→	200 OK (INVITE)																							
		→	ACK																							
<b>Apply post test routine</b>																										

**Table 6.1.2.5-3: Mapping of PSTN XML BearerCapability into ISUP TMU parameter**

<b>TMU_VA</b>	<b>PSTN XML BearerCapability TMU_VA_BC</b>	<b>TMU value TMU_VA_TMU</b>
TMU_VA_01	'00000'	'speech'
TMU_VA_02	'10000'	'3,1 kHz audio'
TMU_VA_03	'10001'	No mapping (see note 1)
TMU_VA_04	Not present (see note 2)	'3,1 kHz audio' or 'speech'

#### 6.1.2.6 Sending of the Connect message (CON)

<b>TP number</b>	TP_206_001	<b>Reference</b>	7.2.3.2.11
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Sending of CON message after 200 OK was received		
<b>Test Purpose</b>	Ensure that on receipt of a 200 OK INVITE and no ACM was sent, a CON message is sent.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → CON ←	<b>MGCF</b> → INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	<b>Mg</b>
			<b>Apply post test routine</b>

<b>TP number</b>	TP_206_002	<b>Reference</b>	7.2.3.2.11.1
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in CON TMR speech or 3,1 kHz audio		
<b>Test Purpose</b>	IAM with Transmission Medium Requirement indicator = speech or 3,1 kHz received. Ensure that on receipt of a 200 OK INVITE final response, a CON is sent and the Backward call indicator is set to the following values: <ul style="list-style-type: none"><li>• Charge indicator = charge (10)</li><li>• Called party's status indicator = no indication (00)</li><li>• Called party's category indicator = no indication (00)</li><li>• End-to-end method indicator = no end-to-end method available (00)</li><li>• Interworking indicator = interworking encountered (1)</li><li>• End-to-end information indicator = no end-to-end information available (0)</li><li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li><li>• ISDN access indicator = terminating access non-ISDN (0)</li><li>• Echo control device indicator = Incoming echo control device included (1).</li></ul>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Transmission Medium Requirement indicator = speech or 3,1 kHz <b>CON:</b> Backward call indicator Called party's status indicator = no indication		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → CON ←	<b>MGCF</b> → INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	<b>Mg</b>
			<b>Apply post test routine</b>

<b>TP number</b>	TP_206_003	<b>Reference</b>	7.2.3.2.11.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND NOT PICS 6.2.1/18														
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in CON TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 200 OK INVITE final response, a CON is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>Incoming echo control device not included (0)</b>.</li> </ul>														
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted</p> <p><b>CON:</b> Backward call indicator</p> <p>Called party's status indicator = no indication</p>														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CON</td> <td>←</td> <td></td> <td></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	CON	←			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK												
CON	←														

<b>TP number</b>	TP_206_004	<b>Reference</b>	7.2.3.2.11.1												
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/														
<b>Selection criteria</b>	PICS 6.2.4/2 AND PICS 6.2.1/18														
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in ANM TMR 64 kBit/s unrestricted														
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 64 kBit/s unrestricted received.</p> <p>Ensure that on receipt of a 200 OK INVITE final response, a CON is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = <b>no interworking encountered (0)</b></li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = <b>ISDN user part used all the way (1)</b></li> <li>• ISDN access indicator = <b>terminating access ISDN (1)</b></li> <li>• Echo control device indicator = Incoming echo control device not included (0).</li> </ul>														
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Transmission Medium Requirement indicator = 64 kBit/s unrestricted</p> <p><b>CON:</b> Backward call indicator</p> <p>Called party's status indicator = no indication</p>														
<b>SIP Parameter values</b>															
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CON</td> <td>←</td> <td></td> <td></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	CON	←			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>												
IAM	→		→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK												
CON	←														

<b>TP number</b>	TP_206_005	<b>Reference</b>	7.2.3.2.11.1																				
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/																						
<b>Selection criteria</b>																							
<b>Test Purpose name</b>	200 OK received, coding of Backward call indicator in CON HLC "Facsimile Group 2/3"																						
<b>Test Purpose</b>	<p>IAM with Transmission Medium Requirement indicator = 3,1 kHz and High Layer Compatibility = Facsimile Group 2/3 received. Ensure that on receipt of a 200 OK INVITE final response, a CON is sent and the Backward call indicator is set to the following values:</p> <ul style="list-style-type: none"> <li>• Charge indicator = charge (10)</li> <li>• Called party's status indicator = no indication (00)</li> <li>• Called party's category indicator = no indication (00)</li> <li>• End-to-end method indicator = no end-to-end method available (00)</li> <li>• Interworking indicator = interworking encountered (1)</li> <li>• End-to-end information indicator = no end-to-end information available (0)</li> <li>• ISDN user part/BICC indicator = ISDN user part not used all the way (0)</li> <li>• ISDN access indicator = terminating access non-ISDN (0)</li> <li>• Echo control device indicator = <b>Incoming echo control device not included (0)</b>.</li> </ul>																						
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Transmission Medium Requirement indicator = 3,1 kHz            High Layer Compatibility = Facsimile Group 2/3</p> <p><b>CON:</b> Backward call indicator            Called party's status indicator = no indication</p>																						
<b>SIP Parameter values</b>																							
<b>Comments</b>																							
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	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																				
IAM	→	→	→ INVITE																				
CON	←	←	← 100 Trying																				
			← 200 OK (INVITE)																				
			→ ACK																				

<b>TP number</b>	TP_206_006	<b>Reference</b>	7.2.3.2.11.2																				
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/																						
<b>Selection criteria</b>	PICS 6.2.1/5																						
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in 200 OK into ATP in the CON																						
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in a 200 OK INVITE, a CON is sent and an Access Transport Parameter is present containing a Progress Indicator #1.																						
<b>ISUP Parameter values</b>	<p><b>CON:</b> Access Transport            Progress Indicator            Progress Description = '0000001'</p>																						
<b>SIP Parameter values</b>	<p>200 OK:            &lt;?xml version="1.0" encoding="utf-8"?&gt;            PSTN            ProgressIndicator            ProgressOctet4            ProgressDescription&gt;0000001&lt;</p>																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>CON</td> <td>←</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>				<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→	→ INVITE	CON	←	←	← 100 Trying				← 200 OK (INVITE)				→ ACK
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																				
IAM	→	→	→ INVITE																				
CON	←	←	← 100 Trying																				
			← 200 OK (INVITE)																				
			→ ACK																				

<b>TP number</b>	TP_206_007	<b>Reference</b>	7.2.3.2.11.2									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in 200 OK into ATP in the CON											
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in a 200 OK INVITE, a CON is sent and an Access Transport Parameter is present containing a Progress Indicator #2.											
<b>ISUP Parameter values</b>	<b>CON:</b> Access Transport Progress Indicator Progress Description = '0000010'											
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CON</td> <td>←</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	CON	←			
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK										
CON	←											

<b>TP number</b>	TP_206_008	<b>Reference</b>	7.2.3.2.11.2									
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/											
<b>Selection criteria</b>	PICS 6.2.1/5											
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in 200 OK into ATP in the CON											
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in a 200 OK INVITE, a CON is sent and an Access Transport Parameter is present containing a Progress Indicator #4.											
<b>ISUP Parameter values</b>	<b>CON:</b> Access Transport Progress Indicator Progress Description='0000100'											
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CON</td> <td>←</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK	CON	←			
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying ← 200 OK (INVITE) → ACK										
CON	←											

<b>TP number</b>	TP_206_009	<b>Reference</b>	7.2.3.2.11.2								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/										
<b>Selection criteria</b>	PICS 6.2.1/5										
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 5 in 200 OK into ATP in the CON										
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 5 in a 200 OK INVITE, a CON is sent and an Access Transport Parameter is present containing a Progress Indicator #5.										
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio <b>CON:</b> Access Transport Progress Indicator Progress Description='0000101'										
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000101<										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>CON</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	CON	←	← 200 OK (INVITE) → ACK	
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
CON	←	← 200 OK (INVITE) → ACK									

<b>TP number</b>	TP_206_010	<b>Reference</b>	7.2.3.2.11.2								
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/										
<b>Selection criteria</b>	PICS 6.2.1/5										
<b>Test Purpose name</b>	No mapping of PSTN XML ProgressIndicator 7 in 200 OK into ATP in the CON										
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 7 in a 200 OK INVITE, a CON is sent and <b>no</b> Access Transport Parameter is present containing a Progress Indicator #7. The Backward call indicator is set to the following values: ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access non-ISDN</b> Interworking indicator <b>no interworking encountered.</b>										
<b>ISUP Parameter values</b>	<b>CON:</b> Access Transport not present Backward call indicator ISDN User Part indicator <b>ISDN User Part used all the way</b> ISDN access indicator <b>Terminating access non-ISDN</b> Interworking indicator <b>no interworking encountered</b>										
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000111<										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>CON</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	CON	←	← 200 OK (INVITE) → ACK	
ISUP	MGCF	Mg									
IAM	→	→ INVITE ← 100 Trying									
CON	←	← 200 OK (INVITE) → ACK									

<b>TP number</b>	TP_206_011	<b>Reference</b>	7.2.3.2.11.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML HighLayerCompatibility in 200 OK into ATP in CON		
<b>Test Purpose</b>	Ensure that on receipt of 200 OK INVITE and a PSTN XML HighLayerCompatibility element is present a CON is sent and an Access Transport Parameter is present containing a High layer compatibility IE and the value is set to the value HLC_VA as indicated in table 6.1.2.5-1.		
<b>ISUP Parameter values</b>	<b>CON:</b> Access Transport High layer compatibility High layer characteristics identification = <b>HLC_VA</b>		
<b>SIP Parameter values</b>	200 OK: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM CON	<b>MGCF</b> → ←	<b>Mg</b> → INVITE ← 100 Trying ← 200 OK (INVITE) → ACK
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_206_012	<b>Reference</b>	7.2.3.2.11.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability in 200 OK into ATP in CON		
<b>Test Purpose</b>	Ensure that on receipt of 200 OK INVITE and a PSTN XML BearerCapability element is present, a CON is sent and an Access Transport Parameter is present containing a Bearer Capability IE and the value is set to the value ITC_value as indicated in table 6.1.2.5-2.		
<b>ISUP Parameter values</b>	<b>CON:</b> Access Transport Bearer Capability Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < BCoocet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM CON	<b>MGCF</b> → ←	<b>Mg</b> → INVITE ← 100 Trying ← 200 OK (INVITE) → ACK
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_206_013	<b>Reference</b>	7.2.3.2.11														
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/																
<b>Selection criteria</b>	PICS 6.2.1/5																
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability into Transmission medium used parameter																
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML BearerCapability element in a 200 OK INVITE a Transmission Medium Used parameter is present in the sent CON message. The value of the PSTN XML InformationTransferCapability value TMU_VA_BC is mapped into the value of the Transmission Medium Used parameter TMU_VA_TMU as described in table 6.1.2.5-3.																
<b>ISUP Parameter values</b>	IAM: USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio CON: TMU: <b>TMU_VA_TMU</b>																
<b>SIP Parameter values</b>	INVITE: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>mapped from USI< .... BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability>mapped from USI prime< .... 200 OK: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability> <b>TMU_VA_BC</b> < ....																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>CON ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE			← 100 Trying	CON ←		← 200 OK (INVITE)			→ ACK	
ISUP	MGCF	Mg															
IAM →		→ INVITE															
		← 100 Trying															
CON ←		← 200 OK (INVITE)															
		→ ACK															

<b>TP number</b>	TP_206_014	<b>Reference</b>	7.2.3.2.11A																							
<b>TSS reference</b>	ISUP-SIP/Basic call/Sending_of_CON/																									
<b>Selection criteria</b>	PICS 6.2.1/19																									
<b>Test Purpose name</b>	Receipt of a reINVITE request																									
<b>Test Purpose</b>	Ensure that on receipt of a reINVITE received from the SIP network containing a Call-Info header, the SUT instruct the MGW to send the associated media to the PSTN leg of the communication.																									
<b>ISUP Parameter values</b>																										
<b>SIP Parameter values</b>	INVITE2: Call-Info: <media resource URL>																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE1</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td></td> <td></td> <td>← INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ 200 OK INVITE2</td> </tr> <tr> <td></td> <td></td> <td>← ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><i>media</i></p> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE1	ACM ←		← 180 Ringing	ANM ←		← 200 OK INVITE			→ ACK			← INVITE			→ 200 OK INVITE2			← ACK	
ISUP	MGCF	Mg																								
IAM →		→ INVITE1																								
ACM ←		← 180 Ringing																								
ANM ←		← 200 OK INVITE																								
		→ ACK																								
		← INVITE																								
		→ 200 OK INVITE2																								
		← ACK																								

### 6.1.2.7 Receipt of Status Codes 3xx, 4xx, 5xx or 6xx

<b>TP number</b>	TP_207_001	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Mapping of unsuccessful final responses to ISUP/BICC Release messages		
<b>Test Purpose</b>	Ensure that on receipt of an unsuccessful final response <b>SIP_Response</b> before an early dialogue is established, a Release message Cause value <b>REL_cause</b> is sent on the ISUP/BICC leg of the connection. The mapping is according the table 6.1.2.7-1. The location value in the REL message is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>	<b>REL</b> : Cause = <b>REL_cause</b>		
<b>SIP Parameter values</b>	<b>SIP_Response</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE ← 100 Trying
	REL ←	→	← SIP_Response → ACK
	RLC		

**Table 6.1.2.7-1: Received status codes on SIP side of O-MGCF mapping to REL**

SIP_Response_VA	←REL (cause code) REL_cause	←4xx/5xx/6xx SIP Message SIP_Response
VA_01	111 (protocol error, unspecified)	400 Bad Request
VA_02	127 (interworking unspecified)	401 Unauthorized
VA_03	127 (interworking unspecified)	402 Payment Required
VA_04	79 (Service or option not implemented, unspecified)	403 Forbidden
VA_05	1 (Unallocated number)	404 Not Found
VA_06	127 (interworking unspecified)	405 Method Not Allowed
VA_07	127 (interworking unspecified)	406 Not Acceptable
VA_08	127 (interworking unspecified)	407 Proxy authentication required
VA_09	102 (recovery on timer expiry)	408 Request Timeout
VA_10	22 (Number changed)	410 Gone
VA_11	127 (interworking unspecified)	413 Request Entity too long
VA_12	111 (protocol error, unspecified)	414 Request-URI too long
VA_13	127 (interworking unspecified)	415 Unsupported Media type
VA_14	111 (protocol error, unspecified)	416 Unsupported URI scheme
VA_15	79 (Service or option not implemented, unspecified)	417 Unknown Resource-Priority
VA_16	111 (protocol error, unspecified)	420 Bad Extension
VA_17	111 (protocol error, unspecified)	421 Extension required
VA_18	31 (Normal, unspecified)	422 Session Interval Too Small
VA_19	127 (interworking unspecified)	423 Interval Too Brief
VA_20	24 (call rejected due to ACR supplementary service)	433 Anonymity Disallowed.
VA_21	20 Subscriber absent	480 Temporarily Unavailable
VA_22	127 (interworking unspecified)	440 Max-Breadth Exceeded
VA_23	127 (interworking unspecified)	481 Call/Transaction does not exist
VA_24	127 (interworking unspecified)	482 Loop detected
VA_25	25 (Exchange routing error)	483 Too many hops
VA_26	28 (Invalid Number format)	484 Address Incomplete
VA_27	Cause value No. 1 (unallocated (unassigned) number)	485 Ambiguous
VA_28	17 (User busy)	486 Busy Here
VA_29	127 (Interworking unspecified) or not interworked	487 Request terminated
VA_30	50 (requested facility no subscribed)	488 Not acceptable here
VA_31	127 (interworking unspecified)	493 Undecipherable
VA_32	127 (interworking unspecified)	500 Server Internal error
VA_33	79 (service or option not implemented)	501 Not implemented
VA_34	27 (Destination out of order)	502 Bad Gateway
VA_35	127 (interworking unspecified)	503 Service Unavailable
VA_36	102 (Recovery on timer expiry)	504 Server timeout
VA_37	127 (interworking unspecified)	505 Version not supported
VA_38	127 (interworking unspecified)	513 Message too large
VA_39	127 (interworking unspecified)	580 Precondition failure
VA_40	17 (User busy)	600 Busy Everywhere
VA_41	21 (Call rejected)	603 Decline
VA_42	2 (No route to specified transit network)	604 Does not exist anywhere
VA_43	88 (incompatible destination)	606 Not acceptable

<b>TP number</b>	TP_207_002	<b>Reference</b>	7.2.3.2.12												
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Mapping of unsuccessful final responses to REL after 180 was received														
<b>Test Purpose</b>	Ensure that on receipt of an unsuccessful final response <b>SIP_Response</b> after an early dialogue was established due to the receipt of a 180 Ringing, a REL is sent. The Cause value of the REL is mapped from the received status code as indicated in table 6.1.2.7-2. The location value in the REL message is set to 'network beyond interworking point'.														
<b>ISUP Parameter values</b>	<b>REL: Cause = REL_cause</b>														
<b>SIP Parameter values</b>	<b>SIP_Response</b>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>REL</td> <td>←</td> <td>← SIP_Response</td> </tr> <tr> <td>RLC</td> <td>→</td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	REL	←	← SIP_Response	RLC	→	→ ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing													
REL	←	← SIP_Response													
RLC	→	→ ACK													

<b>TP number</b>	TP_207_003	<b>Reference</b>	7.2.3.2.12												
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Mapping of unsuccessful final responses to REL after 181 was received														
<b>Test Purpose</b>	Ensure that on receipt of an unsuccessful final response <b>SIP_Response</b> after an early dialogue was established due to the receipt of a 181 Call is Being Forwarded, a REL is sent. The Cause value of the REL is mapped from the received status code as indicated in table 6.1.2.7-2. The location value in the REL message is set to 'network beyond interworking point'.														
<b>ISUP Parameter values</b>	<b>REL: Cause = REL_cause</b>														
<b>SIP Parameter values</b>	<b>SIP_Response</b>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 181 Call is Being Forwarded</td> </tr> <tr> <td>REL</td> <td>←</td> <td>← SIP_Response</td> </tr> <tr> <td>RLC</td> <td>→</td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 181 Call is Being Forwarded	REL	←	← SIP_Response	RLC	→	→ ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying ← 181 Call is Being Forwarded													
REL	←	← SIP_Response													
RLC	→	→ ACK													

<b>TP number</b>	TP_207_004	<b>Reference</b>	7.2.3.2.12												
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Mapping of unsuccessful final responses to REL after 183 was received														
<b>Test Purpose</b>	Ensure that on receipt of an unsuccessful final response <b>SIP_Response</b> after an early dialogue was established due to the receipt of a 183 Session Progress, a REL is sent. The Cause value of the REL is mapped from the received status code as indicated in table 6.1.2.7-2. The location value in the REL message is set to 'network beyond interworking point'.														
<b>ISUP Parameter values</b>	<b>REL: Cause = REL_cause</b>														
<b>SIP Parameter values</b>	<b>SIP_Response</b>														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying ← 183 Session Progress</td> </tr> <tr> <td>REL</td> <td>←</td> <td>← SIP_Response</td> </tr> <tr> <td>RLC</td> <td>→</td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress	REL	←	← SIP_Response	RLC	→	→ ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying ← 183 Session Progress													
REL	←	← SIP_Response													
RLC	→	→ ACK													

**Table 6.1.2.7-2: Received status codes on SIP side of O-MGCF mapping to REL**

SIP_Response_VA	←REL (cause code) REL_cause	←4xx/5xx/6xx SIP Message SIP_Response
VA_01	111 (protocol error, unspecified)	400 Bad Request
VA_02	127 (interworking unspecified)	402 Payment Required
VA_03	79 (Service or option not implemented, unspecified)	403 Forbidden
VA_04	127 (interworking unspecified)	406 Not Acceptable
VA_05	102 (recovery on timer expiry)	408 Request Timeout
VA_06	22 (Number changed)	410 Gone
VA_07	127 (interworking unspecified)	423 Interval Too Brief
VA_08	20 Subscriber absent	480 Temporarily Unavailable
VA_09	127 (interworking unspecified)	481 Call/Transaction does not exist
VA_10	127 (interworking unspecified)	482 Loop detected
VA_11	25 (Exchange routing error)	483 Too many hops
VA_12	1 (Unallocated (unassigned) number)	485 Ambiguous
VA_13	50 (requested facility no subscribed)	488 Not acceptable here
VA_14	127 (interworking unspecified)	500 Server Internal error
VA_15	79 (service or option not implemented)	501 Not implemented
VA_16	27 (Destination out of order)	502 Bad Gateway
VA_17	102 (Recovery on timer expiry)	504 Server timeout
VA_18	21 (Call rejected)	603 Decline
VA_19	2 (No route to specified transit network)	604 Does not exist anywhere
VA_20	88 (incompatible destination)	606 Not acceptable

TP number	TP_207_005	Reference	7.2.3.2.12
TSS reference	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
Selection criteria			
Test Purpose name	Mapping of Reason header into Cause value of REL		
Test Purpose	Ensure that on receipt of an unsuccessful final response SIP_Response and a Reason header is present set to cause SIP_cause, this value is used in the corresponding REL message. The mapping is indicated in table 6.1.2.7-3. The location value in the REL message is set to 'network beyond interworking point'.		
ISUP Parameter values	REL: Cause = SIP_cause		
SIP Parameter values	SIP_Response: Reason: cause = SIP_cause		
Comments	The use of different cause values in the Reason header is recommended. The cause value should be adequate to the response code.		
Message flows	ISUP	MGCF	Mg
	IAM →	→ INVITE	
	REL ←	← 100 Trying	
	RLC →	← SIP_Response	→ ACK

**Table 6.1.2.7-3: Received status codes on SIP side of O-MGCF mapping to REL**

SIP_Response_VA	←REL (cause code) SIP_cause	←4xx/5xx/6xx SIP Message SIP_Response
VA_01	SIP_cause	400 Bad Request
VA_02	SIP_cause	401 Unauthorized
VA_03	SIP_cause	402 Payment Required
VA_04	SIP_cause	403 Forbidden
VA_05	SIP_cause	404 Not Found
VA_06	SIP_cause	405 Method Not Allowed
VA_07	SIP_cause	406 Not Acceptable
VA_08	SIP_cause	407 Proxy authentication required
VA_09	SIP_cause	408 Request Timeout
VA_10	SIP_cause	410 Gone
VA_11	SIP_cause	413 Request Entity too long
VA_12	SIP_cause	414 Request-URI too long
VA_13	SIP_cause	415 Unsupported Media type
VA_14	SIP_cause	416 Unsupported URI scheme
VA_15	SIP_cause	417 Unknown Resource-Priority
VA_16	SIP_cause	420 Bad Extension
VA_17	SIP_cause	421 Extension required
VA_18	SIP_cause	422 Session Interval Too Small
VA_19	SIP_cause	423 Interval Too Brief
VA_20	SIP_cause	433 Anonymity Disallowed.
VA_21	SIP_cause	440 Max-Breadth Exceeded
VA_22	SIP_cause	480 Temporarily Unavailable
VA_23	SIP_cause	481 Call/Transaction does not exist
VA_24	SIP_cause	482 Loop detected
VA_25	SIP_cause	483 Too many hops
VA_26	SIP_cause	484 Address Incomplete
VA_27	SIP_cause	485 Ambiguous
VA_28	SIP_cause	486 Busy Here
VA_29	SIP_cause	487 Request terminated
VA_30	SIP_cause	488 Not acceptable here
VA_31	SIP_cause	493 Undecipherable
VA_32	SIP_cause	500 Server Internal error
VA_33	SIP_cause	501 Not implemented
VA_34	SIP_cause	502 Bad Gateway
VA_35	SIP_cause	503 Service Unavailable
VA_36	SIP_cause	504 Server timeout
VA_37	SIP_cause	505 Version not supported
VA_38	SIP_cause	513 Message too large
VA_39	SIP_cause	580 Precondition failure
VA_40	SIP_cause	600 Busy Everywhere
VA_41	SIP_cause	603 Decline
VA_42	SIP_cause	604 Does not exist anywhere
VA_43	SIP_cause	606 Not acceptable

<b>TP number</b>	TP_207_006	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in an unsuccessful final response into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in an unsuccessful final response as indicated in table 6.1.2.7-4, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #1.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description = '0000001'		
<b>SIP Parameter values</b>	SIP_Response: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM REL RLC	<b>MGCF</b> → ← →	<b>Mg</b> → INVITE ← 100 Trying ← SIP_Response → ACK

<b>TP number</b>	TP_207_007	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in an unsuccessful final response into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in an unsuccessful final response as indicated in table 6.1.2.7-4, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #2.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description = '0000010'		
<b>SIP Parameter values</b>	SIP_Response: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM REL RLC	<b>MGCF</b> → ← →	<b>Mg</b> → INVITE ← 100 Trying ← SIP_Response → ACK

<b>TP number</b>	TP_207_008	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in an unsuccessful final response into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in an unsuccessful final response as indicated in table 6.1.2.7-4, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #4.		
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport Progress Indicator Progress Description = '0000100'		
<b>SIP Parameter values</b>	SIP_Response: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → REL ← RLC →	<b>MGCF</b> → INVITE ← 100 Trying ← SIP_Response → ACK	<b>Mg</b>

<b>TP number</b>	TP_207_009	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 5 in an unsuccessful final response into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 5 in an unsuccessful final response as indicated in table 6.1.2.7-4, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #5.		
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio <b>REL:</b> Access Transport Progress Indicator Progress Description='0000101'		
<b>SIP Parameter values</b>	SIP_Response: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000101<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → REL ← RLC →	<b>MGCF</b> → INVITE ← 100 Trying ← SIP_Response → ACK	<b>Mg</b>

**Table 6.1.2.7-4: Received status codes on SIP side of O-MGCF mapping to REL**

SIP_Response_VA	←4xx/5xx/6xx SIP Message SIP_Response
VA_01	400 Bad Request
VA_02	403 Forbidden
VA_03	406 Not Acceptable
VA_04	408 Request Timeout
VA_05	410 Gone
VA_06	480 Temporarily Unavailable
VA_07	488 Not acceptable here
VA_08	500 Server Internal error
VA_09	502 Bad Gateway
VA_10	504 Server timeout
VA_11	603 Decline
VA_12	606 Not acceptable

TP number	TP_207_010	Reference	7.2.3.2.12
TSS reference	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
Selection criteria	PICS 6.2.1/5		
Test Purpose name	Mapping of PSTN XML HighLayerCompatibility in an unsuccessful final response into ATP in REL		
Test Purpose	Ensure that on receipt of an unsuccessful final response as indicated in table 6.1.2.7-4 and a PSTN XML HighLayerCompatibility element is present a REL is sent and an Access Transport Parameter is present containing a High layer compatibility IE and the value is set to the value HLC_VA as indicated in table 6.1.2.5-1.		
ISUP Parameter values	REL: Access Transport High layer compatibility High layer characteristics identification = <b>HLC_VA</b>		
SIP Parameter values	SIP_Response: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <		
Comments			
Message flows	ISUP IAM → REL ← RLC →	MGCF → INVITE ← 100 Trying ← SIP_Response → ACK	Mg

<b>TP number</b>	TP_207_011	<b>Reference</b>	7.2.3.2.12
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability in an unsuccessful final response into ATP in REL		
<b>Test Purpose</b>	Ensure that on receipt of an unsuccessful final response as indicated in table 6.1.2.7-4 and a PSTN XML BearerCapability element is present, a REL is sent and an Access Transport Parameter is present containing a Bearer Capability IE and the value is set to the value ITC_value as indicated in table 6.1.2.5-2.		
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport Bearer Capability Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	SIP_Response: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoctet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < BCoctet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → REL ← RLC →	<b>MGCF</b> → INVITE ← 100 Trying ← SIP_Response → ACK	<b>Mg</b>

<b>TP number</b>	TP_207_012	<b>Reference</b>	7.2.3.2.12								
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/										
<b>Selection criteria</b>	PICS 6.2.1/20										
<b>Test Purpose name</b>	Play media provided in an Error-Info header received in an unsuccessful final response										
<b>Test Purpose</b>	Ensure that the SUT instructs the MGW to play out media associated with an URL present in an Error-Info header received in an unsuccessful final response as indicated in table 6.1.2.7-4.										
<b>ISUP Parameter values</b>											
<b>SIP Parameter values</b>	SIP_Response: Error-Info: <Media re source URL>										
<b>Comments</b>											
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top; padding-right: 10px;">IAM</td> <td style="width: 30%; text-align: center; vertical-align: middle;">   <i>media</i> </td> <td style="width: 30%; text-align: right; vertical-align: middle;">   INVITE         </td> </tr> <tr> <td style="vertical-align: bottom; padding-top: 10px;">REL</td> <td style="text-align: center; vertical-align: middle;">   100 Trying         </td> <td style="text-align: right; vertical-align: bottom;">   SIP_Response         </td> </tr> <tr> <td style="vertical-align: bottom; padding-top: 10px;">RLC</td> <td style="text-align: center; vertical-align: middle;">   ACK         </td> <td></td> </tr> </table>	IAM	 <i>media</i>	 INVITE	REL	 100 Trying	 SIP_Response	RLC	 ACK		
IAM	 <i>media</i>	 INVITE									
REL	 100 Trying	 SIP_Response									
RLC	 ACK										
		<b>Apply post test routine</b>									

<b>TP number</b>	TP_207_013	<b>Reference</b>	7.2.3.2.12.1, 7.2.3.3														
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/																
<b>Selection criteria</b>	PICS 6.2.3/2																
<b>Test Purpose name</b>	Handling of 404 and 484 responses after sending of INVITE																
<b>Test Purpose</b>	Ensure that on receipt of a 404 Not Found or 484 Address Incomplete responses after sending of INVITE without determining the end of address signalling, timer Ti/w3. After expiry of T i/w3 a REL is sent, the Cause parameter value is set to #28.																
<b>ISUP Parameter values</b>	REL: Cause = 28																
<b>SIP Parameter values</b>																	
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; font-weight: bold;">ISUP</th> <th style="text-align: center; font-weight: bold;">MGCF</th> <th style="text-align: center; font-weight: bold;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td> <b>→</b> Ti/w2 started            Ti/w3 started         </td> <td> <b>→</b> INVITE  <b>←</b> 484 Address Incomplete  <b>→</b> ACK         </td> </tr> <tr> <td>SAM</td> <td> <b>→</b> Ti/w2 started            Ti/w3 started         </td> <td> <b>→</b> INVITE  <b>←</b> 484 Address Incomplete  <b>→</b> ACK         </td> </tr> <tr> <td>REL</td> <td> <b>←</b> Ti/w3 expired         </td> <td></td> </tr> <tr> <td>RLC</td> <td> <b>→</b> </td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	<b>→</b> Ti/w2 started Ti/w3 started	<b>→</b> INVITE <b>←</b> 484 Address Incomplete <b>→</b> ACK	SAM	<b>→</b> Ti/w2 started Ti/w3 started	<b>→</b> INVITE <b>←</b> 484 Address Incomplete <b>→</b> ACK	REL	<b>←</b> Ti/w3 expired		RLC	<b>→</b>		
ISUP	MGCF	Mg															
IAM	<b>→</b> Ti/w2 started Ti/w3 started	<b>→</b> INVITE <b>←</b> 484 Address Incomplete <b>→</b> ACK															
SAM	<b>→</b> Ti/w2 started Ti/w3 started	<b>→</b> INVITE <b>←</b> 484 Address Incomplete <b>→</b> ACK															
REL	<b>←</b> Ti/w3 expired																
RLC	<b>→</b>																

<b>TP number</b>	TP_207_014	<b>Reference</b>	7.2.3.2.19																	
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/																			
<b>Selection criteria</b>																				
<b>Test Purpose name</b>	Handling of 3xx responses after sending of INVITE																			
<b>Test Purpose</b>	Ensure that on receipt of 3xx final responses as indicated in table 6.1.2.7-5, an ISUP REL is sent. The Cause value in the sent REL is set to value 127. OR An new INVITE is sent and the Request line is derived from the Contact header received in the 3xx final response.																			
<b>ISUP Parameter values</b>	REL: Cause = 127 Or INVITE: <Request line derived from the Contact header in the 3xx_VA																			
<b>SIP Parameter values</b>																				
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; font-weight: bold;">ISUP</th> <th style="text-align: center; font-weight: bold;">MGCF</th> <th style="text-align: center; font-weight: bold;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td> <b>→</b> </td> <td> <b>→</b> INVITE  <b>←</b> 3xx_VA  <b>→</b> ACK         </td> </tr> <tr> <td>CASE A</td> <td> <b>←</b> </td> <td></td> </tr> <tr> <td>REL</td> <td> <b>→</b> </td> <td></td> </tr> <tr> <td>RLC</td> <td></td> <td></td> </tr> <tr> <td>CASE B</td> <td></td> <td> <b>→</b> INVITE         </td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	<b>→</b>	<b>→</b> INVITE <b>←</b> 3xx_VA <b>→</b> ACK	CASE A	<b>←</b>		REL	<b>→</b>		RLC			CASE B		<b>→</b> INVITE	
ISUP	MGCF	Mg																		
IAM	<b>→</b>	<b>→</b> INVITE <b>←</b> 3xx_VA <b>→</b> ACK																		
CASE A	<b>←</b>																			
REL	<b>→</b>																			
RLC																				
CASE B		<b>→</b> INVITE																		

Table 6.1.2.7-5: Mapping of 3xx final responses in ISUP REL

3xx_VA	XML HighLayerCharacteristic
3xx_VA_01	300 Multiple Choices
3xx_VA_02	301 Moved Permanently
3xx_VA_03	302 Moved Temporarily
3xx_VA_04	305 Use Proxy
3xx_VA_05	380 Alternative Service

<b>TP number</b>	TP_207_015	<b>Reference</b>	7.2.3.2.17.2
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_4xx-5xx-6xx/		
<b>Selection criteria</b>	PICS 6.2.1/3		
<b>Test Purpose name</b>	580 response to an UPDATE within an early dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a 580 Precondition Failure final response after an UPDATE request was sent in the early dialogue, a REL is sent and the Cause value is set to 127.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Nature of connection indicator = continuity check required on this circuit or continuity check performed on previous circuit <b>COT:</b> Continuity indicator = continuity check successful <b>REL:</b> Cause = 127		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: precondition, 100rel SDP      a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos none remote sendrecv  <b>183:</b> Require: 100rel SDP      a=curr:qos local none a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos mandatory remote sendrecv a=conf:qos remote sendrecv  <b>UPDATE:</b> SDP      a=curr:qos local sendrecv a=curr:qos remote none a=des:qos mandatory local sendrecv a=des:qos mandatory remote sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM      → COT      → REL      ← RLC      →	<b>MGCF</b> → INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 580 Precondition Failure	<b>Mg</b> → INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK) → UPDATE ← 580 Precondition Failure
	<b>Apply post test routine</b>		

### 6.1.2.8 Receipt of a BYE

<b>TP number</b>	TP_208_001	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	BYE received, REL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a BYE message and no reason header is present, a REL is sent. The Cause value of the REL is set to #16, the location is set to 'network beyond interworking point'.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM      → ACM      ← ANM      ← REL      ← RLC      →	<b>MGCF</b> → INVITE ← 100 Trying ← 180 Ringing → ACK ← 200 OK (INVITE) → ACK ← BYE → 200 OK (BYE)	<b>Mg</b> → INVITE ← 100 Trying ← 180 Ringing → ACK ← 200 OK (INVITE) → ACK ← BYE → 200 OK (BYE)

<b>TP number</b>	TP_208_002	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	BYE received a Reason header is present, REL Cause derived from the Reason cause value		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request and a Reason header is present, a REL is sent. The Cause parameter is derived from cause parameter in the Reason header.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause = <Reason cause>		
<b>SIP Parameter values</b>	BYE: Reason: cause		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying
	ACM	←	← 180 Ringing
	ANM	←	← 200 OK (INVITE) → ACK
	REL	←	← BYE
	RLC	→	→ 200 OK (BYE)

<b>TP number</b>	TP_208_003	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 1 in a BYE into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 1 in a BYE request, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #1.		
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport Progress Indicator Progress Description = '0000001'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying
	ACM	←	← 180 Ringing
	ANM	←	← 200 OK (INVITE) → ACK
	REL	←	← BYE
	RLC	→	→ 200 OK (BYE)

<b>TP number</b>	TP_208_004	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 2 in a BYE into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 2 in a BYE request, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #2.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description = '0000010'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM                          →		→ INVITE
			← 100 Trying
	ACM                          ←		← 180 Ringing
			→ 200 OK (INVITE)
	ANM                          ←		→ ACK
			→ BYE
	REL                          ←		← 200 OK (BYE)
	RLC                          →		→ 200 OK (BYE)

<b>TP number</b>	TP_208_005	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 4 in a BYE into ATP in the REL		
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 4 in a BYE request, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #4.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description = '0000100'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM                          →		→ INVITE
			← 100 Trying
	ACM                          ←		← 180 Ringing
			→ 200 OK (INVITE)
	ANM                          ←		→ ACK
			→ BYE
	REL                          ←		← 200 OK (BYE)
	RLC                          →		→ 200 OK (BYE)

<b>TP number</b>	TP_208_006	<b>Reference</b>	7.2.3.2.13																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/																										
<b>Selection criteria</b>	PICS 6.2.1/5																										
<b>Test Purpose name</b>	Mapping of PSTN XML ProgressIndicator 5 in a BYE into ATP in the REL																										
<b>Test Purpose</b>	Ensure that on receipt of a PSTN XML ProgressIndicator value 5 in a BYE request, a REL is sent and an Access Transport Parameter is present containing a Progress Indicator #5.																										
<b>ISUP Parameter values</b>	<b>IAM:</b> USI = speech or 3,1 kHz audio, USI prime = unrestricted digital info with T/A, TMR = 64 kBit/s preferred, TMR prime = speech or 3,1 kHz audio <b>REL:</b> Access Transport Progress Indicator Progress Description='0000101'																										
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000101<																										
<b>Comments</b>																											
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 100 Trying</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">REL</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE)</td> </tr> <tr> <td style="text-align: center;">RLC</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← BYE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ 200 OK (BYE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying	ANM	←	← 180 Ringing	REL	←	← 200 OK (INVITE)	RLC	→	→ ACK			← BYE			→ 200 OK (BYE)		
ISUP	MGCF	Mg																									
IAM	→	→ INVITE																									
ACM	←	← 100 Trying																									
ANM	←	← 180 Ringing																									
REL	←	← 200 OK (INVITE)																									
RLC	→	→ ACK																									
		← BYE																									
		→ 200 OK (BYE)																									

<b>TP number</b>	TP_208_007	<b>Reference</b>	7.2.3.2.13																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/																										
<b>Selection criteria</b>	PICS 6.2.1/5																										
<b>Test Purpose name</b>	Mapping of PSTN XML HighLayerCompatibility in a BYE into ATP in REL																										
<b>Test Purpose</b>	Ensure that on receipt of BYE request and a PSTN XML HighLayerCompatibility element is present a REL is sent and an Access Transport Parameter is present containing a High layer compatibility IE and the value is set to the value HLC_VA as indicated in table 6.1.2.5-1.																										
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport High layer compatibility High layer characteristics identification = <b>HLC_VA</b>																										
<b>SIP Parameter values</b>	BYE: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <																										
<b>Comments</b>																											
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 100 Trying</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">REL</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK (INVITE)</td> </tr> <tr> <td style="text-align: center;">RLC</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← BYE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ 200 OK (BYE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying	ANM	←	← 180 Ringing	REL	←	← 200 OK (INVITE)	RLC	→	→ ACK			← BYE			→ 200 OK (BYE)		
ISUP	MGCF	Mg																									
IAM	→	→ INVITE																									
ACM	←	← 100 Trying																									
ANM	←	← 180 Ringing																									
REL	←	← 200 OK (INVITE)																									
RLC	→	→ ACK																									
		← BYE																									
		→ 200 OK (BYE)																									

<b>TP number</b>	TP_208_008	<b>Reference</b>	7.2.3.2.13
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_BYE/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of PSTN XML BearerCapability in a BYE into ATP in REL		
<b>Test Purpose</b>	Ensure that on receipt of a BYE request and a PSTN XML BearerCapability element is present, a REL is sent and an Access Transport Parameter is present containing a Bearer Capability IE and the value is set to the value ITC_value as indicated in table 6.1.2.5-2.		
<b>ISUP Parameter values</b>	REL: Access Transport Bearer Capability Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN BearerCapability BCoocet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < BCoocet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← ANM ← REL ← RLC →	<b>MGCF</b> → INVITE ← 100 Trying ← 180 Ringing ← 200 OK (INVITE) → ACK ← BYE → 200 OK (BYE)	<b>Mg</b>

### 6.1.2.9 Receipt of the Release Message

<b>TP number</b>	TP_209_001	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	REL received before an early dialogue was established, a CANCEL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message before an early dialogue was established, a CANCEL request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.		
<b>ISUP Parameter values</b>	REL: Cause value		
<b>SIP Parameter values</b>	CANCEL: Reason: cause=<Cause value>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → REL → RLC ←	<b>MGCF</b> → INVITE → 100 Trying → CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK	<b>Mg</b>

<b>TP number</b>	TP_209_002	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	REL received after an early dialogue with 180 was established, a CANCEL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to a 180 Ringing response was established, a CANCEL request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.		
<b>ISUP Parameter values</b>	REL: Cause value		
<b>SIP Parameter values</b>	CANCEL: Reason: cause=<Cause value>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE ← 100 Trying
	ACM ←		← 180 Ringing
	REL →		→ CANCEL ← 200 OK (CANCEL)
	RLC ←		← 487 Request Terminated → ACK

<b>TP number</b>	TP_209_003	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	REL received after an early dialogue with 181 was established, a CANCEL is sent		
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to a 181 Call is Being Forwarded response was established, a CANCEL request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.		
<b>ISUP Parameter values</b>	REL: Cause value		
<b>SIP Parameter values</b>	CANCEL: Reason: cause=<Cause value>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE ← 100 Trying
	ACM ←		← 181 Being forwarded
	REL →		→ CANCEL ← 200 OK (CANCEL)
	RLC ←		← 487 Request Terminated → ACK

<b>TP number</b>	TP_209_004	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>			
<b>Test Purpose</b>	REL received after an early dialogue with 182 was established, a CANCEL is sent		
<b>ISUP Parameter values</b>	Ensure that on receipt of a REL message after an early dialogue due to a 182 Queued response was established, a CANCEL request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.		
<b>SIP Parameter values</b>	REL: Cause value		
<b>Comments</b>	CANCEL: Reason: cause=<Cause value>		
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE ← 100 Trying
	ACM ←		← 182 Queued
	REL →		→ CANCEL ← 200 OK (CANCEL)
	RLC ←		← 487 Request Terminated → ACK

<b>TP number</b>	TP_209_005	<b>Reference</b>	7.2.3.2.14																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/																							
<b>Selection criteria</b>																								
<b>Test Purpose name</b>	REL received after an early dialogue with 183 was established, a CANCEL is sent																							
<b>Test Purpose</b>	Ensure that on receipt of a REL message after an early dialogue due to a 183 Session Progress response was established, a CANCEL request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.																							
<b>ISUP Parameter values</b>	REL: Cause value																							
<b>SIP Parameter values</b>	CANCEL: Reason: cause=<Cause value>																							
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>REL →</td> <td></td> <td>→ CANCEL</td> </tr> <tr> <td>RLC ←</td> <td></td> <td>← 200 OK (CANCEL)</td> </tr> <tr> <td></td> <td></td> <td>← 487 Request Terminated</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 100 Trying	REL →		→ CANCEL	RLC ←		← 200 OK (CANCEL)			← 487 Request Terminated			→ ACK		
ISUP	MGCF	Mg																						
IAM →		→ INVITE																						
ACM ←		← 100 Trying																						
REL →		→ CANCEL																						
RLC ←		← 200 OK (CANCEL)																						
		← 487 Request Terminated																						
		→ ACK																						

<b>TP number</b>	TP_209_006	<b>Reference</b>	7.2.3.2.14																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/																										
<b>Selection criteria</b>																											
<b>Test Purpose name</b>	REL received in the confirmed dialogue a BYE is sent																										
<b>Test Purpose</b>	Ensure that on receipt of a REL message in the confirmed dialogue, a BYE request is sent and the Reason header is present, the cause value is derived from the Cause value in the received REL.																										
<b>ISUP Parameter values</b>	REL: Cause value																										
<b>SIP Parameter values</b>	BYE: Reason: cause=<Cause value>																										
<b>Comments</b>																											
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>REL →</td> <td></td> <td>→ 200 OK (INVITE)</td> </tr> <tr> <td>RLC ←</td> <td></td> <td>→ ACK</td> </tr> <tr> <td></td> <td></td> <td>→ BYE</td> </tr> <tr> <td></td> <td></td> <td>← 200 OK (BYE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 100 Trying	ANM ←		← 180 Ringing	REL →		→ 200 OK (INVITE)	RLC ←		→ ACK			→ BYE			← 200 OK (BYE)		
ISUP	MGCF	Mg																									
IAM →		→ INVITE																									
ACM ←		← 100 Trying																									
ANM ←		← 180 Ringing																									
REL →		→ 200 OK (INVITE)																									
RLC ←		→ ACK																									
		→ BYE																									
		← 200 OK (BYE)																									

<b>TP number</b>	TP_209_007	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP Progress Indicator #1 into PSTN XML ProgressIndicator #1 in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a Progress Indicator #1 in the confirmed dialogue, a BYE request is sent and a PSTN XML ProgressIndicator is present, the ProgressDescription is set to #1.		
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport Progress Indicator Progress Description='0000001'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000001<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	REL	→	→ BYE
	RLC	←	← 200 OK (BYE)

<b>TP number</b>	TP_209_008	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP Progress Indicator #2 into PSTN XML ProgressIndicator #2 in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a Progress Indicator #2 in the confirmed dialogue, a BYE request is sent and a PSTN XML ProgressIndicator is present, the ProgressDescription is set to #2.		
<b>ISUP Parameter values</b>	<b>REL:</b> Access Transport Progress Indicator Progress Description='0000010'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000010<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	REL	→	→ BYE
	RLC	←	← 200 OK (BYE)

<b>TP number</b>	TP_209_009	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP Progress Indicator #4 into PSTN XML ProgressIndicator #4 in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a Progress Indicator #4 in the confirmed dialogue, a BYE request is sent and a PSTN XML ProgressIndicator is present, the ProgressDescription is set to #4.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description='0000100'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000100<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	REL	→	→ BYE
	RLC	←	← 200 OK (BYE)

<b>TP number</b>	TP_209_010	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP Progress Indicator #5 into PSTN XML ProgressIndicator #5 in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a Progress Indicator #5 in the confirmed dialogue, a BYE request is sent and a PSTN XML ProgressIndicator is present, the ProgressDescription is set to #5.		
<b>ISUP Parameter values</b>	REL: Access Transport Progress Indicator Progress Description='0000101'		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN ProgressIndicator ProgressOctet4 ProgressDescription>0000101<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	REL	→	→ BYE
	RLC	←	← 200 OK (BYE)

<b>TP number</b>	TP_209_011	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP High layer compatibility into PSTN XML HighLayerCompatibility in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a High layer compatibility IE in the confirmed dialogue, a BYE request is sent and a PSTN XML HighLayerCompatibility is present, the HighLayerCharacteristics is set to <b>HLC_VA</b> as indicated in table 6.1.2.1-4.		
<b>ISUP Parameter values</b>	REL: Access Transport High layer compatibility High layer characteristics identification = <b>HLC_VA</b>		
<b>SIP Parameter values</b>	BYE: PSTN XML MIME body <?xml version="1.0" encoding="utf-8"?> PSTN HighLayerCompatibility HLOctet3 CodingStandard>00< Interpretation>100< PresentationMethod>01< HLOctet4 HighLayerCharacteristics> <b>HLC_VA</b> <		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← ANM ← REL → RLC ←	<b>MGCF</b> → INVITE ← 100 Trying ← 180 Ringing ← 200 OK (INVITE) → ACK → BYE ← 200 OK (BYE)	<b>Mg</b>

<b>TP number</b>	TP_209_012	<b>Reference</b>	7.2.3.2.14
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_REL/		
<b>Selection criteria</b>	PICS 6.2.1/5		
<b>Test Purpose name</b>	Mapping of REL ATP Low Layer Compatibility into PSTN XML LowLayerCompatibility in the BYE		
<b>Test Purpose</b>	Ensure that on receipt of a REL message and an ATP containing a Low Layer Compatibility IE in the confirmed dialogue, a BYE request is sent and a PSTN XML LowLayerCompatibility is present, the InformationTransferCapability is set to ITC_value as indicated in table 6.1.1.4-4.		
<b>ISUP Parameter values</b>	REL: Access Transport LowLayerCompatibility Information Transfer Capability = <b>ITC_value</b>		
<b>SIP Parameter values</b>	BYE: <?xml version="1.0" encoding="utf-8"?> PSTN LowLayerCompatibility LLoctet3 CodingStandard>00< InformationTransferCapability> <b>ITC_value</b> < LLoctet4 TransferMode>00< InformationTransferRate>10000<		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing
	ACM	←	
	ANM	←	← 200 OK (INVITE) → ACK
	REL	→	→ BYE
	RLC	←	← 200 OK (BYE)

#### 6.1.2.10 Receipt of RSC, GRS or CGB (H/W oriented)

<b>TP number</b>	TP_210_001	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of RSC before an early dialogue was established		
<b>Test Purpose</b>	Ensure that on receipt of a RSC before an early dialogue is established, a CANCEL request is sent containing a Reason header. The SUT received a 487 Request Terminated and sends an ACK request.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	CANCEL: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM	→	→ INVITE ← 100 Trying
	RSC	→	→ CANCEL ← 200 OK (CANCEL)
	RLC	←	← 487 Request Terminated → ACK

<b>TP number</b>	TP_210_002	<b>Reference</b>	7.2.3.2.15																			
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/																					
<b>Selection criteria</b>																						
<b>Test Purpose name</b>	Receipt of RSC after an early dialogue with 180 was established																					
<b>Test Purpose</b>	Ensure that on receipt of a RSC after an early dialogue with receipt of a 180 Ringing provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.																					
<b>ISUP Parameter values</b>																						
<b>SIP Parameter values</b>	CANCEL: Reason:																					
<b>Comments</b>																						
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>RSC →</td> <td></td> <td>→ CANCEL</td> </tr> <tr> <td>RLC ←</td> <td></td> <td>← 200 OK (CANCEL)</td> </tr> <tr> <td></td> <td></td> <td>← 487 Request Terminated</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	RSC →		→ CANCEL	RLC ←		← 200 OK (CANCEL)			← 487 Request Terminated			→ ACK
ISUP	MGCF	Mg																				
IAM →		→ INVITE																				
ACM ←		← 180 Ringing																				
RSC →		→ CANCEL																				
RLC ←		← 200 OK (CANCEL)																				
		← 487 Request Terminated																				
		→ ACK																				

<b>TP number</b>	TP_210_003	<b>Reference</b>	7.2.3.2.15																			
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/																					
<b>Selection criteria</b>																						
<b>Test Purpose name</b>	Receipt of RSC after an early dialogue with 181 was established																					
<b>Test Purpose</b>	Ensure that on receipt of a RSC after an early dialogue with receipt of a 181 Being forwarded provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.																					
<b>ISUP Parameter values</b>																						
<b>SIP Parameter values</b>	CANCEL: Reason:																					
<b>Comments</b>																						
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 181 Being forwarded</td> </tr> <tr> <td>RSC →</td> <td></td> <td>→ CANCEL</td> </tr> <tr> <td>RLC ←</td> <td></td> <td>← 200 OK (CANCEL)</td> </tr> <tr> <td></td> <td></td> <td>← 487 Request Terminated</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE			← 181 Being forwarded	RSC →		→ CANCEL	RLC ←		← 200 OK (CANCEL)			← 487 Request Terminated			→ ACK
ISUP	MGCF	Mg																				
IAM →		→ INVITE																				
		← 181 Being forwarded																				
RSC →		→ CANCEL																				
RLC ←		← 200 OK (CANCEL)																				
		← 487 Request Terminated																				
		→ ACK																				

<b>TP number</b>	TP_210_004	<b>Reference</b>	7.2.3.2.15																			
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/																					
<b>Selection criteria</b>																						
<b>Test Purpose name</b>	Receipt of RSC after an early dialogue with 183 was established																					
<b>Test Purpose</b>	Ensure that on receipt of a RSC after an early dialogue with receipt of a 183 Session Progress provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.																					
<b>ISUP Parameter values</b>																						
<b>SIP Parameter values</b>	CANCEL: Reason:																					
<b>Comments</b>																						
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 183 Session Progress</td> </tr> <tr> <td>RSC →</td> <td></td> <td>→ CANCEL</td> </tr> <tr> <td>RLC ←</td> <td></td> <td>← 200 OK (CANCEL)</td> </tr> <tr> <td></td> <td></td> <td>← 487 Request Terminated</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE			← 183 Session Progress	RSC →		→ CANCEL	RLC ←		← 200 OK (CANCEL)			← 487 Request Terminated			→ ACK
ISUP	MGCF	Mg																				
IAM →		→ INVITE																				
		← 183 Session Progress																				
RSC →		→ CANCEL																				
RLC ←		← 200 OK (CANCEL)																				
		← 487 Request Terminated																				
		→ ACK																				

<b>TP number</b>	TP_210_005	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of RSC after a confirmed dialogue was established		
<b>Test Purpose</b>	Ensure that on receipt of RSC after a confirmed dialogue with a 200 OK (INVITE) final response was established, a BYE request is sent.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	BYE: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	ANM ←	← 200 OK (INVITE)	
		→ ACK	
	RSC →	→ BYE	
	RLC ←	← 200 OK (BYE)	

<b>TP number</b>	TP_210_006	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of GRS before an early dialogue was established		
<b>Test Purpose</b>	Ensure that on receipt of a GRS before an early dialogue is established, a CANCEL request is sent containing a Reason header. The SUT received a 487 Request Terminated and sends an ACK request.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	CANCEL: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →	→ INVITE	
		← 100 Trying	
	GRS →	→ CANCEL	
	GRA ←	← 200 OK (CANCEL)	
		← 487 Request Terminated	
		→ ACK	

<b>TP number</b>	TP_210_007	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of GRS after an early dialogue with 180 was established		
<b>Test Purpose</b>	Ensure that on receipt of a GRS after an early dialogue with receipt of a 180 Ringing provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	CANCEL: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	GRS →	→ CANCEL	
	GRA ←	← 200 OK (CANCEL)	
		← 487 Request Terminated	
		→ ACK	

<b>TP number</b>	TP_210_008	<b>Reference</b>	7.2.3.2.15												
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Receipt of GRS after an early dialogue with 181 was established														
<b>Test Purpose</b>	Ensure that on receipt of a GRS after an early dialogue with receipt of a 181 Being forwarded provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>	CANCEL: Reason:														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE ← 181 Being forwarded</td> </tr> <tr> <td>GRS</td> <td style="text-align: center;">→</td> <td>→ CANCEL</td> </tr> <tr> <td>GRA</td> <td style="text-align: center;">←</td> <td>← 200 OK (CANCEL) ← 487 Request Terminated → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 181 Being forwarded	GRS	→	→ CANCEL	GRA	←	← 200 OK (CANCEL) ← 487 Request Terminated → ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 181 Being forwarded													
GRS	→	→ CANCEL													
GRA	←	← 200 OK (CANCEL) ← 487 Request Terminated → ACK													

<b>TP number</b>	TP_210_009	<b>Reference</b>	7.2.3.2.15												
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/														
<b>Selection criteria</b>															
<b>Test Purpose name</b>	Receipt of GRS after an early dialogue with 183 was established														
<b>Test Purpose</b>	Ensure that on receipt of a GRS after an early dialogue with receipt of a 183 Session Progress provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.														
<b>ISUP Parameter values</b>															
<b>SIP Parameter values</b>	CANCEL: Reason:														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE ← 183 Session Progress</td> </tr> <tr> <td>GRS</td> <td style="text-align: center;">→</td> <td>→ CANCEL</td> </tr> <tr> <td>GRA</td> <td style="text-align: center;">←</td> <td>← 200 OK (CANCEL) ← 487 Request Terminated → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 183 Session Progress	GRS	→	→ CANCEL	GRA	←	← 200 OK (CANCEL) ← 487 Request Terminated → ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 183 Session Progress													
GRS	→	→ CANCEL													
GRA	←	← 200 OK (CANCEL) ← 487 Request Terminated → ACK													

<b>TP number</b>	TP_210_010	<b>Reference</b>	7.2.3.2.15																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/																				
<b>Selection criteria</b>																					
<b>Test Purpose name</b>	Receipt of GRS after a confirmed dialogue was established																				
<b>Test Purpose</b>	Ensure that on receipt of GRS after a confirmed dialogue with a 200 OK (INVITE) final response was established, a BYE request is sent.																				
<b>ISUP Parameter values</b>																					
<b>SIP Parameter values</b>	BYE: Reason:																				
<b>Comments</b>																					
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>GRS</td> <td style="text-align: center;">→</td> <td>→ BYE</td> </tr> <tr> <td>GRA</td> <td style="text-align: center;">←</td> <td>← 200 OK (BYE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	ANM	←	← 200 OK (INVITE) → ACK	GRS	→	→ BYE	GRA	←	← 200 OK (BYE)		
ISUP	MGCF	Mg																			
IAM	→	→ INVITE																			
ACM	←	← 180 Ringing																			
ANM	←	← 200 OK (INVITE) → ACK																			
GRS	→	→ BYE																			
GRA	←	← 200 OK (BYE)																			

<b>TP number</b>	TP_210_011	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of GRS after a confirmed dialogue was established, all affected communications are terminated		
<b>Test Purpose</b>	Two connections are established. Ensure that on receipt of GRS after a confirmed dialogue with a 200 OK (INVITE) final response was established, a BYE request for each of the established connection is sent.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	BYE: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>  <b>Two connection are established</b> </div> <pre>     GRS →     GRA ←     → BYE (1)     ← 200 OK (BYE)      → BYE (2)     ← 200 OK (BYE)   </pre>		

<b>TP number</b>	TP_210_012	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' before an early dialogue was established		
<b>Test Purpose</b>	Ensure that on receipt of a CGB 'hardware oriented' before an early dialogue is established, a CANCEL request is sent containing a Reason header. The SUT received a 487 Request Terminated and sends an ACK request.		
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented		
<b>SIP Parameter values</b>	CANCEL: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b> </div> <pre>     IAM →                    → INVITE     → 100 Trying     CGB →                    → CANCEL     CGBA ←                    ← 200 OK (CANCEL)     ← 487 Request Terminated     → ACK   </pre>		

<b>TP number</b>	TP_210_013	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' after an early dialogue with 180 was established		
<b>Test Purpose</b>	Ensure that on receipt of a CGB 'hardware oriented' after an early dialogue with receipt of a 180 Ringing provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.		
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented		
<b>SIP Parameter values</b>	CANCEL: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b> </div> <pre>     IAM →                    → INVITE     ACM ←                    ← 180 Ringing      CGB →                    → CANCEL     CGBA ←                    ← 200 OK (CANCEL)     ← 487 Request Terminated     → ACK   </pre>		

<b>TP number</b>	TP_210_014	<b>Reference</b>	7.2.3.2.15									
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' after an early dialogue with 181 was established											
<b>Test Purpose</b>	Ensure that on receipt of a CGB 'hardware oriented' after an early dialogue with receipt of a 181 Being forwarded provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.											
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented											
<b>SIP Parameter values</b>	CANCEL: Reason:											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE ← 181 Being forwarded</td> </tr> <tr> <td>CGB → CGBA ←</td> <td></td> <td>→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE ← 181 Being forwarded	CGB → CGBA ←		→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK		
ISUP	MGCF	Mg										
IAM →		→ INVITE ← 181 Being forwarded										
CGB → CGBA ←		→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK										

<b>TP number</b>	TP_210_015	<b>Reference</b>	7.2.3.2.15									
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/											
<b>Selection criteria</b>												
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' after an early dialogue with 183 was established											
<b>Test Purpose</b>	Ensure that on receipt of a CGB 'hardware oriented' after an early dialogue with receipt of a 183 Session Progress provisional response is established, a CANCEL request is sent containing a Reason header. The SUT receives a 487 Request Terminated and sends an ACK request.											
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented											
<b>SIP Parameter values</b>	CANCEL: Reason:											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE ← 183 Session Progress</td> </tr> <tr> <td>CGB → CGBA ←</td> <td></td> <td>→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE ← 183 Session Progress	CGB → CGBA ←		→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK		
ISUP	MGCF	Mg										
IAM →		→ INVITE ← 183 Session Progress										
CGB → CGBA ←		→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK										

<b>TP number</b>	TP_210_016	<b>Reference</b>	7.2.3.2.15																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/																							
<b>Selection criteria</b>																								
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' after a confirmed dialogue was established																							
<b>Test Purpose</b>	Ensure that on receipt of CGB 'hardware oriented' after a confirmed dialogue with a 200 OK (INVITE) final response was established, a BYE request is sent.																							
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented																							
<b>SIP Parameter values</b>	BYE: Reason:																							
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">ISUP</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td>CGB →</td> <td></td> <td>→ BYE</td> </tr> <tr> <td>CGBA ←</td> <td></td> <td>← 200 OK (BYE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE)			→ ACK	CGB →		→ BYE	CGBA ←		← 200 OK (BYE)		
ISUP	MGCF	Mg																						
IAM →		→ INVITE																						
ACM ←		← 180 Ringing																						
ANM ←		← 200 OK (INVITE)																						
		→ ACK																						
CGB →		→ BYE																						
CGBA ←		← 200 OK (BYE)																						

<b>TP number</b>	TP_210_017	<b>Reference</b>	7.2.3.2.15
<b>TSS reference</b>	ISUP-SIP/Basic call/Receipt_of_RSC-GRS-CGB/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Receipt of CGB 'hardware oriented' after a confirmed dialogue was established, all affected communications are terminated		
<b>Test Purpose</b>	Two connections are established. Ensure that on receipt of CGB 'hardware oriented' after a confirmed dialogue with a 200 OK (INVITE) final response was established, a BYE request for each of the established connections is sent.		
<b>ISUP Parameter values</b>	<b>CGB:</b> Circuit group supervision message type = hardware failure oriented		
<b>SIP Parameter values</b>	BYE: Reason:		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <p style="text-align: center;">Two connection are established</p> <pre> sequenceDiagram     participant ISUP     participant MGCF     participant Mg     MGCF-&gt;&gt;ISUP:CGB     MGCF-&gt;&gt;Mg:200 OK (BYE)     ISUP-&gt;&gt;MGCF:CGBA     MGCF-&gt;&gt;Mg:200 OK (BYE)     Mg-&gt;&gt;MGCF:BYE (1)     MGCF-&gt;&gt;Mg:200 OK (BYE)     Mg-&gt;&gt;MGCF:BYE (2)     MGCF-&gt;&gt;Mg:200 OK (BYE)   </pre>		

### 6.1.2.11 Autonomous Release at O-MGCF

<b>TP number</b>	TP_211_001	<b>Reference</b>	7.2.3.2.16
<b>TSS reference</b>	ISUP-SIP/Basic call/Autonomous_Release/		
<b>Selection criteria</b>	PICS 6.2.1/3		
<b>Test Purpose name</b>	COT procedure fails		
<b>Test Purpose</b>	IAM received and the continuity check indicator is set to 'continuitycheck required' or 'performed on a previous circuit'. Ensure that on receipt of a COT message and the continuity indicator is set to 'continuity check failed' the already established early dialogue is terminated. A CANCEL request is sent. A Reason header is present containing the cause value '41'.		
<b>ISUP Parameter values</b>	<b>COT:</b> 'continuity check failed'		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <p style="text-align: center;">IAM                              →                           → INVITE   ← 100 Trying   ← 183 Session Progress   → PRACK   ← 200 OK (PRACK)</p> <p style="text-align: center;">COT                              →                           → CANCEL   ← 200 OK (CANCEL)   ← 487 Request Terminated   → ACK</p>		

<b>TP number</b>	TP_211_002	<b>Reference</b>	7.2.3.2.16								
<b>TSS reference</b>	ISUP-SIP/Basic call/Autonomous_Release/										
<b>Selection criteria</b>	PICS 6.2.1/3										
<b>Test Purpose name</b>	T8 expires										
<b>Test Purpose</b>	IAM received and the continuity check indicator is set to 'continuitycheck required' or 'performed on a previous circuit'. Ensure that on expiry of ISUP timer T8 the already established early dialogue is terminated. A CANCEL request is sent.										
<b>ISUP Parameter values</b>											
<b>SIP Parameter values</b>											
<b>Comments</b>											
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">IAM</td> <td style="width: 10%; text-align: center;">→</td> <td>Start T8</td> <td>→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">T8 expires</td> <td>→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK</td> </tr> </table>	IAM	→	Start T8	→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK)			T8 expires	→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK		
IAM	→	Start T8	→ INVITE ← 100 Trying ← 183 Session Progress → PRACK ← 200 OK (PRACK)								
		T8 expires	→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated → ACK								

<b>TP number</b>	TP_211_003	<b>Reference</b>	7.2.3.2.16															
<b>TSS reference</b>	ISUP-SIP/Basic call/Autonomous_Release/																	
<b>Selection criteria</b>																		
<b>Test Purpose name</b>	Call is released to due message compatibility instruction 'Release call' received in the early dialogue																	
<b>Test Purpose</b>	Ensure that on receipt of an unknown ISUP message in the early dialogue and the message compatibility is set to 'release call' an ISUP REL message is sent and the Cause indicator is set to value 97. In addition a SIP CANCEL request is sent and a Reason header field is present.																	
<b>ISUP Parameter values</b>	??? = unknown message: Message compatibility information: Release call indicator = release call <b>REL: Cause = 97</b>																	
<b>SIP Parameter values</b>	CANCEL: Reason:																	
<b>Comments</b>	For an unknown message use a message type unknown in the SUT.																	
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">IAM</td> <td style="width: 10%; text-align: center;">→</td> <td>→ INVITE ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>???</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>REL</td> <td style="text-align: center;">←</td> <td>→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated</td> </tr> <tr> <td>RLC</td> <td style="text-align: center;">→</td> <td>→ ACK</td> </tr> </table>	IAM	→	→ INVITE ← 180 Ringing	ACM	←		???	→		REL	←	→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated	RLC	→	→ ACK		
IAM	→	→ INVITE ← 180 Ringing																
ACM	←																	
???	→																	
REL	←	→ CANCEL ← 200 OK (CANCEL) ← 487 Request Terminated																
RLC	→	→ ACK																

<b>TP number</b>	TP_211_004	<b>Reference</b>	7.2.3.2.16
<b>TSS reference</b>	ISUP-SIP/Basic call/Autonomous_Release/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Call is released to due message compatibility instruction 'Release call' received in the confirmed dialogue		
<b>Test Purpose</b>	Ensure that on receipt of an unknown ISUP message in the confirmed dialogue and the message compatibility is set to 'release call' an ISUP REL message is sent and the Cause indicator is set to value 97. In addition a SIP BYE request is sent and a Reason header field is present.		
<b>ISUP Parameter values</b>	<p>??? = unknown message:            Message compatibility information: Release call indicator = release call  <b>REL:</b> Cause = 97</p>		
<b>SIP Parameter values</b>	BYE: Reason:		
<b>Comments</b>	For an unknown message use a message type unknown in the SUT.		
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	ANM ←	← 200 OK (INVITE)	
		→ ACK	
	??? →	→ BYE	
	REL ←	← 200 OK (BYE)	
	RLC →		

<b>TP number</b>	TP_211_006	<b>Reference</b>	7.2.3.2.16
<b>TSS reference</b>	ISUP-SIP/Basic call/Autonomous_Release/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Call is released to due parameter compatibility instruction 'Release call' received in the confirmed dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a CPG in the confirmed dialogue and an unknown parameter is present the parameter compatibility instruction is set to 'release call' an ISUP REL message is sent and the Cause indicator is set to value 99 or 110. In addition a SIP BYE request is sent and a Reason header field is present.		
<b>ISUP Parameter values</b>	<p><b>CPG:</b> Parameter compatibility information: Release call indicator = release call  <b>REL:</b> Cause = 99 or 110</p>		
<b>SIP Parameter values</b>	BYE: Reason:		
<b>Comments</b>	For an unknown parameter use a parameter type unknown in the SUT.		
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →	→ INVITE	
	ACM ←	← 180 Ringing	
	ANM ←	← 200 OK (INVITE)	
	→ ACK		
	CPG →	→ BYE	
	REL ←	← 200 OK (BYE)	
	RLC →		

### 6.1.3 SIP Support of charging

#### 6.1.3.1 Incoming call interworking at I-MGCF

<b>TP number</b>	TP_121_001	<b>Reference</b>	4.6.1/ [6]																																		
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																				
<b>Selection criteria</b>	PICS 6.2.1/13																																				
<b>Test Purpose name</b>	Mapping of ISUP crgt message into SIP Content-Type and Content-Disposition header																																				
<b>Test Purpose</b>	<p>Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present.</p> <p>The:</p> <ul style="list-style-type: none"> <li>• Content-Type header is set to 'application/vnd.etsi.sci+xml'</li> <li>• Content-Disposition header is set to 'render' and the handling parameter is set to 'optional'.</li> </ul>																																				
<b>ISUP Parameter values</b>	<p>APM/ACM APP Application Context Identifier '0000011' (Charging ASE)</p> <p>Encapsulated Application Information Charging related Information</p>																																				
<b>SIP Parameter values</b>	I18x/200/NFO: Content-Type: application/vnd.etsi.sci+xml Content-Disposition: render; handling = optional																																				
<b>Comments</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td><b>CASE A</b> 183 Session Progress(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(crgt) → APM(crga)</td> </tr> <tr> <td><b>CASE B</b> 180 / 183 (crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM(crgt) → APM(crga)</td> </tr> <tr> <td><b>CASE C</b> 180 Ringing 183 Session Progress(crgt)</td> <td style="text-align: center;">← ←</td> <td style="text-align: center;">← ACM ← APM(crgt) → APM(crga)</td> </tr> <tr> <td><b>CASE D</b> 180 Ringing 200 OK INVITE ACK</td> <td style="text-align: center;">← ← →</td> <td style="text-align: center;">← ACM ← ANM(crgt) → APM(crga)</td> </tr> <tr> <td><b>CASE E</b> 180 Ringing 183 Session Progress(crgt)</td> <td style="text-align: center;">← ←</td> <td style="text-align: center;">← ACM ← APM(crgt) → APM(crga)</td> </tr> <tr> <td>200 OK INVITE ACK</td> <td style="text-align: center;">← →</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>INFO(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(crgt)</td> </tr> <tr> <td>200 OK INFO</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ APM(crga)</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Apply post test routine</b></td><td></td></tr> </tbody> </table>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	<b>CASE A</b> 183 Session Progress(crgt)	←	← APM(crgt) → APM(crga)	<b>CASE B</b> 180 / 183 (crgt)	←	← ACM(crgt) → APM(crga)	<b>CASE C</b> 180 Ringing 183 Session Progress(crgt)	← ←	← ACM ← APM(crgt) → APM(crga)	<b>CASE D</b> 180 Ringing 200 OK INVITE ACK	← ← →	← ACM ← ANM(crgt) → APM(crga)	<b>CASE E</b> 180 Ringing 183 Session Progress(crgt)	← ←	← ACM ← APM(crgt) → APM(crga)	200 OK INVITE ACK	← →	← ANM	INFO(crgt)	←	← APM(crgt)	200 OK INFO	→	→ APM(crga)	<b>Apply post test routine</b>			
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<b>TP number</b>	TP_121_002	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP crgt 'immediateChangeOfActuallyAppliedTariff' into SIP SCI XML 'crgt/immediateChangeOfActuallyAppliedTariff' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'immediateChangeOfActuallyAppliedTariff' parameter in the encapsulated charging ASE is mapped into the SCI XML 'immediateChangeOfActuallyAppliedTariff' element.		
<b>ISUP Parameter values</b>	APP crgt chargingControlIndicators immediateChangeOfActuallyAppliedTariff = 1		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingControlIndicators> < immediateChangeOfActuallyAppliedTariff>1</...>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → MGCF → IAM <b>CASE A</b> 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE B</b> 180 / 183 (crgt) ← ← ACM(crgt) → APM(crga) <b>CASE C</b> 180 Ringing ← ← ACM 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE D</b> 180 Ringing ← ← ACM 200 OK INVITE ← ← ANM ACK → → INFO(crgt) ← ← APM(crgt) 200 OK INFO → → APM(crga)	<b>ISUP</b> 	
	<b>Apply post test routine</b>		



<b>TP number</b>	TP_121_004	<b>Reference</b>	4.6.1/ [6]																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																														
<b>Test Purpose name</b>	Mapping of ISUP 'currentTariffCurrency/ CommunicationChargeCurrency /tariffDuration' into SIP SCI XML 'currentTariffCurrency/tariffDuration' element																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'tariffDuration' parameter in the encapsulated charging ASE is mapped into the SCI XML 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'tariffDuration' element.																																														
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency tariffDuration=[any value]																																														
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < tariffDuration>[any value] </ ...>																																														
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<b>TP number</b>	TP_121_005	<b>Reference</b>	4.6.1/ [6]																																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																																														
<b>Test Purpose name</b>	Mapping of ISUP 'currentTariffCurrency/ CommunicationChargeCurrency /subTariffControl' into SIP SCI XML 'currentTariffCurrency/ <b>subTariffControl</b> ' element																																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'subTariffControl' parameter in the encapsulated charging ASE is mapped into the SCI XML 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'subTariffControl' element.																																																														
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency subTariffControl=[any value]																																																														
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < subTariffControl>[any value] </ ...>																																																														
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<b>TP number</b>	TP_121_006	<b>Reference</b>	4.6.1/ [6]																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																														
<b>Test Purpose name</b>	Mapping of ISUP 'currentTariffCurrency/tariffControllIndicators' into SIP SCI XML 'currentTariffCurrency/tariffControllIndicators'																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'currentTariffCurrency' - 'tariffControllIndicators' parameter in the encapsulated charging ASE is mapped into the SCI XML 'currentTariffCurrency' - 'tariffControllIndicators' element.																																														
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency tariffControllIndicators non-cyclicTariff = 1																																														
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < tariffControllIndicators>1</...>																																														
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<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">Mg</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 30%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>183 Session Progress(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(crgt) → APM(crga)</td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>180 / 183 (crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM(crgt) → APM(crga)</td> </tr> <tr> <td colspan="3"><b>CASE C</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>183 Session Progress(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(crgt) → APM(crga)</td> </tr> <tr> <td colspan="3"><b>CASE D</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK INVITE</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>INFO(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(crgt)</td> </tr> <tr> <td>200 OK INFO</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ APM(crga)</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	<b>CASE A</b>			183 Session Progress(crgt)	←	← APM(crgt) → APM(crga)	<b>CASE B</b>			180 / 183 (crgt)	←	← ACM(crgt) → APM(crga)	<b>CASE C</b>			180 Ringing	←	← ACM	183 Session Progress(crgt)	←	← APM(crgt) → APM(crga)	<b>CASE D</b>			180 Ringing	←	← ACM	200 OK INVITE	←	← ANM	ACK	→		INFO(crgt)	←	← APM(crgt)	200 OK INFO	→	→ APM(crga)	
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<b>TP number</b>	TP_121_007	<b>Reference</b>	4.6.1/ [6]																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																														
<b>Test Purpose name</b>	Mapping of ISUP 'currentTariffCurrency/callAttemptChargeCurrency' into SIP SCI XML 'currentTariffCurrency/ <b>callAttemptChargeCurrency</b> '																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'currentTariffCurrency' - 'callAttemptChargeCurrency' parameter in the encapsulated charging ASE is mapped into the SCI XML 'currentTariffCurrency' - 'callAttemptChargeCurrency' element.																																														
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<b>TP number</b>	TP_121_008	<b>Reference</b>	4.6.1/ [6]																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																														
<b>Test Purpose name</b>	Mapping of ISUP 'currentTariffCurrency/callSetupChargeCurrency' into SIP SCI XML 'currentTariffCurrency/ <b>callSetupChargeCurrency</b> '																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'currentTariffCurrency' - 'callSetupChargeCurrency' parameter in the encapsulated charging ASE is mapped into the SCI XML 'currentTariffCurrency' - 'callSetupChargeCurrency' element.																																														
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency callSetupChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																																														
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < chargingTariff> < currentTariffCurrency> < callSetupChargeCurrency> < currencyFactor>[any value] </...> < currencyScale>[any value]</...>																																														
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<b>TP number</b>	TP_121_009	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'nextTariffCurrency/CommunicationChargeCurrency/currencyFactorScale' into SIP SCI XML 'nextTariffCurrency/communicationChargeSequenceCurrency/ currencyFactorScale' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'currencyFactorScale' parameter in the encapsulated charging ASE is mapped into the SCI XML 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'currencyFactorScale' element.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < communicationChargeSequenceCurrency> < currencyFactor>[any value]</...> < currencyScale>[any value]</...>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE  <b>CASE A</b> 183 Session Progress(crgt) <b>←</b>  <b>CASE B</b> 180 / 183 (crgt) <b>←</b>  <b>CASE C</b> 180 Ringing <b>←</b> 183 Session Progress(crgt) <b>←</b>  <b>CASE D</b> 180 Ringing <b>←</b> 200 OK INVITE <b>←</b> ACK <b>→</b>  INFO(crgt) <b>←</b> 200 OK INFO <b>→</b>	<b>MGCF</b>  <b>ISUP</b> IAM  <b>APM(crgt)</b> <b>APM(crga)</b>  <b>ACM(crgt)</b> <b>APM(crga)</b>  <b>ACM</b> <b>APM(crgt)</b> <b>APM(crga)</b>  <b>ACM</b> <b>ANM</b>  <b>APM(crgt)</b> <b>APM(crga)</b>	<b>Apply post test routine</b>

<b>TP number</b>	TP_121_010	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'nextTariffCurrency/Communication/ChargeCurrency/ tariffDuration' into SIP SCI XML 'nextTariffCurrency/communicationChargeSequenceCurrency/ tariffDuration' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'tariffDuration' parameter in the encapsulated charging ASE is mapped into the SCI XML 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'tariffDuration' element.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency CommunicationChargeCurrency tariffDuration		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < communicationChargeSequenceCurrency> < tariffDuration>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → → IAM <b>CASE A</b> 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE B</b> 180 / 183 (crgt) ← ← APM(crgt) → APM(crga) <b>CASE C</b> 180 Ringing ← ← ACM 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE D</b> 180 Ringing ← ← ACM 200 OK INVITE ← ← ANM ACK → → INFO(crgt) ← ← APM(crgt) 200 OK INFO → → APM(crga)	<b>MGCF</b> → → <b>ISUP</b> → <b>APM(crgt)</b> <b>APM(crga)</b> <b>ACM(crgt)</b> <b>APM(crga)</b> <b>ACM</b> <b>APM(crgt)</b> <b>APM(crga)</b> <b>ACM</b> <b>ANM</b> <b>APM(crgt)</b> <b>APM(crga)</b>	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_121_011	<b>Reference</b>	4.6.1/ [6]																																												
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																														
<b>Selection criteria</b>	PICS 6.2.1/13																																														
<b>Test Purpose name</b>	Mapping of ISUP 'nextTariffCurrency/CommunicationChargeCurrency/ subTariffControl' into SIP SCI XML 'nextTariffCurrency/communicationChargeSequenceCurrency /subTariffControl' element																																														
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'subTariffControl' parameter in the encapsulated charging ASE is mapped into the SCI XML 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'subTariffControl' element.																																														
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency CommunicationChargeCurrency subTariffControl																																														
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < communicationChargeSequenceCurrency> < subTariffControl>																																														
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INFO(crgt)	←	← APM(crgt)																																													
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<b>TP number</b>	TP_121_013	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'nextTariffCurrency/callAttemptChargeCurrency' into SIP SCI XML 'nextTariffCurrency/callAttemptChargeCurrency'		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callAttemptChargeCurrency' parameter in the encapsulated charging ASE is mapped into the SCI XML 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callAttemptChargeCurrency' element.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency callAttemptChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < callAttemptChargeCurrency> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE  <b>CASE A</b> 183 Session Progress(crgt)  <b>CASE B</b> 180 / 183 (crgt)  <b>CASE C</b> 180 Ringing 183 Session Progress(crgt)  <b>CASE D</b> 180 Ringing 200 OK INVITE ACK  INFO(crgt) 200 OK INFO	<b>MGCF</b> → → IAM  ← → APM(crgt) → APM(crga)  ← → ACM(crgt) → APM(crga)  ← → ACM ← APM(crgt) → APM(crga)  ← → ACM ← ANM  ← → APM(crgt) → APM(crga)	<b>ISUP</b> → IAM  ← APM(crgt) → APM(crga)  ← ACM(crgt) → APM(crga)  ← ACM ← APM(crgt) → APM(crga)  ← ANM  ← APM(crgt) → APM(crga)
	<b>Apply post test routine</b>		





<b>TP number</b>	TP_121_016	<b>Reference</b>	4.6.1/ [6]																																															
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																																																	
<b>Selection criteria</b>	PICS 6.2.1/13																																																	
<b>Test Purpose name</b>	Mapping of ISUP two sub tariffs in 'currentTariffCurrency/ CommunicationChargeCurrency / <b>currencyFactorScale</b> ' into two SIP SCI XML 'currentTariffCurrency/ communicationChargeSequenceCurrency / <b>currencyFactorScale</b> ' elements																																																	
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. Two sub tariffs in the 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'currencyFactorScale' parameter in the encapsulated charging ASE is mapped into the SCI XML two sub tariffs in the 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'currencyFactorScale' element.																																																	
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value] CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																																																	
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < currencyFactorScale> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...> < communicationChargeSequenceCurrency> < currencyFactorScale> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>																																																	
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<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																																																
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<b>Apply post test routine</b>																																																		

<b>TP number</b>	TP_121_017	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP two sub tariffs in 'nextTariffCurrency/CommunicationChargeCurrency/currencyFactorScale' into SIP SCI XML 'nextTariffCurrency/communicationChargeSequenceCurrency/currencyFactorScale' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. Two sub tariffs in the 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'currencyFactorScale' parameter in the encapsulated charging ASE is mapped into the SCI XML two subtariffs in the 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'currencyFactorScale' element.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value] CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < communicationChargeSequenceCurrency> < currencyFactorScale> < currencyFactor>[any value]< /...> < currencyScale>[any value]< /...> < communicationChargeSequenceCurrency> < currencyFactorScale> < currencyFactor>[any value]< /...> < currencyScale>[any value]< /...>		
<b>Comments</b>			

Message flows	Mg	MGCF	ISUP
	INVITE	→	→ IAM
<b>CASE A</b>			← APM(crgt) → APM(crga)
	183 Session Progress(crgt)	←	
<b>CASE B</b>			← ACM(crgt) → APM(crga)
	180 / 183 (crgt)	←	
<b>CASE C</b>			← ACM ← APM(crgt) → APM(crga)
	180 Ringing	←	
	183 Session Progress(crgt)	←	
<b>CASE D</b>			← ACM ← ANM
	180 Ringing	←	
	200 OK INVITE	←	
	ACK	→	
	INFO(crgt)	←	← APM(crgt)
	200 OK INFO	→	→ APM(crga)
<b>Apply post test routine</b>			

<b>TP number</b>	TP_121_018	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP crgt/originationIdentification' into SIP SCI XML 'messageType / crgt/originationIdentification' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'crgt' - 'originationIdentification' parameter in the encapsulated charging ASE is mapped into the SCI XML 'messageType' - 'crgt' - 'originationIdentification' element.		
<b>ISUP Parameter values</b>	APP crgt originationIdentification networkIdentification referenceID		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < originationIdentification> < networkIdentification> < referenceID>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → MGCF → IAM <b>CASE A</b> 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE B</b> 180 / 183 (crgt) ← ← APM(crgt) → APM(crga) <b>CASE C</b> 180 Ringing ← ← ACM 183 Session Progress(crgt) ← ← APM(crgt) → APM(crga) <b>CASE D</b> 180 Ringing ← ← ACM 200 OK INVITE ← ← ANM ACK → INFO(crgt) ← ← APM(crgt) 200 OK INFO → → APM(crga)	<b>MGCF</b> MGCF → IAM <b>ISUP</b> IAM → Mg	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_121_019	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'crgt/currency' into SIP SCI XML 'messageType / crgt/ <b>currency</b> ' element		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an ACM or APM containing an APP coded as 'Charging ASE' a SIP 183 Session Progress or 180 Ringing or an INFO request is sent. A XML 'SCI' element is present. The 'crgt' - 'currency' parameter in the encapsulated charging ASE is mapped into the SCI XML 'messageType' - 'crgt' - 'currency' element or the XML element is not present.		
<b>ISUP Parameter values</b>	APP crgt currency		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < currency>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → <b>CASE A</b> 183 Session Progress(crgt) ← <b>CASE B</b> 180 / 183 (crgt) ← <b>CASE C</b> 180 Ringing ← 183 Session Progress(crgt) ← <b>CASE D</b> 180 Ringing ← 200 OK INVITE ← ACK → INFO(crgt) ← 200 OK INFO →	<b>MGCF</b> → IAM → APM(crgt) → APM(crga) → ACM(crgt) → APM(crga) → ACM → APM(crgt) → APM(crga) → ACM → ANM → APM(crgt) → APM(crga)	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_121_020	<b>Reference</b>	4.6.1/ [6]																				
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/																						
<b>Selection criteria</b>	PICS 6.2.1/13																						
<b>Test Purpose name</b>	Mapping of ISUP 'aocrg / chargingControllIndicators' into SIP SCI XML body 'aocrg / 'chargingControllIndicators'																						
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an APM containing an APP coded as 'Charging ASE' in the confirmed dialogue, an INFO request is sent. An XML 'SCI' element is present. The 'aocrg' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' parameter in the encapsulated charging ASE is mapped into the SCI XML 'aocrg' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' element in the INFO request.																						
<b>ISUP Parameter values</b>	APM APP aocrg chargingControllIndicators immediateChangeOfActuallyAppliedTariff																						
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < chargingControllIndicators> < immediateChangeOfActuallyAppliedTariff>																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK INVITE</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>INFO(aocrg)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← APM(aocrg)</td> </tr> <tr> <td>200 OK INFO</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ APM(crga)</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	180 Ringing	←	← ACM	200 OK INVITE	←	← ANM	ACK	→		INFO(aocrg)	←	← APM(aocrg)	200 OK INFO	→	→ APM(crga)	<b>Apply post test routine</b>
Mg	MGCF	ISUP																					
INVITE	→	→ IAM																					
180 Ringing	←	← ACM																					
200 OK INVITE	←	← ANM																					
ACK	→																						
INFO(aocrg)	←	← APM(aocrg)																					
200 OK INFO	→	→ APM(crga)																					

<b>TP number</b>	TP_121_021	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'aocrg / addOnChargeCurrency' into SIP SCI XML body 'aocrg / 'addOnChargeCurrency'		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an APM containing an APP coded as 'Charging ASE' in the confirmed dialogue, an INFO request is sent. An XML 'SCI' element is present. The 'aocrg' - 'addOnChargeCurrency' - 'currencyFactorScale' parameter in the encapsulated charging ASE is mapped into the SCI XML 'aocrg' - 'addOnCharge' - 'addOnChargeCurrency' element in the INFO request.		
<b>ISUP Parameter values</b>	APM APP aocrg addOnChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]		
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < addOnCharge> < addOnChargeCurrency> < currencyFactor>[any value]</ ...> < currencyScale>[any value]</ ...>		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 180 Ringing 200 OK INVITE ACK  INFO(aocrg) 200 OK INFO	MGCF → ← ← →  ← →	ISUP IAM ACM ANM  APM(aocrg) APM(crga)
		<b>Apply post test routine</b>	

<b>TP number</b>	TP_121_022	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'aocrg / originationIdentification' into SIP SCI XML body 'aocrg / 'originationIdentification'		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an APM containing an APP coded as 'Charging ASE' in the confirmed dialogue, an INFO request is sent. An XML 'SCI' element is present. The 'aocrg' - 'originationIdentification' parameter in the encapsulated charging ASE is mapped into the SCI XML 'aocrg' - 'originationIdentification' element in the INFO request.		
<b>ISUP Parameter values</b>	APM APP aocrg originationIdentification networkIdentification referenceID		
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < originationIdentification> < networkIdentification> < referenceID>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 200 OK INVITE ACK  INFO(aocrg) 200 OK INFO	<b>MGCF</b> → ← ← →  ← →	<b>ISUP</b> IAM ACM ANM  APM(aocrg) APM(crga)
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_121_023	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	SIP-ISUP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of ISUP 'aocrg / currency' into SIP SCI XML body 'aocrg / 'currency'		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP Application transport parameter in an APM containing an APP coded as 'Charging ASE' in the confirmed dialogue, an INFO request is sent. An XML 'SCI' element is present. The 'aocrg' - 'currency' parameter in the encapsulated charging ASE is mapped into the SCI XML 'aocrg' - 'currency' element in the INFO request.		
<b>ISUP Parameter values</b>	APM APP aocrg currency		
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < currency>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 200 OK INVITE ACK  INFO(aocrg) 200 OK INFO	<b>MGCF</b> → ← ← →  ← →	<b>ISUP</b> IAM ACM ANM  APM(aocrg) APM(crga)
	<b>Apply post test routine</b>		

### 6.1.3.2 Outgoing Call Interworking O-MGCF

<b>TP number</b>	TP_221_001	<b>Reference</b>	4.6.1/ [6]																																																																							
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																																									
<b>Selection criteria</b>	PICS 6.2.1/13																																																																									
<b>Test Purpose name</b>	Mapping of SCI XML into ISUP crgt basic function																																																																									
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The Application context Identifier is set to 'Charging ASE' and the XML SCI SIP message body is mapped into the APP encapsulated information.																																																																									
<b>ISUP Parameter values</b>	APM APP Application Context Identifier '0000011' (Charging ASE)  Encapsulated Application Information Charging related Information																																																																									
<b>SIP Parameter values</b>	18x/200/INFO XML SIP Transfer of Tariff																																																																									
<b>Comments</b>																																																																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td><b>CASE A</b></td> <td></td> <td></td> </tr> <tr> <td>APM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE B</b></td> <td></td> <td></td> </tr> <tr> <td>ACM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE C</b></td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>CPG(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE D</b></td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK INVITE(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td><b>CASE E</b></td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>CPG(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>APM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← INFO(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ 200 OK INFO</td> </tr> </tbody> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	<b>CASE A</b>			APM(crgt)	←	← 183 Session Progress(crgt)	APM(crga)	→		<b>CASE B</b>			ACM(crgt)	←	← 180 Ringing(crgt)	APM(crga)	→		<b>CASE C</b>			ACM	←	← 180 Ringing	CPG(crgt)	←	← 183 Session Progress(crgt)	APM(crga)	→		<b>CASE D</b>			ACM	←	← 180 Ringing	ANM	←	← 200 OK INVITE(crgt)	APM(crga)	→	→ ACK	<b>CASE E</b>			ACM	←	← 180 Ringing	CPG(crgt)	←	← 183 Session Progress(crgt)	APM(crga)	→		ANM	←	← 200 OK INVITE			→ ACK	APM(crgt)	←	← INFO(crgt)	APM(crga)	→	→ 200 OK INFO	<b>Apply post test routine</b>
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																																																																								
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<b>TP number</b>	TP_221_002	<b>Reference</b>	4.6.1/ [6]																																																																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																																										
<b>Selection criteria</b>	PICS 6.2.1/13																																																																										
<b>Test Purpose name</b>	Mapping of SCI XML 'immediateChangeOfActuallyAppliedTariff' into ISUP APP crgt 'chargingControllIndicators/ <b>immediateChangeOfActuallyAppliedTariff</b> '																																																																										
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'crgt' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' element is mapped into the ISUP APP encapsulated Charging ASE 'crgt' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' parameter.																																																																										
<b>ISUP Parameter values</b>	APP crgt chargingControllIndicators immediateChangeOfActuallyAppliedTariff = 1																																																																										
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingControllIndicators> < immediateChangeOfActuallyAppliedTariff>1</...>																																																																										
<b>Comments</b>																																																																											
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td colspan="4"><b>CASE A</b></td> </tr> <tr> <td style="text-align: center;">APM(crgt)</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td style="text-align: center;">APM(crga)</td> <td style="text-align: center;">→</td> <td colspan="2"></td> </tr> <tr> <td colspan="4"><b>CASE B</b></td> </tr> <tr> <td style="text-align: center;">ACM(crgt)</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 180 Ringing(crgt)</td> </tr> <tr> <td style="text-align: center;">APM(crga)</td> <td style="text-align: center;">→</td> <td colspan="2"></td> </tr> <tr> <td colspan="4"><b>CASE C</b></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">CPG(crgt)</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td style="text-align: center;">APM(crga)</td> <td style="text-align: center;">→</td> <td colspan="2"></td> </tr> <tr> <td colspan="4"><b>CASE D</b></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← 200 OK INVITE(crgt)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→</td> <td style="text-align: center;">ACK</td> </tr> <tr> <td style="text-align: center;">APM(crgt)</td> <td style="text-align: center;">←</td> <td colspan="2" style="text-align: center;">← INFO(crgt)</td> </tr> <tr> <td style="text-align: center;">APM(crga)</td> <td style="text-align: center;">→</td> <td colspan="2" style="text-align: center;">→ 200 OK INFO</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→	INVITE	<b>CASE A</b>				APM(crgt)	←	← 183 Session Progress(crgt)		APM(crga)	→			<b>CASE B</b>				ACM(crgt)	←	← 180 Ringing(crgt)		APM(crga)	→			<b>CASE C</b>				ACM	←	← 180 Ringing		CPG(crgt)	←	← 183 Session Progress(crgt)		APM(crga)	→			<b>CASE D</b>				ACM	←	← 180 Ringing		ANM	←	← 200 OK INVITE(crgt)				→	ACK	APM(crgt)	←	← INFO(crgt)		APM(crga)	→	→ 200 OK INFO		<b>Apply post test routine</b>	
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<b>TP number</b>	TP_221_003	<b>Reference</b>	4.6.1/ [6]																																																		
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																				
<b>Selection criteria</b>	PICS 6.2.1/13																																																				
<b>Test Purpose name</b>	Mapping of SCI XML 'currentTariffCurrency/ communicationChargeSequenceCurrency/ currencyFactorScale' into ISUP APP crgt 'currentTariffCurrency / CommunicationChargeCurrency/ <b>currencyFactorScale</b> '																																																				
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'currencyFactorScale' element is mapped into the ISUP APP encapsulated Charging ASE 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'currencyFactorScale' parameter.																																																				
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																																																				
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < currencyFactorScale> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>																																																				
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<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 25%;">ISUP</th> <th style="text-align: center; width: 25%;">MGCF</th> <th style="text-align: center; width: 25%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td><b>CASE A</b></td> <td></td> <td></td> </tr> <tr> <td>APM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE B</b></td> <td></td> <td></td> </tr> <tr> <td>ACM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE C</b></td> <td></td> <td></td> </tr> <tr> <td>CPG(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 183 Session Progress(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td><b>CASE D</b></td> <td></td> <td></td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK INVITE(crgt)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td>APM(crgt)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← INFO(crgt)</td> </tr> <tr> <td>APM(crga)</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ 200 OK INFO</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	<b>CASE A</b>			APM(crgt)	←	← 183 Session Progress(crgt)	APM(crga)	→		<b>CASE B</b>			ACM(crgt)	←	← 180 Ringing(crgt)	APM(crga)	→		<b>CASE C</b>			CPG(crgt)	←	← 183 Session Progress(crgt)	APM(crga)	→		<b>CASE D</b>			ACM	←	← 180 Ringing	ANM	←	← 200 OK INVITE(crgt)			→ ACK	APM(crgt)	←	← INFO(crgt)	APM(crga)	→	→ 200 OK INFO	<b>Apply post test routine</b>
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APM(crgt)	←	← INFO(crgt)																																																			
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<b>TP number</b>	TP_221_004	<b>Reference</b>	4.6.1/ [6]																																																																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																																										
<b>Selection criteria</b>	PICS 6.2.1/13																																																																										
<b>Test Purpose name</b>	Mapping of SCI XML 'currentTariffCurrency/ communicationChargeSequenceCurrency/ tariffDuration' into ISUP APP crgt 'currentTariffCurrency/CommunicationChargeCurrency/ tariffDuration'																																																																										
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'tariffDuration' element is mapped into the ISUP APP encapsulated Charging ASE 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'tariffDuration' parameter.																																																																										
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency tariffDuration=[any value]																																																																										
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < tariffDuration>[any value] </ ...>																																																																										
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	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																																																																								
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APM(crga)	→		→ 200 OK INFO																																																																								

<b>TP number</b>	TP_221_005	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of SCI XML 'currentTariffCurrency/ communicationChargeSequenceCurrency/ subTariffControl' into ISUP APP crgt 'currentTariffCurrency/ CommunicationChargeCurrency/ <b>subTariffControl</b> '		
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'currentTariffCurrency' - 'communicationChargeSequenceCurrency' - 'subTariffControl' element is mapped into the ISUP APP encapsulated Charging ASE 'currentTariffCurrency' - 'CommunicationChargeCurrency' - 'subTariffControl' parameter.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency CommunicationChargeCurrency subTariffControl=[any value]		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < currentTariffCurrency> < communicationChargeSequenceCurrency> < subTariffControl>[any value] </ ...>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM  <b>CASE A</b> APM(crgt) APM(crga)	<b>MGCF</b> →  <b>CASE B</b> ACM(crgt) APM(crga)	<b>Mg</b> → INVITE  ← 183 Session Progress(crgt)  ← 180 Ringing(crgt)  ← 180 Ringing ← 183 Session Progress(crgt)  ← 180 Ringing ← 200 OK INVITE → ACK  ← INFO(crgt) → 200 OK INFO
			<b>Apply post test routine</b>

<b>TP number</b>	TP_221_006	<b>Reference</b>	4.6.1/ [6]																																																																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																																										
<b>Selection criteria</b>	PICS 6.2.1/13																																																																										
<b>Test Purpose name</b>	Mapping of SCI XML 'currentTariffCurrency/ tariffControllIndicators' into ISUP APP crgt 'currentTariffCurrency/ <b>tariffControllIndicators</b> '																																																																										
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'currentTariffCurrency' - 'tariffControllIndicators' element is mapped into the ISUP APP encapsulated Charging ASE 'currentTariffCurrency' - 'tariffControllIndicators' parameter.																																																																										
<b>ISUP Parameter values</b>	APP crgt tariffCurrency currentTariffCurrency tariffControllIndicators non-cyclicTariff = 1																																																																										
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<b>TP number</b>	TP_221_007	<b>Reference</b>	4.6.1/ [6]																																																																								
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<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																														
<b>Selection criteria</b>	PICS 6.2.1/13																														
<b>Test Purpose name</b>	Mapping of SCI XML 'currentTariffCurrency/callSetupChargeCurrency' into ISUP APP crgt 'tariffCurrency/ CommunicationChargeCurrency/ <b>callSetupChargeCurrency</b> '																														
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<b>TP number</b>	TP_221_009	<b>Reference</b>	4.6.1/ [6]																												
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																														
<b>Selection criteria</b>	PICS 6.2.1/13																														
<b>Test Purpose name</b>	Mapping of SCI XML 'nextTariffCurrency / communicationChargeSequenceCurrency/ currencyFactorScale' into ISUP APP crgt 'nextTariffCurrency / CommunicationChargeCurrency/ <b>currencyFactorScale</b> '																														
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'currencyFactorScale' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'currencyFactorScale' parameter.																														
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<b>TP number</b>	TP_221_010	<b>Reference</b>	4.6.1/ [6]																																																																								
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<b>TP number</b>	TP_221_011	<b>Reference</b>	4.6.1/ [6]																																																																								
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																																										
<b>Selection criteria</b>	PICS 6.2.1/13																																																																										
<b>Test Purpose name</b>	Mapping of SCI XML 'nextTariffCurrency / communicationChargeSequenceCurrency/ subTariffControl' into ISUP APP crgt 'nextTariffCurrency / CommunicationChargeCurrency/ subTariffControl'																																																																										
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'communicationChargeSequenceCurrency' - 'subTariffControl' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'CommunicationChargeCurrency' - 'subTariffControl' parameter.																																																																										
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency CommunicationChargeCurrency subTariffControl																																																																										
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < communicationChargeSequenceCurrency> < subTariffControl>																																																																										
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<b>TP number</b>	TP_221_012	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of SCI XML 'nextTariffCurrency / tariffControllIndicators' into ISUP APP crgt 'nextTariffCurrency / <b>tariffControllIndicators</b> '		
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'tariffControllIndicators' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'tariffControllIndicators' parameter.		
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency tariffControllIndicators non-cyclicTariff		
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < tariffControllIndicators>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM  <b>CASE A</b> APM(crgt) APM(crga)	<b>MGCF</b> →  <b>CASE B</b> ACM(crgt) APM(crga)	<b>Mg</b> → INVITE  ← 183 Session Progress(crgt)  ← 180 Ringing(crgt)  ← 180 Ringing ← 183 Session Progress(crgt)  ← 180 Ringing ← 200 OK INVITE → ACK  ← INFO(crgt) → 200 OK INFO
			<b>Apply post test routine</b>

<b>TP number</b>	TP_221_013	<b>Reference</b>	4.6.1/ [6]																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																							
<b>Selection criteria</b>	PICS 6.2.1/13																							
<b>Test Purpose name</b>	Mapping of SCI XML 'nextTariffCurrency / callAttemptChargeCurrency' into ISUP APP crgt 'nextTariffCurrency / <b>callAttemptChargeCurrency</b> '																							
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callAttemptChargeCurrency' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callAttemptChargeCurrency' - 'currencyFactorScale' parameter.																							
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency callAttemptChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																							
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < callAttemptChargeCurrency> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>																							
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IAM	→	→ INVITE																						
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<b>TP number</b>	TP_221_014	<b>Reference</b>	4.6.1/ [6]																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																							
<b>Selection criteria</b>	PICS 6.2.1/13																							
<b>Test Purpose name</b>	Mapping of SCI XML 'nextTariffCurrency / callSetupChargeCurrency' into ISUP APP crgt 'nextTariffCurrency / <b>callSetupChargeCurrency</b> '																							
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callSetupChargeCurrency' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'nextTariffCurrency' - 'callSetupChargeCurrency' - 'currencyFactorScale' parameter.																							
<b>ISUP Parameter values</b>	APP crgt tariffCurrency tariffSwitchCurrency nextTariffCurrency callSetupChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																							
<b>SIP Parameter values</b>	18x/200/INFO:  < messageType > < crgt> < chargingTariff> < tariffCurrency> < tariffSwitchCurrency> < nextTariffCurrency> < callSetupChargeCurrency> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>																							
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APM(crgt) APM(crga)	← →	← INFO(crgt) → 200 OK INFO																						

<b>TP number</b>	TP_221_015	<b>Reference</b>	4.6.1/ [6]																																																					
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																																																							
<b>Selection criteria</b>	PICS 6.2.1/13																																																							
<b>Test Purpose name</b>	Mapping of SCI XML 'tariffSwitchCurrency/ tariffSwitchoverTime' into ISUP APP crgt 'tariffSwitchCurrency / <b>tariffSwitchoverTime</b> '																																																							
<b>Test Purpose</b>	Ensure that on receipt of a 183 Session Progress, 180 Ringing or INFO request containing a XML SCI SIP message body an APM or ACM message is sent and an ISUP APP parameter is present. The XML SCI 'tariffSwitchCurrency' - 'tariffSwitchOverTime' element is mapped into the ISUP APP encapsulated Charging ASE 'tariffSwitchCurrency' - 'tariffSwitchoverTime' parameter.																																																							
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<b>CASE B</b>																																																								
ACM(crgt)	←	← 180 Ringing(crgt)																																																						
ACM(crga)	→																																																							
<b>CASE C</b>																																																								
ACM	←	← 180 Ringing																																																						
CPG(crgt)	←	← 183 Session Progress(crgt)																																																						
APM(crga)	→																																																							
<b>CASE D</b>																																																								
ACM	←	← 180 Ringing																																																						
ANM	←	← 200 OK INVITE																																																						
		→ ACK																																																						
APM(crgt)	←	← INFO(crgt)																																																						
APM(crga)	→	→ 200 OK INFO																																																						

<b>TP number</b>	TP_221_020	<b>Reference</b>	4.6.1/ [6]																												
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																														
<b>Selection criteria</b>	PICS 6.2.1/13																														
<b>Test Purpose name</b>	Mapping of SCI XML 'aocrg / chargingControllIndicators' into ISUP APP aocrgt <b>'chargingControllIndicators'</b>																														
<b>Test Purpose</b>	Ensure that on receipt of an INFO request containing a XML SCI SIP message body in the confirmed dialogue an ISUP APM message is sent and an ISUP APP parameter is present. The XML SCI 'aocrg' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' element is mapped into the ISUP APP encapsulated Charging ASE 'aocrg' - 'chargingControllIndicators' - 'immediateChangeOfActuallyAppliedTariff' parameter.																														
<b>ISUP Parameter values</b>	APM APP aocrg chargingControllIndicators immediateChangeOfActuallyAppliedTariff																														
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < chargingControllIndicators> < immediateChangeOfActuallyAppliedTariff>																														
<b>Comments</b>																															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">180 Ringing</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→</td> <td style="text-align: center;">ACK</td> </tr> <tr> <td style="text-align: center;">APM(aocrg)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">INFO(aocrg)</td> </tr> <tr> <td style="text-align: center;">APM(crga)</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">200 OK INFO</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→	INVITE	ACM	←	←	180 Ringing	ANM	←	←	200 OK INVITE			→	ACK	APM(aocrg)	←	←	INFO(aocrg)	APM(crga)	→	→	200 OK INFO	<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																												
IAM	→	→	INVITE																												
ACM	←	←	180 Ringing																												
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APM(aocrg)	←	←	INFO(aocrg)																												
APM(crga)	→	→	200 OK INFO																												

<b>TP number</b>	TP_221_021	<b>Reference</b>	4.6.1/ [6]																												
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/																														
<b>Selection criteria</b>	PICS 6.2.1/13																														
<b>Test Purpose name</b>	Mapping of SCI XML 'aocrg / addOnCharge / addOnChargeCurrency' into ISUP APP aocrgt ' <b>addOnChargeCurrency</b> '																														
<b>Test Purpose</b>	Ensure that on receipt of an INFO request containing a XML SCI SIP message body in the confirmed dialogue an ISUP APM message is sent and an ISUP APP parameter is present. The XML SCI 'aocrg' - 'addOnCharge' - 'addOnChargeCurrency' element is mapped into the ISUP APP encapsulated Charging ASE 'aocrg' - 'addOnChargeCurrency' parameter.																														
<b>ISUP Parameter values</b>	APM APP aocrg addOnChargeCurrency currencyFactorScale currencyFactor=[any value] currencyScale=[any value]																														
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < addOnCharge> < addOnChargeCurrency> < currencyFactor>[any value] </ ...> < currencyScale>[any value]</ ...>																														
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	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																												
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APM(crga)	→		→ 200 OK INFO																												

<b>TP number</b>	TP_221_022	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of SCI XML 'aocrg / originationIdentification' into ISUP APP aocrgt 'originationIdentification'		
<b>Test Purpose</b>	Ensure that on receipt of an INFO request containing a XML SCI SIP message body in the confirmed dialogue an ISUP APM message is sent and an ISUP APP parameter is present. The XML SCI 'aocrg' - 'originationIdentification' element is mapped into the ISUP APP encapsulated Charging ASE 'aocrg' - 'originationIdentification' parameter.		
<b>ISUP Parameter values</b>	APM APP aocrg originationIdentification networkIdentification referenceID		
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < originationIdentification> < networkIdentification> < referenceID>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE
	ACM ←		← 180 Ringing
	ANM ←		← 200 OK INVITE
			→ ACK
	APM(aocrg) ←		← INFO(aocrg)
	APM(crga) →		→ 200 OK INFO
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_221_023	<b>Reference</b>	4.6.1/ [6]
<b>TSS reference</b>	ISUP-SIP/Basic call/Charging/		
<b>Selection criteria</b>	PICS 6.2.1/13		
<b>Test Purpose name</b>	Mapping of SCI XML 'aocrg / currency' into ISUP APP aocrgt 'currency'		
<b>Test Purpose</b>	Ensure that on receipt of an INFO request containing a XML SCI SIP message body in the confirmed dialogue an ISUP APM message is sent and an ISUP APP parameter is present. The XML SCI 'aocrg' - 'currency' element is mapped into the ISUP APP encapsulated Charging ASE 'aocrg' - 'currency' parameter.		
<b>ISUP Parameter values</b>	APM APP aocrg currency		
<b>SIP Parameter values</b>	INFO:  < messageType > < aocrg> < currency>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM →		→ INVITE
	ACM ←		← 180 Ringing
	ANM ←		← 200 OK INVITE
			→ ACK
	APM(aocrg) ←		← INFO(aocrg)
	APM(crga) →		→ 200 OK INFO
	<b>Apply post test routine</b>		

## 6.2 Supplementary Services

### 6.2.1 Void

### 6.2.2 Connected line presentation and restriction (COLP/COLR)

<b>TP number</b>	TP_302_001	<b>Reference</b>	7.4.2																													
<b>TSS reference</b>	PSTN-SS/COL/																															
<b>Selection criteria</b>	NOT PICS 6.3.4/1 AND PICS 6.3.2/2																															
<b>Test Purpose name</b>	The SUT does not invoke the COLP service																															
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request ant the SUT does not invoke the COLP service, an IAM is sent and the Connected Line Identity Request indicator" field of the Optional forward call indicators parameter of the IAM to 'not requested'. A received connected number is not interworked.																															
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicators = 'not requested' <b>ANM/CON:</b> Connected number present																															
<b>SIP Parameter values</b>	200 OK: P-Asserted-Identity not present																															
<b>Comments</b>																																
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33%;">Mg</th> <th style="text-align: center; width: 33%;">MGCF</th> <th style="text-align: center; width: 33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		<b>CASE A</b>			180 Ringing	←	ACM	200 OK (INVITE)	←	ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	CON	ACK	→		<b>Apply post test routine</b>
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<b>CASE B</b>																																
200 OK (INVITE)	←	CON																														
ACK	→																															

<b>TP number</b>	TP_302_002	<b>Reference</b>	7.4.2.1.2																													
<b>TSS reference</b>	PSTN-SS/COL/																															
<b>Selection criteria</b>	PICS 6.3.4/1 AND PICS 6.3.2/2																															
<b>Test Purpose name</b>	The SUT invokes the COLP service presentation allowed																															
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request ant the SUT invokes the COLP service, an IAM is sent and the Connected Line Identity Request indicator" field of the Optional forward call indicators parameter of the IAM to 'requested'. A received connected number presentation allowed is interworked.</p> <p><b>Connected number</b></p> <p>Nature of Address Indicator equal to</p> <ul style="list-style-type: none"> <li>• 'national (significant) number' 200 OK INVITE P-Asserted-Identity Add CC (of the country where the SUT is located) to Connected number address signals to construct an E.164 number in the URI. Prefix number with '+' in the format '+ CC NDC SN.'</li> <li>• 'international number' 200 OK INVITE P-Asserted-Identity Map complete Connected number address signals to construct an E.164 number in the URI. Prefix number with "+" in the Format '+ CC NDC SN'.</li> </ul> <p>Address presentation restriction indicator</p> <ul style="list-style-type: none"> <li>• 'presentation allowed' Privacy header is not present or if present the value is not equal to 'id'.</li> </ul>																															
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicators = 'requested' <b>ANM/CON:</b> Connected number present																															
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity present <b>200 OK:</b> P-Asserted-Identity present																															
<b>Comments</b>																																
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">Mg</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← CON</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>CASE A</b>			180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		<b>CASE B</b>			200 OK (INVITE)	←	← CON	ACK	→		<b>Apply post test routine</b>
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<b>CASE B</b>																																
200 OK (INVITE)	←	← CON																														
ACK	→																															

<b>TP number</b>	TP_302_003	<b>Reference</b>	7.4.2.1.2																													
<b>TSS reference</b>	PSTN-SS/COL/																															
<b>Selection criteria</b>	PICS 6.3.4/1 AND PICS 6.3.2/2																															
<b>Test Purpose name</b>	The SUT invokes the COLP service presentation restricted																															
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request ant the SUT invokes the COLP service, an IAM is sent and the Connected Line Identity Request indicator" field of the Optional forward call indicators parameter of the IAM to 'requested'. A received connected number presentation restricted is interworked.</p> <p><b>Connected number</b></p> <p>Nature of Address Indicator equal to:</p> <ul style="list-style-type: none"> <li>• 'national (significant) number' 200 OK INVITE P-Asserted-Identity Add CC (of the country where the SUT is located) to Connected number address signals to construct an E.164 number in the URI. Prefix number with '+' in the format '+ CC NDC SN.'</li> <li>• 'international number' 200 OK INVITE P-Asserted-Identity Map complete Connected number address signals to construct an E.164 number in the URI. Prefix number with "+" in the Format '+ CC NDC SN'.</li> </ul> <p>Address presentation restriction indicator:</p> <ul style="list-style-type: none"> <li>• 'presentation restricted' Privacy: id.</li> </ul>																															
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicators = 'requested' <b>ANM/CON:</b> Connected number present																															
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity present 200 OK: P-Asserted-Identity present Privacy: id																															
<b>Comments</b>																																
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<b>CASE B</b>																																
200 OK (INVITE)	←	← CON																														
ACK	→																															

<b>TP number</b>	TP_302_004	<b>Reference</b>	7.4.2.2																		
<b>TSS reference</b>	PSTN-SS/COL/																				
<b>Selection criteria</b>	PICS 6.3.2/2																				
<b>Test Purpose name</b>	COL request is set to not requested																				
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'not requested', no P-Asserted-Identity received in a provisional or successful final response is present. No connected number is sent in an ANM or CON.																				
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<b>SIP Parameter values</b>																					
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IAM	→	→ INVITE ← 100 Trying																			
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ANM	←	← 200 OK (INVITE) → ACK																			
<b>CASE B</b>																					
CON	←	← 200 OK (INVITE) → ACK																			
	<b>Apply post test routine</b>																				

<b>TP number</b>	TP_302_004A	<b>Reference</b>	7.4.2.2																		
<b>TSS reference</b>	PSTN-SS/COL/																				
<b>Selection criteria</b>	PICS 6.3.2/2																				
<b>Test Purpose name</b>	COL request is set to not requested P-Asserted-Identity is not mapped																				
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'not requested', a P-Asserted-Identity received in a provisional or successful final response is present. No connected number is sent in an ANM or CON.																				
<b>ISUP Parameter values</b>																					
<b>SIP Parameter values</b>	200 OK: P-Asserted-Identity present																				
<b>Comments</b>																					
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">IAM</td> <td style="width: 33%; text-align: center;">→</td> <td style="width: 33%; text-align: center;">→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>CON</td> <td style="text-align: center;">←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </table>			IAM	→	→ INVITE ← 100 Trying	<b>CASE A</b>			ACM	←	← 180 Ringing	ANM	←	← 200 OK (INVITE) → ACK	<b>CASE B</b>			CON	←	← 200 OK (INVITE) → ACK
IAM	→	→ INVITE ← 100 Trying																			
<b>CASE A</b>																					
ACM	←	← 180 Ringing																			
ANM	←	← 200 OK (INVITE) → ACK																			
<b>CASE B</b>																					
CON	←	← 200 OK (INVITE) → ACK																			
	<b>Apply post test routine</b>																				

<b>TP number</b>	TP_302_004B	<b>Reference</b>	7.4.2.2																				
<b>TSS reference</b>	PSTN-SS/COL/																						
<b>Selection criteria</b>	PICS 6.3.2/2																						
<b>Test Purpose name</b>	COL request is set to requested P-Asserted-Identity is not received a network provided Connected number is sent																						
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested', no P-Asserted-Identity received in a provisional or successful final response is present. A network provided connected number is sent in an ANM or CON. <ul style="list-style-type: none"> <li>• The Nature of address indicator is set to = spare</li> <li>• Numbering plan indicator = spare</li> <li>• Address presentation restriction indicator = Address not available</li> <li>• Screening indicator = network provided</li> <li>• Address signals: not present.</li> </ul>																						
<b>ISUP Parameter values</b>	ANM/CON: Connected number																						
<b>SIP Parameter values</b>																							
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>CASE A</b></td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td colspan="3"><b>CASE B</b></td> </tr> <tr> <td>CON ←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE ← 100 Trying	<b>CASE A</b>			ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE) → ACK	<b>CASE B</b>			CON ←		← 200 OK (INVITE) → ACK	<b>Apply post test routine</b>
ISUP	MGCF	Mg																					
IAM →		→ INVITE ← 100 Trying																					
<b>CASE A</b>																							
ACM ←		← 180 Ringing																					
ANM ←		← 200 OK (INVITE) → ACK																					
<b>CASE B</b>																							
CON ←		← 200 OK (INVITE) → ACK																					

<b>TP number</b>	TP_302_005	<b>Reference</b>	7.4.2.2											
<b>TSS reference</b>	PSTN-SS/COL/													
<b>Selection criteria</b>	PICS 6.3.2/2													
<b>Test Purpose name</b>	COL request is set to requested Terminating identity received in a 180 response													
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested', the P-Asserted-Identity received in a provisional response is sent in the <b>ANM</b> .  <b>Coding of Connected number parameter</b> Number incomplete indicator equal to 'Complete' Numbering Plan Indicator equal to 'ISDN/Telephony ( <i>Recommendation E.164</i> )' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then set to "national (significant) number" else set to "international number" Address Presentation Restricted Indicator derived from the Privacy header according the mapping as described in table 6.2.2-1.													
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested <b>ANM:</b> Connected number Presentation restriction <b>Privacy_VA</b>													
<b>SIP Parameter values</b>	180: P-Asserted-Identity													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE ← 100 Trying	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE) → ACK	<b>Apply post test routine</b>
ISUP	MGCF	Mg												
IAM →		→ INVITE ← 100 Trying												
ACM ←		← 180 Ringing												
ANM ←		← 200 OK (INVITE) → ACK												

<b>TP number</b>	TP_302_006	<b>Reference</b>	7.4.2.2												
<b>TSS reference</b>	PSTN-SS/COL/														
<b>Selection criteria</b>	PICS 6.3.2/2														
<b>Test Purpose name</b>	COL request is set to requested Terminating identity received in a 200 OK response														
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested', the P-Asserted-Identity received in a 200 OK response is sent in the <b>ANM</b>.</p> <p>Coding of <b>Connected number parameter</b></p> <p>Number incomplete indicator equal to 'Complete'</p> <p>Numbering Plan Indicator equal to 'ISDN/Telephony (<i>Recommendation E.164</i>)'</p> <p>Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then set to "national (significant) number"</p> <p>else set to "international number"</p> <p>Address Presentation Restricted Indicator derived from the Privacy header according the mapping as described in table 6.2.2-1.</p>														
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested</p> <p><b>ANM:</b> Connected number Presentation restriction <b>Privacy_VA</b></p>														
<b>SIP Parameter values</b>	200: P-Asserted-Identity														
<b>Comments</b>															
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ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
ACM	←	← 180 Ringing													
ANM	←	← 200 OK (INVITE) → ACK													

<b>TP number</b>	TP_302_007	<b>Reference</b>	7.4.2.2									
<b>TSS reference</b>	PSTN-SS/COL/											
<b>Selection criteria</b>	PICS 6.3.2/2											
<b>Test Purpose name</b>	COL request is set to requested Terminating identity received in a 200 OK response											
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested', if no provisional response was received the P-Asserted-Identity received in a 200 OK response is sent in the <b>CON</b>.</p> <p>Coding of <b>Connected number parameter</b></p> <p>Number incomplete indicator equal to 'Complete'</p> <p>Numbering Plan Indicator equal to 'ISDN/Telephony (<i>Recommendation E.164</i>)'</p> <p>Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then set to "national (significant) number"</p> <p>else set to "international number"</p> <p>Address Presentation Restricted Indicator derived from the Privacy header according the mapping as described in table 6.2.2-1.</p>											
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested</p> <p><b>CON:</b> Connected number Presentation restriction <b>Privacy_VA</b></p>											
<b>SIP Parameter values</b>	200: P-Asserted-Identity											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>CON</td> <td>←</td> <td>← 200 OK (INVITE) → ACK</td> </tr> </tbody> </table> <p><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	CON	←	← 200 OK (INVITE) → ACK		
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
CON	←	← 200 OK (INVITE) → ACK										

**Table 6.2.2-1: Mapping of Privacy value into Address presentation restriction indicator**

<b>Privacy_VA</b>	<b>Privacy value</b>	<b>Address Presentation Restricted Indicator</b>
Privacy_VA_01	Header	Presentation restricted
Privacy_VA_02	User	Presentation restricted
Privacy_VA_03	None	Presentation allowed
Privacy_VA_04	Id	Presentation restricted
Privacy_VA_05	Privacy header not present	Presentation allowed

### 6.2.3 Malicious call identification

<b>TP number</b>	TP_303_001	<b>Reference</b>	7.4.4
<b>TSS reference</b>	PSTN-SS/MCID/		
<b>Selection criteria</b>	NOT PICS 6.3.2/3		
<b>Test Purpose name</b>	MCID request before ACM		
<b>Test Purpose</b>	Ensure that a MCID request before an ACM received in an ISUP IDR is discarded without disrupt the call setup procedure. The sending of an IRS is optional.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b></p> <p>INVITE → IAM 100 Trying ←</p> <p><b>CASE A</b></p> <p>← IDR → IRS</p> <p><b>CASE B</b></p> <p>← IDR</p>	<b>MGCF</b>	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_303_002	<b>Reference</b>	7.4.4
<b>TSS reference</b>	PSTN-SS/MCID/		
<b>Selection criteria</b>	NOT PICS 6.3.2/3		
<b>Test Purpose name</b>	MCID request after ACM		
<b>Test Purpose</b>	Ensure that a MCID request after an ACM received in an ISUP IDR is discarded without disrupt the call setup procedure. The sending of an IRS is optional.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b></p> <p>INVITE → IAM 100 Trying ← 180 Ringing ←</p> <p><b>CASE A</b></p> <p>← ACM ← IDR → IRS</p> <p><b>CASE B</b></p> <p>← IDR</p>	<b>MGCF</b>	<b>ISUP</b>
	<b>Apply post test routine</b>		

## 6.2.4 Subaddressing (SUB)

<b>TP number</b>	TP_304_001	<b>Reference</b>	7.4.5.2						
<b>TSS reference</b>	PSTN-SS/SUB/								
<b>Selection criteria</b>	PICS 6.3.2/4								
<b>Test Purpose name</b>	isub parameter in the To header is mapped into Called party Subaddress								
<b>Test Purpose</b>	<p>Ensure that on receipt of an initial INVITE request, an IAM is sent. The isub parameter present in the To header is mapped into the Called party Subaddress covered in an Access Transport parameter in the sent IAM. If the isub-encoding parameter is present, the values 'nsap-ia5', 'nsap-bcd' or 'nsap' are relevant for mapping.</p> <p>Encoding of the Subaddress in the IAM: Type of Subaddress = 'NSAP' Subaddress digits derived from the uric of the isub parameter.</p>								
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Called party subaddress Type of Subaddress = NSAP Subaddress digits derived from the uric of the isub parameter								
<b>SIP Parameter values</b>	<b>INVITE:</b> To: isub uric Subaddress digits isub-encoding: Not present nsap-ia5 nsap-bcd nsap								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> </table> <p><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM		
Mg	MGCF	ISUP							
INVITE 100 Trying	→ ←	→ IAM							

<b>TP number</b>	TP_304_002	<b>Reference</b>	7.4.5.2						
<b>TSS reference</b>	PSTN-SS/SUB/								
<b>Selection criteria</b>	PICS 6.3.2/4								
<b>Test Purpose name</b>	isub parameter in the To header is not mapped								
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request, an IAM is sent. The isub parameter present in the To header is not mapped into the Called party Subaddress if the value of the <b>isub-encoding</b> parameter is other then 'nsap-ia5', 'nsap-bcd' or 'nsap'.								
<b>ISUP Parameter values</b>									
<b>SIP Parameter values</b>	<b>INVITE:</b> To: isub uric Subaddress digits isub-encoding: <any token>								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> </table> <p><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM		
Mg	MGCF	ISUP							
INVITE 100 Trying	→ ←	→ IAM							

<b>TP number</b>	TP_304_003	<b>Reference</b>	7.4.5.2											
<b>TSS reference</b>	PSTN-SS/SUB/													
<b>Selection criteria</b>	PICS 6.3.2/4													
<b>Test Purpose name</b>	isub parameter in the P-Asserted-Identity header is mapped into Calling party Subaddress													
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request, an IAM is sent. The isub parameter present in the P-Asserted-Identity header is mapped into the Calling party Subaddress covered in an Access Transport parameter in the sent IAM. If the <b>isub-encoding</b> parameter is present, the values 'nsap-ia5', 'nsap-bcd' or 'nsap' are relevant for mapping.  Encoding of the Subaddress: Type of Subaddress = 'NSAP' Subaddress digits derived from the uric of the isub parameter.													
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Calling party subaddress Type of Subaddress = NSAP Subaddress digits derived from the uric of the isub parameter													
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: isub uric Subaddress digits isub-encoding: Not present nsap-ia5 nsap-bcd nsap													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>			
Mg	MGCF	ISUP												
INVITE	→	→ IAM												
100 Trying	←													
<b>Apply post test routine</b>														

<b>TP number</b>	TP_304_004	<b>Reference</b>	7.4.5.2											
<b>TSS reference</b>	PSTN-SS/SUB/													
<b>Selection criteria</b>	6.3.2/4													
<b>Test Purpose name</b>	isub parameter in the P-Asserted-Identity header in the INVITE is not mapped													
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request, an IAM is sent. The isub parameter present in the P-Asserted-Identity header is not mapped into the Calling party Subaddress if the value of the <b>isub-encoding</b> parameter is other then 'nsap-ia5', 'nsap-bcd' or 'nsap'.													
<b>ISUP Parameter values</b>														
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: isub uric Subaddress digits isub-encoding: <any token>													
<b>Comments</b>														
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Mg	MGCF	ISUP												
INVITE	→	→ IAM												
100 Trying	←													
<b>Apply post test routine</b>														

<b>TP number</b>	TP_304_005	<b>Reference</b>	7.4.5.2															
<b>TSS reference</b>	PSTN-SS/SUB/																	
<b>Selection criteria</b>	PICS 6.3.2/4																	
<b>Test Purpose name</b>	Connected party Subaddress in the ANM is mapped into the isub parameter in the P-Asserted-Identity header in the 200 OK																	
<b>Test Purpose</b>	Ensure that on receipt of an ANM message containing a Connected party Subaddress parameter in an Access Transport parameter, a 200 OK (INVITE) is sent and the P-Asserted-Identity header contains an isub parameter, the uric value is derived from the Connected Subaddress digits of the Connected party subaddress digits.																	
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport Connected party subaddress Type of Subaddress = NSAP Subaddress digits																	
<b>SIP Parameter values</b>	200 OK: P-Asserted-Identity: isub uric digits derived from the Connected party Subaddress digits																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>← ANM</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→			
Mg	MGCF	ISUP																
INVITE	→	→ IAM																
180 Ringing	←	← ACM																
200 OK (INVITE)	←	← ANM																
ACK	→																	

<b>TP number</b>	TP_304_006	<b>Reference</b>	7.4.5.2															
<b>TSS reference</b>	PSTN-SS/SUB/																	
<b>Selection criteria</b>	PICS 6.3.2/4																	
<b>Test Purpose name</b>	Connected party Subaddress in the ANM is not mapped																	
<b>Test Purpose</b>	Ensure that on receipt of an ANM message containing a Connected party Subaddress parameter in an Access Transport parameter, a 200 OK (INVITE) is sent and the Connected party subaddress is not mapped if the Type of subaddress is not equal 'NSAP'.																	
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport Connected party subaddress Type of Subaddress other then NSAP																	
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>← ANM</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→			
Mg	MGCF	ISUP																
INVITE	→	→ IAM																
180 Ringing	←	← ACM																
200 OK (INVITE)	←	← ANM																
ACK	→																	

<b>TP number</b>	TP_304_007	<b>Reference</b>	7.4.5.3									
<b>TSS reference</b>	PSTN-SS/SUB/											
<b>Selection criteria</b>	PICS 6.3.2/4											
<b>Test Purpose name</b>	Mapping of Called Party subaddress in the IAM into isub parameter in the To header in the INVITE											
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Called party subaddress in the Access Transport parameter, an initial INVITE is sent. The Called party subaddress is mapped into an isub parameter present in the <b>To header</b> in the INVITE if the Type of number of the subaddress is set to 'NSAP', the isub-encoding parameter is set to 'nsap-ia5'.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Called party subaddress Type of Subaddress = NSAP Subaddress digits											
<b>SIP Parameter values</b>	<b>INVITE:</b> To: isub uric digits derived from the Called party Subaddress digits isub-encoding=nsap-ia5											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_304_008	<b>Reference</b>	7.4.5.3									
<b>TSS reference</b>	PSTN-SS/SUB/											
<b>Selection criteria</b>	PICS 6.3.2/4											
<b>Test Purpose name</b>	No mapping of Called Party subaddress in the IAM											
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Called party subaddress in the Access Transport parameter, an initial INVITE is sent. The Called party subaddress is not mapped into an isub parameter present in the To header of the INVITE if the Type of number of the subaddress is not equal to 'NSAP'.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Called party subaddress Type of Subaddress not NSAP Subaddress digits											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_304_009	<b>Reference</b>	7.4.5.3
<b>TSS reference</b>	PSTN-SS/SUB/		
<b>Selection criteria</b>	PICS 6.3.2/4		
<b>Test Purpose name</b>	Mapping of Calling Party subaddress in the IAM into isub parameter in the P-Asserted-Identity header in the INVITE		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Calling party subaddress in the Access Transport parameter, an initial INVITE is sent. The Calling party subaddress is mapped into an isub parameter present in the <b>P-Asserted-Identity header</b> in the INVITE if the Type of number of the subaddress is equal to 'NSAP', the isub-encoding parameter is set to 'nsap-ia5'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Calling party subaddress Type of Subaddress = NSAP Subaddress digits		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: isub uric digits derived from the Calling party Subaddress digits isub-encoding=nsap-ia5		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

<b>TP number</b>	TP_304_010	<b>Reference</b>	7.4.5.3
<b>TSS reference</b>	PSTN-SS/SUB/		
<b>Selection criteria</b>	PICS 6.3.2/4		
<b>Test Purpose name</b>	No mapping of Calling Party subaddress in the IAM		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Calling party subaddress in the Access Transport parameter, an initial INVITE is sent. The Calling party subaddress is not mapped into an isub parameter present in the P-Asserted-Identity header in the INVITE if the Type of number of the subaddress is not equal to 'NSAP'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Access Transport Calling party subaddress Type of Subaddress not NSAP Subaddress digits		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF → Apply post test routine	Mg → INVITE ← 100 Trying

<b>TP number</b>	TP_304_011	<b>Reference</b>	7.4.5.3														
<b>TSS reference</b>	PSTN-SS/SUB/																
<b>Selection criteria</b>	PICS 6.3.2/4																
<b>Test Purpose name</b>	Mapping of isub parameter in the 200 OK into the Connected party subaddress in the ANM																
<b>Test Purpose</b>	Ensure that on receipt of an isub parameter present in the P-Asserted-Identity in a 200 OK (INVITE), an ANM is sent and the received Subaddress is mapped in the Connected party subaddress present in the Access Transport parameter in the ANM. If the isub-encoding parameter is present, the values 'nsap-ia5', 'nsap-bcd' or 'nsap' are relevant for mapping.																
<b>ISUP Parameter values</b>	<b>ANM:</b> Access Transport Connected party subaddress Type of Subaddress = NSAP Subaddress digits derived from the uric of the isub parameter																
<b>SIP Parameter values</b>	200 OK: P-Asserted-Identity: isub uric Subaddress digits isub-encoding: Not present nsap-ia5 nsap-bcd nsap																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	<b>Mg</b>	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE)			→ ACK	
ISUP	MGCF	<b>Mg</b>															
IAM →		→ INVITE															
ACM ←		← 180 Ringing															
ANM ←		← 200 OK (INVITE)															
		→ ACK															

<b>TP number</b>	TP_304_012	<b>Reference</b>	7.4.5.3														
<b>TSS reference</b>	PSTN-SS/SUB/																
<b>Selection criteria</b>	PICS 6.3.2/4																
<b>Test Purpose name</b>	No mapping of isub parameter in the 200 OK into the Connected party subaddress in the ANM																
<b>Test Purpose</b>	Ensure that on receipt of an isub parameter present in the P-Asserted-Identity in a 200 OK (INVITE), an ANM is sent and the received Subaddress is not mapped in the Connected party subaddress present in the Access Transport parameter in the ANM If the isub-encoding parameter is present and the value is not equal to 'nsap-ia5', 'nsap-bcd' or 'nsap'.																
<b>ISUP Parameter values</b>																	
<b>SIP Parameter values</b>	200 OK: P-Asserted-Identity: isub isub-encoding: Not nsap-ia5, nsap-bcd, nsap																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	<b>Mg</b>	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE)			→ ACK	
ISUP	MGCF	<b>Mg</b>															
IAM →		→ INVITE															
ACM ←		← 180 Ringing															
ANM ←		← 200 OK (INVITE)															
		→ ACK															

## 6.2.5 Call Forwarding Busy (CFB)/ Call Forwarding No Reply (CFNR) / Call Forwarding Unconditional (CFU)

<b>TP number</b>	TP_305_001	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2														
<b>TSS reference</b>	PSTN-SS/CDIV/																
<b>Selection criteria</b>	PICS 6.3.2/5																
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into early ACM Redirection number and Redirecting Reason																
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) an ACM is sent. The called party status is set to 'no indication'. The History-Info entry following the last History-Info entry containing a Reason header is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>If CC is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged and sent in the Address signal of the Redirection number.</li> </ul> <p>The Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.2.5-1.</p>																
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Redirection number Nature of address indicator Address signal Derived from the last History-Info entry Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>																
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td></td> <td></td> <td colspan="2"><b>Apply post test routine</b></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	ACM	←		← 181 Call Is Being Forwarded			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>														
IAM	→		→ INVITE														
ACM	←		← 181 Call Is Being Forwarded														
		<b>Apply post test routine</b>															

**Table 6.2.5-1: Mapping of Reason header into Redirecting reason**

<b>CAUSE</b>	<b>CAUSE_value</b>	<b>Redirecting_Reason</b>
VA_01	302	Deflection immediate response
VA_02	486	User busy
VA_03	408	No reply
VA_04	503	Mobile subscriber not reachable

<b>TP number</b>	TP_305_001A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2														
<b>TSS reference</b>	PSTN-SS/CDIV/																
<b>Selection criteria</b>	PICS 6.3.2/5																
<b>Test Purpose name</b>	Mapping of 181 into early ACM Generic notification is set to 'Call is diverting'																
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) History-Info header, an ACM is sent. The Generic notification indicator is set to 'Call is diverting'.																
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Generic Notification call is diverting																
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td></td> <td></td> <td colspan="2"><b>Apply post test routine</b></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	ACM	←		← 181 Call Is Being Forwarded			<b>Apply post test routine</b>	
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>														
IAM	→		→ INVITE														
ACM	←		← 181 Call Is Being Forwarded														
		<b>Apply post test routine</b>															

<b>TP number</b>	TP_305_002	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 Privacy header into early ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header, an ACM is sent. The called party status is set to 'no indication'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.2.5-2.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	181: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 181 Call Is Being Forwarded	<b>Mg</b> <i>Apply post test routine</i>

**Table 6.2.5-2: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation not allowed
VA_02	session	presentation not allowed
VA_03	header	presentation not allowed
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_003	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into early ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing an escaped Privacy header field in the last hi-targeted-to-uri, an ACM is sent. The called party status is set to 'no indication'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-3.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any >; index=1, <sip:any proper URI?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>	Privacy and Reason header can appear in reverse order		
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 181 Call Is Being Forwarded	<b>Mg</b> <i>Apply post test routine</i>

**Table 6.2.5-3: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation allowed without redirection number
VA_02	session	presentation allowed without redirection number
VA_03	header	presentation allowed without redirection number
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_004	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3							
<b>TSS reference</b>	PSTN-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/5									
<b>Test Purpose name</b>	Mapping of 181 Privacy header into early ACM Redirection number restriction									
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header, an ACM is sent. The called party status is set to 'no indication'.</p> <p>The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-4.</p>									
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	181: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call Is Being Forwarded</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 181 Call Is Being Forwarded
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 181 Call Is Being Forwarded								

<b>TP number</b>	TP_305_005	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3							
<b>TSS reference</b>	PSTN-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/5									
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into early ACM Redirection number restriction									
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded), an ACM is sent. The called party status is set to 'no indication'.</p> <p>The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-4.</p>									
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = no indication Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <b>Priv-value</b> >; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call Is Being Forwarded</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 181 Call Is Being Forwarded
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 181 Call Is Being Forwarded								

**Table 6.2.5-4: Mapping of Privacy value into Redirection number restriction**

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	None or absent	Presentation allowed or absent

<b>TP number</b>	TP_305_006	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.7
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into CPG Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.2.5-5.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

**Table 6.2.5-5: Mapping of Reason header into Redirecting reason**

<b>CAUSE</b>	<b>CAUSE_value</b>	<b>Redirecting_Reason</b>
VA_01	302	Deflection immediate response
VA_02	486	User busy
VA_03	408	No reply
VA_04	503	Mobile subscriber not reachable

<b>TP number</b>	TP_305_006A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.7
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into CPG Generic notification is set to 'Call is diverting'		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The Event indicator is set to 'Progress'. The Generic notification indicator is set to 'Call is diverting'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic Notification call is diverting		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

<b>TP number</b>	TP_305_007	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.7
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.5/1 AND PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri escaped Reason header into CPG Event indicator		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The Event indicator is set to ' <b>Redirecting Reason</b> ' as indicated in table 6.2.5-6.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = <b>Redirecting Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 180 Ringing ← 181 Call Is Being Forwarded	<b>Mg</b>  Apply post test routine

Table 6.2.5-6: Mapping of Reason header into Event indicator

	<b>CAUSE_value</b>	<b>Redirecting Reason</b>
VA_01	486	User busy
VA_02	408	No reply

<b>TP number</b>	TP_305_007A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.7
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.5/1 AND PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into CPG Redirection number		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The History-Info entry following the last History-Info entry containing a Reason header is mapped into the Redirection number: <ul style="list-style-type: none"><li>• If CC is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string.</li><li>• If the country code is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged.</li></ul>		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number Derived from the last History-Info entry		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 180 Ringing ← 181 Call Is Being Forwarded	<b>Mg</b>  Apply post test routine

<b>TP number</b>	TP_305_008	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 181 Privacy header into CPG Notification subscription options														
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header, a CPG is sent. The Event indicator is set to 'Progress'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.2.5-7.</p>														
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>														
<b>SIP Parameter values</b>	181: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="margin-left: auto; margin-right: auto;"> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ACM ←		← 180 Ringing													
CPG ←		← 181 Call Is Being Forwarded													

**Table 6.2.5-7: Mapping of Privacy value into Notification subscription options**

<b>CAUSE</b>	<b>Priv-value</b>	<b>SUBS_options</b>
VA_01	history	presentation not allowed
VA_02	session	presentation not allowed
VA_03	header	presentation not allowed
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_009	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into CPG Notification subscription options														
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing an escaped Privacy header field in the last hi-targeted-to-uri, a CPG is sent. The Event indicator is set to 'Progress'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-8.</p>														
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>														
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=Priv-value>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="margin-left: auto; margin-right: auto;"> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ACM ←		← 180 Ringing													
CPG ←		← 181 Call Is Being Forwarded													

**Table 6.2.5-8: Mapping of Privacy value into Notification subscription options**

<b>CAUSE</b>	<b>Priv-value</b>	<b>SUBS_options</b>
VA_01	history	presentation allowed without redirection number
VA_02	session	presentation allowed without redirection number
VA_03	header	presentation allowed without redirection number
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_010	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header in the message body, a CPG is sent. The Event indicator is set to 'Progress'. The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-9.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	181: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

<b>TP number</b>	TP_305_011	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded), a CPG is sent. The Event indicator is set to 'Progress'. The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-9.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <i>Priv-value</i> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

**Table 6.2.5-9: Mapping of Privacy value into Redirection number restriction**

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	None or absent	Presentation allowed or absent

<b>TP number</b>	TP_305_011A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.7
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5 AND NOT PICS 6.3.5/1		
<b>Test Purpose name</b>	Mapping of 181 Reason header into CPG Event information		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Reason header in the second last History entry, a CPG is sent. The Event indicator is set to 'Progress'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

<b>TP number</b>	TP_305_012	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into ACM Redirection number and Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM is sent. The called party status is set to 'subscriber free'. The History-Info entry following the last History-Info entry containing a Reason header is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.2.5-10.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Call Diversion Information Redirecting reason = <b>Redirecting Reason</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 180 Ringing <b>Apply post test routine</b>

**Table 6.2.5-10: Mapping of Reason header into Redirecting reason**

<b>CAUSE</b>	<b>Redirecting_Reason</b>	<b>CAUSE_value</b>
VA_01	Deflection immediate response	302
VA_02	User busy	486
VA_03	No reply	408
VA_04	Mobile subscriber not reachable	503

<b>TP number</b>	TP_305_012A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into ACM Generic notification 'Call is diverted'		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM is sent. The called party status is set to 'subscriber free'. The History-Info entry following the last History-Info entry containing a Reason header is mapped into the Redirection number: The Generic notification indicator is set to 'Call is diverted'.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Generic Notification call is diverting		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_305_012B	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into ACM Redirection number and Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM is sent. The called party status is set to 'subscriber free'. The History-Info entry following the last History-Info entry containing a Reason header is mapped into the Redirection number: <ul style="list-style-type: none"><li>• If CC is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string.</li><li>• If the country code is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged.</li></ul>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Redirection number <b>Derived from the last History-Info entry</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause=[any value]>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_305_013	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 Privacy header into ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing a Privacy header in the message body, an ACM is sent. The called party status is set to 'subscriber free'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.2.5-11.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 180 Ringing	<b>Mg</b> <i>Apply post test routine</i>

**Table 6.2.5-11: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation not allowed
VA_02	session	presentation not allowed
VA_03	header	presentation not allowed
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_014	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing an escaped Privacy header field in the last hi-targeted-to-uri, an ACM is sent. The called party status is set to 'subscriber free'.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-12.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=Priv-value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 180 Ringing	<b>Mg</b> <i>Apply post test routine</i>

**Table 6.2.5-12: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation allowed without redirection number
VA_02	session	presentation allowed without redirection number
VA_03	header	presentation allowed without redirection number
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_015	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3							
<b>TSS reference</b>	PSTN-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/5									
<b>Test Purpose name</b>	Mapping of 180 Privacy header into ACM Redirection number restriction									
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing a Privacy header in the message body, an ACM is sent. The called party status is set to 'subscriber free'.</p> <p>The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-13.</p>									
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	181: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 180 Ringing								

<b>TP number</b>	TP_305_016	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3							
<b>TSS reference</b>	PSTN-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/5									
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into ACM Redirection number restriction									
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing an escaped Privacy header in the last hi-targeted-to-uri, an ACM is sent. The called party status is set to 'subscriber free'.</p> <p>The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-13.</p>									
<b>ISUP Parameter values</b>	<b>ACM:</b> Called party status = subscriber free Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <b>Priv-value</b> >; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 180 Ringing								

**Table 6.2.5-13: Mapping of Privacy value into Redirection number restriction**

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	None or absent	Presentation allowed or absent

<b>TP number</b>	TP_305_017	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.4 Table 7.4.6.2.2.9
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Redirection number and Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG is sent. The Event indicator is set to 'ALERTING'. The History-Info entry concerning the diverted-to number is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.2.5-14.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = ALERTING Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>  Apply post test routine

Table 6.2.5-14: Mapping of Reason header into Redirecting reason

CAUSE	Redirecting_Reason	CAUSE_value
VA_01	Deflection immediate response	302
VA_02	User busy	486
VA_03	No reply	408
VA_04	Mobile subscriber not reachable	503

<b>TP number</b>	TP_305_017A	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.4 Table 7.4.6.2.2.9
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Generic notification 'Call is diverting'		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG is sent. The History-Info entry concerning the diverted-to number is mapped into the Redirection number: The Generic notification indicator is set to 'Call is diverting'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic Notification call is diverting		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>  Apply post test routine

<b>TP number</b>	TP_305_017B	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.4 Table 7.4.6.2.2.9
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Event indicator 'ALERTING'		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG is sent. The History-Info entry concerning the diverted-to number is mapped into the Redirection number: The Event information is set to 'Alerting'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = ALERTING		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 181 Call Is Being Forwarded 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_305_017C	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.4 Table 7.4.6.2.2.9
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Redirection number		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG is sent. The History-Info entry concerning the diverted-to number is mapped into the Redirection number: <ul style="list-style-type: none"><li>• If CC is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string.</li><li>• If the country code is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged.</li></ul>		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 181 Call Is Being Forwarded 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_305_018	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 180 Privacy header into CPG Notification subscription options														
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) containing a Privacy header, a CPG is sent. The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.2.5-15.														
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>														
<b>SIP Parameter values</b>	180: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 181 Call Is Being Forwarded	CPG ←		← 180 Ringing
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ACM ←		← 181 Call Is Being Forwarded													
CPG ←		← 180 Ringing													

**Table 6.2.5-15: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation not allowed
VA_02	session	presentation not allowed
VA_03	header	presentation not allowed
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_019	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.4												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into CPG Notification subscription options														
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) containing an escaped Privacy header field in the last hi-targeted-to-uri, a CPG is sent. The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-16.														
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>														
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=Priv-value>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 181 Call Is Being Forwarded	CPG ←		← 180 Ringing
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ACM ←		← 181 Call Is Being Forwarded													
CPG ←		← 180 Ringing													

**Table 6.2.5-16: Mapping of Privacy value into Notification subscription options**

CAUSE	Priv-value	SUBS_options
VA_01	history	presentation allowed without redirection number
VA_02	session	presentation allowed without redirection number
VA_03	header	presentation allowed without redirection number
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_305_020	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) containing a Privacy header, a CPG is sent. The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-17.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 181 Call Is Being Forwarded 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_305_021	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing), a CPG is sent. The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-17.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=Priv-value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 181 Call Is Being Forwarded 180 Ringing <b>Apply post test routine</b>

Table 6.2.5-17: Mapping of Privacy value into Redirection number restriction

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	None or absent	Presentation allowed or absent

<b>TP number</b>	TP_305_022	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2 Table 7.4.6.2.2.10														
<b>TSS reference</b>	PSTN-SS/CDIV/																
<b>Selection criteria</b>	PICS 6.3.2/5																
<b>Test Purpose name</b>	Mapping of 200 hi-targeted-to-uri into ANM Redirection number																
<b>Test Purpose</b>	<p>Ensure that on receipt of 200 OK (INVITE) an ANM is sent. The History-Info entry following the last History-Info entry in the format <b>+CC+NDC+SN</b> containing a Reason header is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>• If 'CC' is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string.</li> <li>• If the 'CC' is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged.</li> </ul>																
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number Derived from the last History-Info entry																
<b>SIP Parameter values</b>	200: History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1																
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;">ISUP</th> <th style="width: 33.33%;">MGCF</th> <th style="width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK INVITE			→ ACK	<b>Apply post test routine</b>
ISUP	MGCF	Mg															
IAM →		→ INVITE															
ACM ←		← 180 Ringing															
ANM ←		← 200 OK INVITE															
		→ ACK															

<b>TP number</b>	TP_305_023	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3														
<b>TSS reference</b>	PSTN-SS/CDIV/																
<b>Selection criteria</b>	PICS 6.3.2/5																
<b>Test Purpose name</b>	Mapping of 200 Privacy header into ANM Redirection number restriction																
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE) containing a Privacy header, an ANM is sent. The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-18.																
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number restriction = <b>PRES_restr</b>																
<b>SIP Parameter values</b>	200: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1																
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ISUP	MGCF	Mg															
IAM →		→ INVITE															
ACM ←		← 180 Ringing															
ANM ←		← 200 OK INVITE															
		→ ACK															

<b>TP number</b>	TP_305_024	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3															
<b>TSS reference</b>	PSTN-SS/CDIV/																	
<b>Selection criteria</b>	PICS 6.3.2/5																	
<b>Test Purpose name</b>	Mapping of 200 escaped Privacy header into ANM Redirection number restriction																	
<b>Test Purpose</b>	<p>Ensure that on receipt of 200 OK (INVITE), an ANM is sent.</p> <p>The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-18.</p>																	
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number restriction = <b>PRES_restr</b>																	
<b>SIP Parameter values</b>	200:  History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <b>Priv-value</b> >; index=1.1																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK INVITE			→ ACK	<b>Apply post test routine</b>	
ISUP	MGCF	Mg																
IAM →		→ INVITE																
ACM ←		← 180 Ringing																
ANM ←		← 200 OK INVITE																
		→ ACK																

<b>TP number</b>	TP_305_025	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.2, Table 7.4.6.2.2.10												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 200 hi-targeted-to-uri into CON Redirection number														
<b>Test Purpose</b>	<p>Ensure that on receipt of 200 OK (INVITE) a CON is sent. The History-Info entry following the last History-Info entry in the format +'CC+NDC+SN' containing a Reason header is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>• If 'CC' is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', the country code is removed from the digit string.</li> <li>• If 'CC' is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' the digit string is used unchanged.</li> </ul>														
<b>ISUP Parameter values</b>	<b>CON:</b> Redirection number Derived from the last History-Info entry														
<b>SIP Parameter values</b>	200:  History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1														
<b>Comments</b>															
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ISUP	MGCF	Mg													
IAM →		→ INVITE													
ANM ←		← 200 OK INVITE													
		→ ACK													

<b>TP number</b>	TP_305_026	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 200 Privacy header into CON Redirection number restriction														
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE) containing a Privacy header, a CON is sent. The Redirection number restriction is set according the Privacy header in the message body as indicated in table 6.2.5-18.														
<b>ISUP Parameter values</b>	<b>CON:</b> Redirection number restriction = <b>PRES_restr</b>														
<b>SIP Parameter values</b>	200: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI?Reason=SIP;cause=any value>; index=1, <sip:any proper URI>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM →		→ INVITE	ANM ←		← 200 OK INVITE			→ ACK
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ANM ←		← 200 OK INVITE													
		→ ACK													

<b>TP number</b>	TP_305_027	<b>Reference</b>	7.4.6.2.2 Table 7.4.6.2.2.3												
<b>TSS reference</b>	PSTN-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/5														
<b>Test Purpose name</b>	Mapping of 200 escaped Privacy header into CON Redirection number restriction														
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE), a CON is sent. The Redirection number restriction is set according the escaped Privacy header in the last History entry as indicated in table 6.2.5-18.														
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number restriction = <b>PRES_restr</b>														
<b>SIP Parameter values</b>	200: History-Info: <sip:any proper URI?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=Priv-value>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			ISUP	MGCF	Mg	IAM →		→ INVITE	ANM ←		← 200 OK INVITE			→ ACK
ISUP	MGCF	Mg													
IAM →		→ INVITE													
ANM ←		← 200 OK INVITE													
		→ ACK													

**Table 6.2.5-18: Mapping of Privacy value into Redirection number restriction**

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	None or absent	Presentation allowed or absent

<b>TP number</b>	TP_305_028	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirecting number Address Signals		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirecting number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The value of the second last hi-targeted-to-uri <b>Value of Redirecting number</b> is mapped from the Redirecting number Address Signals as indicated in table 6.2.5-19.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Nature of Address: <b>NoA_value</b> Address Signals <any appropriate value> Redirection Information Original called number		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause=404>; index=1, <sip: <b>Value of Redirecting number</b> ?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.2.5-19: Mapping of Redirecting number into second last Hist-entry**

	<b>NoA_value</b>	<b>Value of Redirecting number second last hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Redirecting number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Redirecting number

<b>TP number</b>	TP_305_029	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirecting number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirecting number parameter, an INVITE request is sent and a History-Info header is present. A Privacy header is escaped in the second last hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Address presentation restricted indicator of the Redirecting number as indicated in table 6.2.5-20.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Address presentation restricted indicator: <b>APRI_value</b> Redirection Information Original called number		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause=404>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> &Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.2.5-20: Mapping of Redirecting number APRI into Privacy header in the second last Hist-entry**

	<b>APRI_value</b>	<b>PRIV_value second last hi-targeted-to-uri</b>
VA_01	presentation restricted	history
VA_02	presentation allowed	Header absent or 'none'

<b>TP number</b>	TP_305_030	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirection Information Redirecting indicator		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirecting number and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. A Privacy header is escaped in the second last hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Redirecting indicator of the Redirection Information as indicated in table 6.2.5-21.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection Information Redirecting indicator = <b>RDIND_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause=404>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> &Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE <b>Apply post test routine</b>

**Table 6.2.5-21: Mapping of Redirecting indicator into Privacy header  
in the second last Hist-entry**

	<b>RDIND_value</b>	<b>PRIV_value</b> second last hi-targeted-to-uri
VA_01	Call diverted, all redirection info presentation restricted	history
VA_02	Call diverted	none
VA_03	Call diverted <b>AND</b> Redirecting number APRI presentation restricted	history

<b>TP number</b>	TP_305_031	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirection Information Redirection counter		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirecting number and a Redirection Information parameter, an INVITE request is sent and the hi-targeted-to-uri and the index parameter of the Redirection counter as indicated in table 6.2.5-22.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection Information Redirection counter = <b>RDCONT_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <b>ENTRY_values</b>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE <b>Apply post test routine</b>

**Table 6.2.5-22: Mapping of Redirection counter into index parameter of History-Info header**

	<b>RDCONT_value</b>	<b>ENTRY_values</b>
VA_01	1	<sip:represents the Original called number>; <b>index=1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1</b>
VA_02	2	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1</b>
VA_03	3	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1</b>
VA_04	4	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1.1</b>
VA_05	5	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1.1.1</b>

<b>TP number</b>	TP_305_032	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirection Information Original redirection reason		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirection number an Original called number and a Redirection Information parameter, an INVITE request is sent. The Original redirection reason indicator value ' <b>unknown</b> ' of the Redirection Information is mapped into the cause parameter value ' <b>404</b> ' of the first hi-targeted-to-uri of the History-Info header in the sent INVITE.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection Information Original redirection reason = <b>unknown</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause= <b>404</b> >; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> →	<b>Mg</b> → INVITE <b>Apply post test routine</b>

**Table 6.2.5-23: Void**

<b>TP number</b>	TP_305_033	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Redirection Information Redirecting reason		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirection number an Original called number and a Redirection Information parameter, an INVITE request is sent. The Redirecting reason indicator <b>REAS_value</b> of the Redirection Information is mapped into the cause parameter <b>Cause_value</b> of the second last hi-targeted-to uri of the History-Info header in the sent INVITE as indicated in table 6.2.5-24.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection Information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause=404>; index=1, <sip:any proper URI?Reason=SIP;cause= <b>Cause_value</b> >; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> →	<b>Mg</b> → INVITE Apply post test routine

**Table 6.2.5-24: Mapping of Redirecting reason into Reason header in the second last Hist-entry**

	<b>REAS_value</b>	<b>Cause_value</b> <b>Second last hi-targeted-to-uri</b>
VA_01	unknown	404
VA_02	unconditional	302
VA_03	User Busy	486
VA_04	No reply	408
VA_05	Deflection during alerting	302
VA_06	Deflection immediate response	302
VA_07	Mobile subscriber not reachable	503

<b>TP number</b>	TP_305_034	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Called party number Address Signals		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirection number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The Called party number is mapped into the last hi-targeted-to-uri of the History-Info header as indicated in table 6.2.5-25.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Nature of Address: <b>NoA_value</b> Address Signals		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI?Reason=SIP;cause=404>; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1 <sip: <b>Called party number</b> ?Reason=SIP;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> →	<b>Mg</b> → INVITE Apply post test routine

**Table 6.2.5-25: Mapping of Called party number into last Hist-entry**

	<b>NoA_value</b>	<b>Value of Called party number</b> <b>last hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Called party number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Called party number

<b>TP number</b>	TP_305_035	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Original called number Address Signals		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The value of the first hi-targeted-to-uri <b>Value of Original called number</b> is mapped from the Original called number Address Signals as indicated in table 6.2.5-26.		
<b>ISUP Parameter values</b>	IAM: Original called number Nature of Address: <b>NoA_value</b> Address Signals <Digits>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip: <b>Original called number</b> ?Reason=SIP;cause=404>; index=1 <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	IAM	ISUP → MGCF → INVITE	Mg <b>Apply post test routine</b>

**Table 6.2.5-26: Mapping of Original called number into first Hist-entry**

	<b>NoA_value</b>	<b>Value of Original called number</b> <b>First hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Original called number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Original called number

<b>TP number</b>	TP_305_036	<b>Reference</b>	7.4.6.2.3 Table 7.4.6.2.3.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing an Original called number parameter, an INVITE request is sent and a History-Info header is present. A Privacy header escaped in the first hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Address presentation restricted indicator of the Original called number as indicated in table 6.2.5-27.		
<b>ISUP Parameter values</b>	IAM: Original called number Address presentation restricted indicator: <b>APRI_value</b> Address Signals <any appropriate value>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI?Privacy= <b>PRIV_value</b> &Reason=SIP;cause=404>; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	IAM	ISUP → MGCF → INVITE	Mg <b>Apply post test routine</b>

**Table 6.2.5-27: Mapping of Original called number APRI into Privacy header in the first Hist-entry**

	<b>APRI_value</b>	<b>PRIV_value</b> <b>first hi-targeted-to-uri</b>
VA_01	presentation restricted	history
VA_02	presentation allowed	none

<b>TP number</b>	TP_305_037	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.2
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Latest History-Info header field entry containing a Reason header is mapped into Redirecting number Nature of address indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Nature of address indicator</b> of the Redirecting number is mapped from the latest History-Info header field entry in the format '+CC+NDC+SN' containing a Reason header as indicated in table 6.2.5-28.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Nature of address indicator = <b>NoA_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip: <b>Second last entry URI?Reason=SIP;cause=any</b> >; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.2.5-28: Mapping of second last first Hist-entry into Redirecting number  
Nature of address indicator**

	<b>Second last entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	<i>national (significant) number</i>
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	<i>international number</i>

<b>TP number</b>	TP_305_038	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.2
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Latest History-Info header field entry containing a Reason header is mapped into Redirecting number Address signal		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address signal</b> of the Redirecting number is mapped from the latest History-Info header field entry in the format '+CC+NDC+SN' containing a Reason header as indicated in table 6.2.5-29.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number <i>Address signal derived from the second last Hist-entry</i>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip: <b>Second last entry URI?Reason=SIP;cause=any</b> >; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.2.5-29: Mapping of second last first Hist-entry into Redirecting number Address signal**

	<b>Second last entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	'+CC' is removed from the userpart digit string used in the Redirecting number Address signal
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	'+' is removed from the userpart digit string used in the Redirecting number Address signal

<b>TP number</b>	TP_305_039	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.2
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Latest History-Info header field entry containing a Reason header escaped Privacy header is mapped into Redirecting number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Redirecting number is mapped from the escaped Privacy header of the latest History-Info header field entry containing a Reason header as indicated in table 6.2.5-30.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> &Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

<b>TP number</b>	TP_305_040	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.2
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Privacy header is mapped into Redirecting number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Redirecting number is mapped from the Privacy header of the received INVITE request as indicated in table 6.2.5-30.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> Privacy: <b>PRIV_value</b> History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

**Table 6.2.5-30: Mapping of Privacy header into Redirecting number  
Address presentation restricted indicator**

	PRIV_value	APRI_value
VA_01	history	presentation restricted
VA_02	session	presentation restricted
VA_03	header	presentation restricted
VA_04	none	presentation allowed
VA_05	Header absent	presentation allowed

<b>TP number</b>	TP_305_041	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Escaped Privacy header is mapped into Redirection information Redirecting indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting indicator</b> of the Redirection information is mapped from the escaped Privacy header of the latest History-Info header field entry containing a Reason header in the received INVITE request as indicated in table 6.2.5-31.		
<b>ISUP Parameter values</b>	IAM: Redirection information Redirecting indicator = <b>RDIND_value</b>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> &Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_305_042	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Privacy header is mapped into Redirection information Redirecting indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting indicator</b> of the Redirection information is mapped from the Privacy header in the received INVITE request as indicated in table 6.2.5-31.		
<b>ISUP Parameter values</b>	IAM: Redirection information Redirecting indicator = <b>RDIND_value</b>		
<b>SIP Parameter values</b>	INVITE: Privacy: <b>PRIV_value</b> History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.2.5-31: Mapping of Privacy header into Redirecting indicator**

	<b>PRIV_value</b>	<b>RDIND_value</b>
VA_01	history	Call diverted, all redirection info presentation restricted
VA_02	session	Call diverted, all redirection info presentation restricted
VA_03	header	Call diverted, all redirection info presentation restricted
VA_04	none	Call diverted
VA_05	Privacy header field absent	Call diverted

<b>TP number</b>	TP_305_043	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	cause value is mapped into Redirection information Redirecting reason		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting reason</b> of the Redirection information is mapped from the cause parameter of the Reason header of the latest History-Info header field entry containing a Reason header in the received INVITE request as indicated in table 6.2.5-32.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection information Original redirection reason = unknown/not available Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Reason=SIP;cause= <b>Cause_value</b> >; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

**Table 6.2.5-32: Mapping of cause parameter in the second last Hist-entry into Redirecting reason**

	<b>Cause_value</b> <b>Second last hi-targeted-to-uri</b>	<b>REAS_value</b>
VA_01	302	Deflection immediate response
VA_02	486	User Busy
VA_03	408	No reply
VA_04	503	Mobile subscriber not reachable
VA_05	404	unknown

<b>TP number</b>	TP_305_044	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Hi-index is mapped into Redirection information Redirection counter		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirection counter</b> of the Redirection information is mapped from the hi-index of the last History-Info header field entry in the received INVITE request as indicated in table 6.2.5-33. The number of dots in the hi-index value is equal to the value of the Redirection counter.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection information Redirection counter = <b>RDCONT_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <b>ENTRY_values</b>		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.2.5-33: Mapping of Redirection counter into index parameters of History-Info header**

	<b>ENTRY_values</b>	<b>RDCONT_value</b>
VA_01	<sip:represents the Original called number>; <b>index=1</b> , <sip: represents the Called party number>; <b>index=1.1</b>	1
VA_02	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents the Redirecting number;cause=any>; <b>index=1.1</b> , <sip: represents the Called party number>; <b>index=1.1.1</b>	2
VA_03	<sip: represents the Original called number>; <b>index=1</b> , <sip: any proper URI;cause=404>; <b>index=1.1</b> , <sip: represents the Redirecting number;cause=any>; <b>index=1.1.1</b> , <sip: represents the Called party number>; <b>index=1.1.1.1</b>	3
VA_04	<sip: represents the Original called number>; <b>index=1</b> , <sip: any proper URI;cause=404>; <b>index=1.1</b> , <sip: any proper URI;cause=404>; <b>index=1.1.1</b> , <sip: represents the Redirecting number;cause=any>; <b>index=1.1.1.1</b> , <sip: represents the Called party number>; <b>index=1.1.1.1.1</b>	4
VA_05	<sip: represents the Original called number>; <b>index=1</b> , <sip: any proper URI;cause=404>; <b>index=1.1</b> , <sip: any proper URI;cause=404>; <b>index=1.1.1</b> , <sip: any proper URI;cause=404>; <b>index=1.1.1.1</b> , <sip: represents the Redirecting number;cause=any>; <b>index=1.1.1.1.1</b> , <sip: represents the Called party number>; <b>index=1.1.1.1.1.1</b>	5

<b>TP number</b>	TP_305_045	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	First History-Info header field entry is mapped into Original called number Nature of address indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Nature of address indicator</b> of the Original called number is mapped from the first History-Info header field entry in the format '+CC+NDC+SN' as indicated in table 6.2.5-34.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called number Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan</i> ( <i>Recommendation E.164</i> ) Nature of address indicator = <b>NoA_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip: <b>First entry URI</b> >; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

**Table 6.2.5-34: Mapping of first Hist-entry into Original called number**  
**Nature of address indicator**

	<b>First entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	<i>national (significant) number</i>
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	<i>international number</i>

<b>TP number</b>	TP_305_046	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	First History-Info header field entry is mapped into Original called Address signal		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address signal</b> of the Original called number is mapped from the first History-Info header field entry in the format '+CC+NDC+SN' as indicated in table 6.2.5-35.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan</i> ( <i>Recommendation E.164</i> ) Address signal derived from the first Hist-entry		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip: <b>First entry URI</b> >; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

**Table 6.2.5-35: Mapping of first Hist-entry into Original called number Address signal**

	<b>First entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	'+CC' is removed from the userpart digit string used in the Original called number Address signal
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	'+' is removed from the userpart digit string used in the Original called number Address signal

<b>TP number</b>	TP_305_047	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	First History-Info header field entry escaped Privacy header is mapped into Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Original called number is mapped from the escaped Privacy header of the first History-Info header field entry as indicated in table 6.2.5-36.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any appropriate URI?Privacy= <b>PRIV_value</b> >; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_305_048	<b>Reference</b>	7.4.6.3.2 Table 7.4.6.3.2.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Privacy header is mapped into Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Original called number is mapped from the Privacy header of the received INVITE request as indicated in table 6.2.5-36.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> Privacy: <b>PRIV_value</b> History-Info: <sip:any appropriate URI>; index=1, <sip:any proper URI?Reason=SIP;cause=any>; index=1.1, <sip:any proper URI>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.2.5-36: Mapping of Privacy header into Redirecting number Address presentation restricted indicator**

	PRIV_value	APRI_value
VA_01	history	presentation restricted
VA_02	session	presentation restricted
VA_03	header	presentation restricted
VA_04	none	presentation allowed
VA_05	Header absent	presentation allowed

<b>TP number</b>	TP_305_049	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of ACM Redirection number into 181 (Being forwarded) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Redirection number is mapped into the hi-targeted-to-uri in a History-Info header containing one hi-entry in the sent 181 as indicated in table 6.2.5-37.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party statue = 'no indication' Generic notification = call is diverting Call diversion information Redirection number Nature of address indicator = NOA_value Address signal <b>Digits</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip: LAST_HIST_URI?Privacy=history>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 181 Being forwarded	<b>MGCF</b> → ← <b>ISUP</b> IAM ACM Apply post test routine	

**Table 6.2.5-37: Mapping Redirection number into History-Info header**

	NOA_value	History-Info header: LAST_HIST_URI
VA_01	<i>national (significant) number</i>	Add '+' and CC (of the country where the MGCF is located) to Redirection number Address Signals then map to user portion of the last hi-targeted-to-uri in the format '+ CC NDC SN'.
VA_01	<i>international number</i>	Map complete Redirection number Address Signals and '+' to user portion of the last hi-targeted-to-uri in the format '+ CC NDC SN'

**Table 6.2.5-38: Mapping of Redirecting reason into cause parameter**

CAUSE	Redirecting_Reason REAS_value	Cause parameter, CAUSE_value
VA_01	unknown	404
VA_02	unconditional	302
VA_03	User Busy	486
VA_04	No reply	408
VA_05	Deflection during alerting	302
VA_06	Deflection immediate response	302
VA_07	Mobile subscriber not reachable	503

<b>TP number</b>	TP_305_051	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.5/2 AND PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of ACM <b>Redirecting reason</b> into 181 (Being forwarded) History-Info header Reason header		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Call diversion information Redirecting reason is mapped into the <b>Reason header</b> of the hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.2.5-39.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Redirection number Call diversion information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause= <b>Cause_value</b> >; index=1, <sip:derived from Redirection number?Privacy=history>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	181 Being forwarded	←	ACM
	Apply post test routine		

**Table 6.2.5-39: Mapping of Redirecting reason into Reason header**

<b>CAUSE</b>	<b>Redirecting_Reason REAS_value</b>	<b>Reason header, CAUSE_value</b>
VA_01	unknown	404
VA_02	unconditional	302
VA_03	User Busy	486
VA_04	No reply	408
VA_05	Deflection during alerting	302
VA_06	Deflection immediate response	302
VA_07	Mobile subscriber not reachable	503

<b>TP number</b>	TP_305_052	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of ACM <b>Notification subscription options</b> no 181 (Being forwarded) is sent		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, if the Call diversion information Notification subscription options is set to <b>presentation not allowed</b> no 181 (Being forwarded) is sent.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = presentation not allowed		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
		←	ACM
	Apply post test routine		

<b>TP number</b>	TP_305_053	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of ACM <b>Notification subscription</b> options into 181 (Being forwarded) escaped Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The escaped Privacy header of the last hi-targeted-to-uri in a History-Info header in the sent 181 is set to 'history' as indicated in table 6.2.5-40.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = <b>NSO_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=history>;index=1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 181 Being forwarded	MGCF → ← Apply post test routine	ISUP IAM ACM

**Table 6.2.5-40: Mapping of Notification subscription options into Privacy header**

CAUSE	NSO_value
VA_01	Unknown
VA_02	presentation allowed with redirection number
VA_03	presentation allowed without redirection number

<b>TP number</b>	TP_305_054	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG <b>Redirection number</b> into 181 (Being forwarded) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Redirection number is mapped into the last hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.2.5-37.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Call diversion information Redirection number Nature of address indicator = <b>NOA_value</b> Address signal <b>Digits</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip: <b>LAST_HIST_URI</b> ?Privacy=history>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 180 Ringing 181 Being forwarded	MGCF → ← ← Apply post test routine	ISUP IAM ACM CPG

<b>TP number</b>	TP_305_056	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.5/2 AND PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG <b>Redirecting reason</b> into 181 (Being forwarded) History-Info header Reason header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Call diversion information Redirecting reason is mapped into the <b>Reason header</b> of the second last hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.2.5-39.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause= <b>Cause_value</b> >; index=1, <sip: derived from Redirection number?Privacy=history>;index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 181 Being forwarded	<b>MGCF</b> → ← ←	<b>ISUP</b> IAM ACM CPG <b>Apply post test routine</b>

<b>TP number</b>	TP_305_057	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG <b>Notification subscription options</b> no 181 (Being forwarded) is sent		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, if the Call diversion information Notification subscription options is set to <b>presentation not allowed</b> no 181 (Being forwarded) is sent.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = presentation not allowed		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing	<b>MGCF</b> → ←	<b>ISUP</b> IAM ACM CPG <b>Apply post test routine</b>

<b>TP number</b>	TP_305_058	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.4
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG <b>Notification subscription options</b> into 181 (Being forwarded) escaped Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The escaped Privacy header of the last hi-targeted-to-uri in a History-Info header in the sent 181 is set to 'history' as indicated in table 6.2.5-40.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = <b>NSO_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <b>history</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	180 Ringing	←	ACM
	181 Being forwarded	←	CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_305_059	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	NOT PICS 6.3.5/2 AND PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>Redirection number</b> into 180 (Ringing) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection number is present, a 180 (Ringing) is sent. The Redirection number Address signal digits are mapped into the last hi-targeted-to-uri in a History-Info header in the sent 180 as indicated in table 6.2.5-37.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Optional backward call indicator In-band info or appropriate pattern is now available  <b>CPG:</b> Event indicator = Alerting Redirection number Nature of address indicator = <b>NOA_value</b> Address signal <b>Digits</b> Call diversion information		
<b>SIP Parameter values</b>	180: History-Info: <sip:unknown@unknown.invalid>; index=1, <sip: <b>LAST_HIST_UR</b> ;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	IAM
	183 Session Progress	←	ACM
	180 Ringing	←	CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_305_060	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>Redirecting reason</b> into 180 (Ringing) History-Info header cause parameter		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection number and a Call diversion information parameter are present, a 180 (Ringing) is sent. The cause parameter value is mapped from the received Redirecting reason as indicated in table 6.2.5-38.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Redirection number  <b>CPG:</b> Event indicator = Alerting Call diversion information Redirecting reason = <b>REAS_value</b> Redirection number		
<b>SIP Parameter values</b>	180: History-Info: <sip:unknown@unknown.invalid >; index=1, <sip: any proper URI?Privacy=history; cause= <b>Cause_value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	181 Being forwarded	←	← ACM
	180 Ringing	←	← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_305_061	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5 AND PICS 6.3.5/2		
<b>Test Purpose name</b>	Mapping of CPG Alerting <b>Redirecting reason</b> into 180 (Ringing) Reason header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection Number Restriction parameter and a Call diversion indicator parameter are present, a 180 (Ringing) is sent. As a network option, a Reason header is escaped in the penultimate hi-entry of the History-Info header as indicated in table 6.2.5-39.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Redirection number  <b>CPG:</b> Event indicator = Alerting Call diversion information Redirecting reason = <b>REAS_value</b> Redirection number		
<b>SIP Parameter values</b>	180: <sip:unknown@unknown.invalid?Reason=SIP;cause= <b>Cause_value</b> >; index=1, <sip: any proper URI?Privacy=history; cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE	→	→ IAM
	181 Being forwarded	←	← ACM
	180 Ringing	←	← CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_305_061A	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG Alerting <b>Redirection Number Restriction</b> into 180 (Ringing) Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a <b>Redirection Number Restriction parameter</b> is present, a 180 (Ringing) is sent. The Redirection Number Restriction parameter value as indicated in table 6.2.5-41 and depending on the Notification subscription option in the previous received Call diversion information as indicated in table 6.2.5-40 is mapped into the Privacy header in the sent 180.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Notification subscription option = <b>NSO_value</b> Redirection number  <b>CPG:</b> Event indicator = Alerting Redirection Number Restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: <sip:unknown@unknown.invalid>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> ;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 181 Being forwarded ← 180 Ringing ←  <b>MGCF</b> → IAM ← ACM ← CPG  <b>ISUP</b> <b>Apply post test routine</b>		

**Table 6.2.5-41: Mapping of Redirection Number Restriction parameter into Privacy header**

<b>CAUSE</b>	<b>Redirection Number Restriction PRES_restr</b>	<b>Privacy PRIV_value</b>
VA_01	Presentation allowed AND previous received Notification subscription option <b>NSO_value</b> was NOT "presentation not allowed" AND was NOT "presentation allowed without redirection number"	'none' OR Header not present
VA_02	Presentation restricted	'History'
VA_03	Parameter absent AND previous received Notification subscription option <b>NSO_value</b> was NOT "presentation not allowed" AND was NOT "presentation allowed without redirection number"	'none' OR Header not present

<b>TP number</b>	TP_305_061A	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG Alerting <b>without Call diversion information parameters</b> into 180 (Ringing) History-Info header Reason header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' and no Call diversion information parameters are present, a 180 (Ringing) is sent. A History-Info header is present the last history entry and the escaped Reason header in the penultimate hi-entry is derived as indicated in table 6.2.5-39 from a previous received Call diversion information parameter. The escaped Privacy in the last history entry is set to 'history'		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Redirecting reason = <b>REAS_value</b> Redirection number  <b>CPG:</b> Event indicator = Alerting		
<b>SIP Parameter values</b>	180: <sip:unknown@unknown.invalid?Reason=SIP;cause= <b>Cause_value</b> ; index=1, <sip:any proper URI?Privacy=history>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 181 Being forwarded 180 Ringing	<b>MGCF</b> ➔ ↙ ↙	<b>ISUP</b> IAM ACM CPG  <i>Apply post test routine</i>

<b>TP number</b>	TP_305_061B	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.5
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of CPG Alerting <b>without Call diversion information parameters</b> into 180 (Ringing) History-Info header Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' and no Call diversion information parameters are present, a 180 (Ringing) is sent. A History-Info header is present the last history entry and the escaped Privacy header in the penultimate hi-entry is set to 'history' independent of the value of the previous received Notification subscription options value as indicated in table 6.2.5-40		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Notification subscription option = <b>NSO_value</b> Redirection number  <b>CPG:</b> Event indicator = Alerting		
<b>SIP Parameter values</b>	180: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy=history>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 181 Being forwarded 180 Ringing	<b>MGCF</b> ➔ ↙ ↙	<b>ISUP</b> IAM ACM CPG  <i>Apply post test routine</i>

<b>TP number</b>	TP_305_064	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.6
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/5		
<b>Test Purpose name</b>	Mapping of ANM Redirection Number Restriction into 200 OK Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of an ANM a Redirection Number Restriction parameter is present as an indication a call diversion occurred, a 200 OK INVITE is sent. The Redirection Number Restriction parameter value is mapped into the Privacy header in the sent 200 as indicated in table 6.2.5-41.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Generic notification Call diversion information Redirection number <b>ANM:</b> Redirection Number Restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	200: History-Info: <sip:unknown@unknown.invalid?Reason=SIP;cause=any>; index=1, <sip:any proper URI?Privacy= <b>PRIV_value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → IAM 181 Being forwarded ← ACM 180 Ringing ← CPG 200 OK INVITE ← ANM ACK →	<b>MGCF</b> → IAM ← ACM ← CPG ← ANM	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_305_065	<b>Reference</b>	7.4.6.1
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	NOT (PICS 6.3.2/5 OR PICS 6.3.2/27)		
<b>Test Purpose name</b>	No mapping of Redirecting number, Original called number and Redirection Information		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirecting number parameter, an Original called number and a Redirection Information parameter Redirecting reason indicator is set to <b>REAS_value</b> as indicated in table 6.2.5-42, an INVITE request is sent and no History-Info header is present. The call setup is not disrupted.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Redirection Information Redirecting reason = <b>REAS_value</b> Original called number		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → INVITE	<b>MGCF</b> → INVITE	<b>Mg</b>
	<b>Apply post test routine</b>		

Table 6.2.5-42: Value of Redirecting reason received in Redirection Information

	<b>REAS_value</b>
VA_01	unknown
VA_02	unconditional
VA_03	User Busy
VA_04	Deflection immediate response
VA_05	Mobile subscriber not reachable

<b>TP number</b>	TP_305_066	<b>Reference</b>	7.4.6.3.3 Table 7.4.6.3.3.1, Table 7.4.6.3.3.3
<b>TSS reference</b>	PSTN-SS/CDIV/		
<b>Selection criteria</b>	NOT (PICS 6.3.2/5 OR PICS 6.3.2/27)		
<b>Test Purpose name</b>	No mapping of ACM Redirection number and Call diversion information		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter the Redirecting reason is set to <b>REAS_value</b> as indicated in table 6.2.5-43 is present as an indication a call diversion occurred, a 180 Ringing is sent and no History-Info header is present. The call setup is not disrupted.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Redirection number Call diversion information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing	<b>MGCF</b> → ←	ISUP IAM ← ACM  Apply post test routine

Table 6.2.5-43: Value of Redirecting reason received in Call diversion information

CAUSE	Redirecting_Reason <b>REAS_value</b>
VA_01	unknown
VA_02	unconditional
VA_03	User Busy
VA_04	Deflection immediate response
VA_05	Mobile subscriber not reachable

## 6.2.6 Explicit Call Transfer (ECT)

<b>TP number</b>	TP_306_001	<b>Reference</b>	7.4.8
<b>TSS reference</b>	PSTN-SS/ECT/		
<b>Selection criteria</b>	PICS 6.3.2/6		
<b>Test Purpose name</b>	A session is retrieved when a notification 'call transfer, active' in a FAC was received and the session is on hold		
<b>Test Purpose</b>	I-MGCF: A session is on hold. Ensure that on receipt of an FAC message and the Generic notification indicator is set to 'call transfer, active', a reINVITE is sent the "a" attribute in the SDP is set to 'sendrecv'.		
<b>ISUP Parameter values</b>	<b>FAC:</b> Generic notification = transfer active		
<b>SIP Parameter values</b>	INVITE 2 SDP a=sendonly INVITE 3 SDP a=sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 1 100 Trying 180 Ringing  200 OK (INVITE) ACK  INVITE 2 200 OK (INVITE) ACK  INVITE 3 200 OK (INVITE) ACK	<b>MGCF</b> → ←  ← →  ← →  ← →  ← →  ←	ISUP IAM ← ACM  ← ANM  ← CPG(hold)  ← FAC(call transfer, active)
	Apply post test routine		

<b>TP number</b>	TP_306_002	<b>Reference</b>	7.4.8																																												
<b>TSS reference</b>	PSTN-SS/ECT/																																														
<b>Selection criteria</b>	PICS 6.3.2/6																																														
<b>Test Purpose name</b>	A session is retrieved when a notification 'call transfer, alerting' in a FAC was received and the session is on hold																																														
<b>Test Purpose</b>	I-MGCF: A session is on hold. Ensure that on receipt of an FAC message and the Generic notification indicator is set to 'call transfer, alerting', no reINVITE is sent. The session is retrieved when a FAC is received the Generic notification set to 'call transfer active' subsequently.																																														
<b>ISUP Parameter values</b>	<b>FAC:</b> Generic notification = transfer alerting																																														
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ACK	←																																														
		<b>Apply post test routine</b>																																													

<b>TP number</b>	TP_306_003	<b>Reference</b>	7.4.8																																												
<b>TSS reference</b>	PSTN-SS/ECT/																																														
<b>Selection criteria</b>	PICS 6.3.2/6																																														
<b>Test Purpose name</b>	A session is retrieved when a notification 'call transfer, active' in a CPG was received and the session is on hold																																														
<b>Test Purpose</b>	O-MGCF: A session is on hold. Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'call transfer, active', a reINVITE is sent the "a" attribute in the SDP is set to 'sendrecv'.																																														
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<b>TP number</b>	TP_306_004	<b>Reference</b>	7.4.8																										
<b>TSS reference</b>	PSTN-SS/ECT/																												
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INVITE 3 200 OK (INVITE)	← →	← FAC(call transfer, active)																											
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<b>TP number</b>	TP_306_005	<b>Reference</b>	7.4.8														
<b>TSS reference</b>	PSTN-SS/ECT/																
<b>Selection criteria</b>	PICS 6.3.2/6																
<b>Test Purpose name</b>	FAC with generic notification 'call transfer, active' received, no mapping																
<b>Test Purpose</b>	O-MGCF: Ensure that on receipt of a FAC message and the Generic notification indicator is coded as 'call transfer, active' and the session is not on hold, no mapping occurs on the SIP site.																
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ISUP	MGCF	Mg															
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing															
ACM	←																
ANM	←	← 200 OK (INVITE) → ACK															
FAC(call transfer, active)	→																

<b>TP number</b>	TP_306_006	<b>Reference</b>	7.4.8															
<b>TSS reference</b>	PSTN-SS/ECT/																	
<b>Selection criteria</b>	PICS 6.3.2/6																	
<b>Test Purpose name</b>	FAC with generic notification 'call transfer, alerting' received, no mapping																	
<b>Test Purpose</b>	O-MGCF: Ensure that on receipt of a FAC message and the Generic notification indicator is coded as 'call transfer, alerting' and the session is not on hold, no mapping occurs on the SIP site.																	
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ANM	←	← 200 OK (INVITE) → ACK																
FAC(call transfer, alerting)	→	<b>Apply post test routine</b>																

<b>TP number</b>	TP_306_007	<b>Reference</b>	7.4.8																					
<b>TSS reference</b>	PSTN-SS/ECT/																							
<b>Selection criteria</b>	PICS 6.3.2/6																							
<b>Test Purpose name</b>	CPG with generic notification 'call transfer, active' received, no mapping																							
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200 OK (INVITE)	←	← CPG(call transfer, active)																						
ACK	→																							
		<b>Apply post test routine</b>																						

<b>TP number</b>	TP_306_008	<b>Reference</b>	7.4.8																					
<b>TSS reference</b>	PSTN-SS/ECT/																							
<b>Selection criteria</b>	PICS 6.3.2/6																							
<b>Test Purpose name</b>	CPG with generic notification 'call transfer, alerting' received, no mapping																							
<b>Test Purpose</b>	I-MGCF: Ensure that on receipt of a CPG message and the Generic notification indicator is coded as 'call transfer, alerting' and the session is not on hold, no mapping occurs on the SIP site.																							
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<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">Mg</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td>← ACM</td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td>← ANM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td>← CPG(call transfer, alerting)</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←	← ACM	180 Ringing	←	← ANM	200 OK (INVITE)	←	← CPG(call transfer, alerting)	ACK	→				<b>Apply post test routine</b>		
Mg	MGCF	ISUP																						
INVITE	→	→ IAM																						
100 Trying	←	← ACM																						
180 Ringing	←	← ANM																						
200 OK (INVITE)	←	← CPG(call transfer, alerting)																						
ACK	→																							
		<b>Apply post test routine</b>																						

## 6.2.7 Call Waiting

<b>TP number</b>	TP_307_001	<b>Reference</b>	7.4.9												
<b>TSS reference</b>	PSTN-SS/CW/														
<b>Selection criteria</b>	PICS 6.3.2/7														
<b>Test Purpose name</b>	Generic notification 'Call is a waiting call' in ACM is not interworked														
<b>Test Purpose</b>	Ensure that on receipt of an ACM and the called party status indicator is set to 'subscriber free', a 180 Ringing is sent. The Generic notification 'Call is a waiting call' is not interworked.														
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party Status = subscriber free, Generic notification = Call is a waiting call														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM		
Mg	MGCF	ISUP													
INVITE	→	IAM													
100 Trying	←														
180 Ringing	←	ACM													

<b>TP number</b>	TP_307_002	<b>Reference</b>	7.4.9												
<b>TSS reference</b>	PSTN-SS/CW/														
<b>Selection criteria</b>	6.3.2/7														
<b>Test Purpose name</b>	Generic notification 'Call is a waiting call' in CPG is not interworked														
<b>Test Purpose</b>	An ACM called party status 'no indication' was received. Ensure that on receipt of a CPG and the Event indication is set to 'Alerting', a 180 Ringing is sent. The Generic notification 'Call is a waiting call' is not interworked.														
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI Called party Status = no indication, oBCI = inband info available <b>CPG:</b> Event indication = ALERTING, Generic notification = Call is a waiting call														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM(no indication) CPG(ALERTING)</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM(no indication) CPG(ALERTING)		
Mg	MGCF	ISUP													
INVITE	→	IAM													
100 Trying	←														
180 Ringing	←	ACM(no indication) CPG(ALERTING)													

## 6.2.8 Call Hold

<b>TP number</b>	TP_308_001	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	Hold and Retrieve requested from the ISUP		
<b>Test Purpose</b>	Ensure that on receipt of a CPG message and the Generic notification is set to 'Remote hold' in the confirmed dialogue, an INVITE or UPDATE is sent. The media stream in the SDP is set to 'sendonly'. Ensure that on receipt of a CPG message and the Generic notification is set to 'Remote retrieval', an INVITE or UPDATE is sent. The media stream in the SDP is set to 'sendrecv'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold Remote retrieval		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>   <b>MGCF</b>  <b>Establish a confirmed dialogue</b></p> <p><b>CASE A</b>          INVITE(SDP 1 = sendonly)                    ←    ← CPG(hold)          200 OK (INVITE)                                →          ACK    ←</p> <p><b>CASE B</b>          UPDATE(SDP 1 = sendonly)                    ←          200 OK (UPDATE)                                →</p> <p><b>CASE A</b>          INVITE(SDP 2 = sendrecv)                    ←    ← CPG(retrieve)          200 OK (INVITE)                                →          ACK    ←</p> <p><b>CASE B</b>          UPDATE(SDP 2 = sendrecv)                    ←          200 OK (UPDATE)                                →</p>		<b>ISUP</b>

<b>TP number</b>	TP_308_002	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	Hold and Retrieve requested from SIP in reINVITE request		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request in the confirmed dialogue and the media stream in the SDP is set to 'sendonly', a CPG message is sent the Generic notification indicator is set to 'remote hold'. Ensure that on receipt of an INVITE request in the confirmed dialogue and the media stream in the SDP is set to 'sendrecv', a CPG message is sent the Generic notification indicator is set to 'remote retrieval'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic notification Remote hold Remote retrieval		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;">Establish a confirmed dialogue</p> <p>INVITE(sendonly)      →      → CPG(hold)      200 OK (INVITE)      ←      ←      ACK      →      →</p> <p>INVITE(sendrecv)      →      → CPG(retrieve)      200 OK (INVITE)      ←      ←      ACK      →      →</p> <p style="text-align: center;">Apply post test routine</p>		

<b>TP number</b>	TP_308_003	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	Hold and Retrieve requested from SIP in UPDATE request		
<b>Test Purpose</b>	Ensure that on receipt of an UPDATE request in the confirmed dialogue and the media stream in the SDP is set to 'sendonly', a CPG message is sent the Generic notification indicator is set to 'remote hold'. Ensure that on receipt of an UPDATE request in the confirmed dialogue and the media stream in the SDP is set to 'sendrecv', a CPG message is sent the Generic notification indicator is set to 'remote retrieval'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic notification Remote hold Remote retrieval		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=sendrecv		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;">Establish a confirmed dialogue</p> <p>UPDATE(sendonly)      →      → CPG(hold)      200 OK (UPDATE)      ←      ←      ACK      →      →</p> <p>UPDATE(sendrecv)      →      → CPG(retrieve)      200 OK (UPDATE)      ←      ←      ACK      →      →</p> <p style="text-align: center;">Apply post test routine</p>		

<b>TP number</b>	TP_308_004	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	Hold requested from both ends, session inactive sent		
<b>Test Purpose</b>	Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote hold' and the session was set on hold before, an INVITE or UPDATE request is sent and the media stream is set to 'inactive'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Establish a confirmed dialogue</b></p> <p>INVITE(SDP 1 = sendonly)      →      →      CPG(hold)      200 OK (INVITE)                  ←      ←      ACK                                 →</p> <p><b>CASE A</b></p> <p>INVITE(SDP 2 = inactive)      ←      ←      CPG(hold)      200 OK (INVITE)                  →      →      ACK                                 ←</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 2 = inactive)      ←      →      200 OK (UPDATE)</p>		
			<b>Apply post test routine</b>

<b>TP number</b>	TP_308_005	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	Hold requested from both ends, session inactive received		
<b>Test Purpose</b>	The session is already set on hold. Ensure that on receipt of an INVITE request and the media stream in the SDP is set to 'inactive', a CPG message is sent and the Notification indicator is set to 'remote hold'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Establish a confirmed dialogue</b></p> <p><b>CASE A</b></p> <p>INVITE(SDP 1 = sendonly)      ←      ←      CPG(hold)      200 OK (INVITE)                  →      →      ACK                                 ←</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 1 = sendonly)      ←      →      200 OK (UPDATE)</p> <p>INVITE(SDP 2 = inactive)      →      →      CPG(hold)      200 OK (INVITE)                  ←      ←      ACK                                 →</p>		
			<b>Apply post test routine</b>

<b>TP number</b>	TP_308_006	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	First hold from SIP. Session inactive, Retrieve requested from SIP		
<b>Test Purpose</b>	The session is set on hold at first from SIP as well as second from ISUP. Ensure that on receipt of an INVITE request and the media stream in the SDP is set to 'recvonly', a CPG message is sent and the Generic notification indicator is set to 'remote retrieval'.		
<b>ISUP Parameter values</b>	CPG 1: Generic notification Remote hold CPG 2: Generic notification Remote retrieval		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive SDP 3 a=recvonly		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Establish a confirmed dialogue</b></p> <p>INVITE(SDP 1 = sendonly)      →      →      CPG 1 (hold)</p> <p>200 OK (INVITE)      ←      ←      CPG 1 (hold)</p> <p>ACK      →</p> <p><b>CASE A</b></p> <p>INVITE(SDP 2 = inactive)      ←      ←      CPG 1 (hold)</p> <p>200 OK (INVITE)      →      →</p> <p>ACK      ←</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 2 = inactive)      ←      →</p> <p>200 OK (UPDATE)      →</p> <p>INVITE(SDP 3 = recvonly)      →      →      CPG 2 (retrieve)</p> <p>200 OK (INVITE)      ←      ←</p> <p>ACK      →</p> <p style="text-align: right;"><b>Apply post test routine</b></p>		

<b>TP number</b>	TP_308_007	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	First hold from SIP. Session inactive, Retrieve requested from ISUP		
<b>Test Purpose</b>	The session is set on hold at first from SIP as well as second from ISUP. Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote retrieval', an INVITE or UPDATE request is sent and the media stream in the SDP is set to 'recvonly'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive SDP 3 a=recvonly		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Establish a confirmed dialogue</b></p> <p>INVITE(SDP 1 = sendonly)      →      →      CPG(hold)      200 OK (INVITE)      ←      →      ACK      →</p> <p><b>CASE A</b></p> <p>INVITE(SDP 2 = inactive)      ←      ←      CPG(hold)      200 OK (INVITE)      →      ←      ACK      ←</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 2 = inactive)      ←      →      200 OK (UPDATE)</p> <p><b>CASE A</b></p> <p>INVITE(SDP 3 = recvonly)      ←      ←      CPG(retrieve)      200 OK (INVITE)      →      ←      ACK      ←</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 3 = recvonly)      ←      →      200 OK (UPDATE)</p>		Apply post test routine

<b>TP number</b>	TP_308_008	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	First hold from ISUP. Session inactive, Retrieve requested from SIP		
<b>Test Purpose</b>	The session is set on hold at first from ISUP as well as second from SIP. Ensure that on receipt of an INVITE request and the media stream in the SDP is set to 'recvonly', a CPG message is sent and the Generic notification indicator is set to 'remote retrieval'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive SDP 3 a=recvonly		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> <b>MGCF</b> <b>ISUP</b> <b>Establish a confirmed dialogue</b>		
<b>CASE A</b>			
INVITE(SDP 1 = sendonly) ← ← CPG(hold)			
200 OK (INVITE) →			
ACK ←			
<b>CASE B</b>			
UPDATE(SDP 1 = sendonly) ← ← CPG(hold)			
200 OK (UPDATE) →			
INVITE(SDP 2 = inactive) → → CPG(hold)			
200 OK (INVITE) ←			
ACK →			
INVITE(SDP 3 = recvonly) → → CPG(retrieve)			
200 OK (INVITE) ←			
ACK →			
<b>Apply post test routine</b>			

<b>TP number</b>	TP_308_009	<b>Reference</b>	7.4.10
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9		
<b>Test Purpose name</b>	First hold from ISUP. Session inactive, Retrieve requested from ISUP		
<b>Test Purpose</b>	The session is set on hold at first from ISUP as well as second from SIP. Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote retrieval', an INVITE or UPDATE request is sent and the media stream in the SDP is set to 'recvonly'.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP 1 a=sendonly SDP 2 a=inactive SDP 3 a=recvonly		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Establish a confirmed dialogue</b></p> <p><b>CASE A</b></p> <p>INVITE(SDP 1 = sendonly)      ↪                    ↤      ← CPG(hold)      200 OK (INVITE)                 ↤                    ↬      ACK                              ↤</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 1 = sendonly)      ↪                    ↤      → CPG(hold)      200 OK (UPDATE)                ↤      INVITE(SDP 2 = inactive)      ↤                    ↬      200 OK (INVITE)                ↤                    ↬      ACK                              ↤</p> <p><b>CASE A</b></p> <p>INVITE(SDP 3 = recvonly)      ↪                    ↤      ← CPG(retrieve)      200 OK (INVITE)                ↤                    ↬      ACK                              ↤</p> <p><b>CASE B</b></p> <p>UPDATE(SDP 3 = recvonly)      ↪                    ↤      →      200 OK (UPDATE)                ↤</p>		
			<b>Apply post test routine</b>

<b>TP number</b>	TP_308_010	<b>Reference</b>	7.4.10.2
<b>TSS reference</b>	PSTN-SS/HOLD/		
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1		
<b>Test Purpose name</b>	CPG hold received before a dialogue was established UPDATE is sent in early dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote hold' before a dialogue is established, the UPDATE request indicating the hold indication is sent <b>after the early dialogue</b> by receiving a 180 Ringing is established. The media stream in the SDP is set to sendonly indicating the hold state.		
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold		
<b>SIP Parameter values</b>	UPDATE: SDP a=sendonly		
<b>Comments</b>	A CPG is received after an ACM was sent.		
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <p>IAM                            → Start Ti/w2            → INVITE      ACM                            ↤                            ↬      CPG(hold)                  →                            ↤      180 Ringing      →                            →                            →      UPDATE(sendonly)      →                            →                            →      200 OK (UPDATE)</p>		
			<b>Apply post test routine</b>

<b>TP number</b>	TP_308_011	<b>Reference</b>	7.4.10.2																				
<b>TSS reference</b>	PSTN-SS/HOLD/																						
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																						
<b>Test Purpose name</b>	CPG hold received before a dialogue was established UPDATE is sent in confirmed dialogue																						
<b>Test Purpose</b>	Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote hold' before a dialogue is established, the INVITE or UPDATE request indicating the hold indication is sent <b>after the confirmed dialogue</b> by receiving a 200 OK (INVITE) is established. The media stream in the SDP is set to sendonly indicating the hold state.																						
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold																						
<b>SIP Parameter values</b>	INVITE/UPDATE:SDP a=sendonly																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">ISUP</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>CPG(hold) → CON ←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>CASE A</b></td> </tr> <tr> <td colspan="3" style="text-align: center;">→ INVITE(sendonly) ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>CASE B</b></td> </tr> <tr> <td colspan="3" style="text-align: center;">→ UPDATE(sendonly) ← 200 OK (UPDATE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE ← 100 Trying	CPG(hold) → CON ←		← 200 OK (INVITE) → ACK	<b>CASE A</b>			→ INVITE(sendonly) ← 200 OK (INVITE) → ACK			<b>CASE B</b>			→ UPDATE(sendonly) ← 200 OK (UPDATE)			<b>Apply post test routine</b>
ISUP	MGCF	Mg																					
IAM →		→ INVITE ← 100 Trying																					
CPG(hold) → CON ←		← 200 OK (INVITE) → ACK																					
<b>CASE A</b>																							
→ INVITE(sendonly) ← 200 OK (INVITE) → ACK																							
<b>CASE B</b>																							
→ UPDATE(sendonly) ← 200 OK (UPDATE)																							

<b>TP number</b>	TP_308_013	<b>Reference</b>	7.4.10.2																	
<b>TSS reference</b>	PSTN-SS/HOLD/																			
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																			
<b>Test Purpose name</b>	An UPDATE (hold) is repeated in the early dialogue after SDP offer answer exchange																			
<b>Test Purpose</b>	Ensure that on receipt of an UPDATE request after the session was set on hold indicating a new SDP, an UPDATE request is sent and the media stream is set to 'sendonly' to refresh the previous held state.																			
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold																			
<b>SIP Parameter values</b>	INVITE: SDP1 UPDATE 1: SDP a=sendonly UPDATE 2: SDP 2 (any codec negotiation no hold)																			
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">ISUP</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE(SDP1)</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG(hold) →</td> <td></td> <td>→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)</td> </tr> <tr> <td></td> <td></td> <td>← UPDATE 2 (SDP2) → 200 OK (UPDATE)</td> </tr> <tr> <td></td> <td></td> <td>→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE(SDP1)	ACM ←		← 180 Ringing	CPG(hold) →		→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)			← UPDATE 2 (SDP2) → 200 OK (UPDATE)			→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)	<b>Apply post test routine</b>
ISUP	MGCF	Mg																		
IAM →		→ INVITE(SDP1)																		
ACM ←		← 180 Ringing																		
CPG(hold) →		→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)																		
		← UPDATE 2 (SDP2) → 200 OK (UPDATE)																		
		→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)																		

<b>TP number</b>	TP_308_014	<b>Reference</b>	7.4.10.2																	
<b>TSS reference</b>	PSTN-SS/HOLD/																			
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																			
<b>Test Purpose name</b>	An UPDATE (hold) is sent after an additional early dialogue is established																			
<b>Test Purpose</b>	An early dialogue is established and set on hold. Ensure that on receipt of a 180 Ringing establish a new early dialogue, an UPDATE request is sent on this dialogue and the media stream is set to 'sendonly'.																			
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold																			
<b>SIP Parameter values</b>	180 1: To: <appropriate URI>; tag=1 180 1: To: <appropriate URI>; tag=2  UPDATE 2: To: <appropriate URI>; tag=2																			
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing 1</td> </tr> <tr> <td>CPG(hold) →</td> <td></td> <td>→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing 2</td> </tr> <tr> <td></td> <td></td> <td>→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing 1	CPG(hold) →		→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)			← 180 Ringing 2			→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)	
ISUP	MGCF	Mg																		
IAM →		→ INVITE																		
ACM ←		← 180 Ringing 1																		
CPG(hold) →		→ UPDATE 1 (sendonly) ← 200 OK (UPDATE)																		
		← 180 Ringing 2																		
		→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)																		
		<b>Apply post test routine</b>																		

<b>TP number</b>	TP_308_015	<b>Reference</b>	7.4.10.2																				
<b>TSS reference</b>	PSTN-SS/HOLD/																						
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																						
<b>Test Purpose name</b>	An INVITE or UPDATE (hold condition) is sent after 200 OK INVITE was received when a CPG (hold) was received in early dialogue																						
<b>Test Purpose</b>	A CPG indicating Hold was received in the early dialogue. Ensure that on receipt of a 200 OK (INVITE) establishing the confirmed dialogue, an INVITE or UPDATE request is sent and the media stream is set to 'sendonly' indicating the held state.																						
<b>ISUP Parameter values</b>	CPG: Generic notification Remote hold																						
<b>SIP Parameter values</b>	INVITE/UPDATE 2: SDP a=sendonly																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG(hold) →</td> <td></td> <td>→ UPDATE(sendonly) ← 200 OK (UPDATE)</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CASE A</td> <td></td> <td>→ INVITE 2 (sendonly) ← 200 OK (INVITE) → ACK</td> </tr> <tr> <td>CASE B</td> <td></td> <td>→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG(hold) →		→ UPDATE(sendonly) ← 200 OK (UPDATE)	ANM ←		← 200 OK (INVITE) → ACK	CASE A		→ INVITE 2 (sendonly) ← 200 OK (INVITE) → ACK	CASE B		→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)	
ISUP	MGCF	Mg																					
IAM →		→ INVITE																					
ACM ←		← 180 Ringing																					
CPG(hold) →		→ UPDATE(sendonly) ← 200 OK (UPDATE)																					
ANM ←		← 200 OK (INVITE) → ACK																					
CASE A		→ INVITE 2 (sendonly) ← 200 OK (INVITE) → ACK																					
CASE B		→ UPDATE 2 (sendonly) ← 200 OK (UPDATE)																					
		<b>Apply post test routine</b>																					

<b>TP number</b>	TP_308_016	<b>Reference</b>	7.4.10															
<b>TSS reference</b>	PSTN-SS/HOLD/																	
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																	
<b>Test Purpose name</b>	'sendonly' and 'sendrecv' received from the terminating SIP user in the early dialogue																	
<b>Test Purpose</b>	Ensure that on receipt of an UPDATE request in the early dialogue and the media stream is set to 'sendonly' a CPG message is sent and the Generic notification indicator is set to 'remote hold'. Ensure that on receipt of an UPDATE request in the early dialogue and the media stream is already set on hold the media stream is set to 'sendrecv' in the received UPDATE, a CPG message is sent and the Generic notification indicator is set to 'remote retrieval'.																	
<b>ISUP Parameter values</b>																		
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">ISUP</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td>← UPDATE(sendonly) → 200 OK (UPDATE)</td> </tr> <tr> <td>CPG(hold)</td> <td style="text-align: center;">←</td> <td>← UPDATE(sendrecv) → 200 OK (UPDATE)</td> </tr> <tr> <td>CPG(retrieve)</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying ← 180 Ringing	ACM	←	← UPDATE(sendonly) → 200 OK (UPDATE)	CPG(hold)	←	← UPDATE(sendrecv) → 200 OK (UPDATE)	CPG(retrieve)	←			
ISUP	MGCF	Mg																
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing																
ACM	←	← UPDATE(sendonly) → 200 OK (UPDATE)																
CPG(hold)	←	← UPDATE(sendrecv) → 200 OK (UPDATE)																
CPG(retrieve)	←																	
		<b>Apply post test routine</b>																

<b>TP number</b>	TP_308_017	<b>Reference</b>	7.4.2																					
<b>TSS reference</b>	PSTN-SS/HOLD/																							
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																							
<b>Test Purpose name</b>	'sendonly' and 'sendrecv' received from the originating SIP user in the early dialogue																							
<b>Test Purpose</b>	Ensure that on receipt of an UPDATE request in the early dialogue and the media stream is set to 'sendonly', a CPG message is sent and the Generic notification indicator is set to 'remote hold'. Ensure that on receipt of an UPDATE request in the early dialogue and the media stream is set to 'sendonly' the session is already set on hold, a CPG message is sent and the Generic notification indicator is set to 'remote retrieval'.																							
<b>ISUP Parameter values</b>																								
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Mg	MGCF	ISUP																						
INVITE	→	→ IAM																						
180 Ringing	←	← ACM																						
UPDATE(sendonly)	→	→ CPG(hold)																						
200 OK (UPDATE)	←																							
UPDATE(sendrecv)	→	→ CPG(retrieve)																						
200 OK (UPDATE)	←																							
		<b>Apply post test routine</b>																						

<b>TP number</b>	TP_308_018	<b>Reference</b>	7.4.10															
<b>TSS reference</b>	PSTN-SS/HOLD/																	
<b>Selection criteria</b>	PICS 6.3.2/9 AND PICS 6.3.6/1																	
<b>Test Purpose name</b>	'hold' and 'retrieve' received from the originating PSTN user in the early dialogue																	
<b>Test Purpose</b>	Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote hold' in the early dialogue, an UPDATE request is sent and the mediasream is set to 'sendonly'. Ensure that on receipt of a CPG message and the Generic notification indicator is set to 'remote retrieval' and the session is already set on hold, an UPDATE request is sent and the media stream is set to 'sendrecv'.																	
<b>ISUP Parameter values</b>																		
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
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ISUP	MGCF	Mg																
IAM	→	→ INVITE ← 100 Trying ← 180 Ringing																
ACM	←																	
CPG(hold)	→	→ UPDATE(sendonly) ← 200 OK (UPDATE)																
CPG(retrieve)	→	→ UPDATE(sendrecv) ← 200 OK (UPDATE)																
		<b>Apply post test routine</b>																

### 6.2.9 Call Completion on busy subscriber

<b>TP number</b>	TP_309_001	<b>Reference</b>	7.4.11															
<b>TSS reference</b>	PSTN-SS/CCBS/																	
<b>Selection criteria</b>	PICS 6.3.2/10																	
<b>Test Purpose name</b>	The diagnostic field is not interworked																	
<b>Test Purpose</b>	Ensure that on receipt of an REL message cause #17 and a diagnostic field is present set to 'CCBS possible', a final SIP response 486 Busy Here is sent no indication of CCBS is present.																	
<b>ISUP Parameter values</b>	REL: Cause indicator CCBS possible indicator = CCBS possible																	
<b>SIP Parameter values</b>																		
<b>Comments</b>	The CCBS possible indicator is contained in the diagnostic field of the Cause indicator																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>486 Busy Here</td> <td>←</td> <td>← REL(17)</td> </tr> <tr> <td>ACK</td> <td>→</td> <td>→ RLC</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		486 Busy Here	←	← REL(17)	ACK	→	→ RLC		
Mg	MGCF	ISUP																
INVITE	→	→ IAM																
100 Trying	←																	
486 Busy Here	←	← REL(17)																
ACK	→	→ RLC																

### 6.2.10 Completion of Calls on No Reply (CCNR)

<b>TP number</b>	TP_310_001	<b>Reference</b>	7.4.12												
<b>TSS reference</b>	PSTN-SS/CCNR/														
<b>Selection criteria</b>	PICS 6.3.2/11														
<b>Test Purpose name</b>	CCNR possible indication received in an ACM, discarded														
<b>Test Purpose</b>	Ensure that on receipt of an ACM and a CCNR possible indicator is present the value set to 'CCNR possible', a 180 Ringing is sent without indication of CCNR facility.														
<b>ISUP Parameter values</b>	ACM: BCI called party status indicator = subscriber free, CCNR Possible Indicator = CCNR possible														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM</td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM		
Mg	MGCF	ISUP													
INVITE	→	→ IAM													
100 Trying	←														
180 Ringing	←	← ACM													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_310_002	<b>Reference</b>	7.4.12												
<b>TSS reference</b>	PSTN-SS/CCNR/														
<b>Selection criteria</b>	PICS 6.3.2/11														
<b>Test Purpose name</b>	CCNR possible indication received in a CPG, discarded														
<b>Test Purpose</b>	Ensure that on receipt of a CPG and a CCNR possible indicator is present the value set to 'CCNR possible', a 180 Ringing is sent without indication of CCNR facility.														
<b>ISUP Parameter values</b>	<b>ACM:</b> BCI called party status indicator = no indication, oBCI = inband info available <b>CPG:</b> Event indicator = ALERTING, CCNR Possible Indicator = CCNR possible														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM(no indication) CPG</td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM(no indication) CPG		
Mg	MGCF	ISUP													
INVITE	→	IAM													
100 Trying	←														
180 Ringing	←	ACM(no indication) CPG													

### 6.2.11 Terminal Portability (TP)

<b>TP number</b>	TP_311_001	<b>Reference</b>	7.4.13																											
<b>TSS reference</b>	PSTN-SS/TP/																													
<b>Selection criteria</b>	PICS 6.3.2/12																													
<b>Test Purpose name</b>	SUS user initiated is mapped into an reINVITE SDP sendonly																													
<b>Test Purpose</b>	Ensure that on receipt of an SUS message and the Suspend/Resume indicator is set to 'ISDN subscriber initiated', a reINVITE is sent and the media stream indicated in the SDP is set to 'sendonly'.																													
<b>ISUP Parameter values</b>	<b>SUS:</b> Suspend/Resume ISDN subscriber initiated																													
<b>SIP Parameter values</b>	INVITE: SDP a=sendonly																													
<b>Comments</b>																														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>100 Trying</td> <td>←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>←</td> <td>ANM</td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> <tr> <td>INVITE(sendonly)</td> <td>←</td> <td>SUS(user)</td> </tr> <tr> <td>200 OK (INVITE)</td> <td>→</td> <td></td> </tr> <tr> <td>ACK</td> <td>←</td> <td></td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	100 Trying	←		180 Ringing	←	ACM	200 OK (INVITE)	←	ANM	ACK	→		INVITE(sendonly)	←	SUS(user)	200 OK (INVITE)	→		ACK	←			
Mg	MGCF	ISUP																												
INVITE	→	IAM																												
100 Trying	←																													
180 Ringing	←	ACM																												
200 OK (INVITE)	←	ANM																												
ACK	→																													
INVITE(sendonly)	←	SUS(user)																												
200 OK (INVITE)	→																													
ACK	←																													

<b>TP number</b>	TP_311_002	<b>Reference</b>	7.4.13																							
<b>TSS reference</b>	PSTN-SS/TP/																									
<b>Selection criteria</b>	PICS 6.3.2/12																									
<b>Test Purpose name</b>	RES user initiated is mapped into an reINVITE SDP sendrecv																									
<b>Test Purpose</b>	A SUS message and the Suspend/Resume indicator is set to 'ISDN subscriber initiated' was received. Ensure that on receipt of an RES message and the Suspend/Resume indicator is set to 'ISDN subscriber initiated', a reINVITE is sent and the media stream indicated in the SDP is set to 'sendrecv'.																									
<b>ISUP Parameter values</b>	<b>RES:</b> Suspend/Resume ISDN subscriber initiated																									
<b>SIP Parameter values</b>	<b>INVITE:</b> SDP a=sendrecv																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">ISUP</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>INVITE(sendonly) 200 OK (INVITE)</td> <td>← →</td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td>ACK ←</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>INVITE(sendrecv) 200 OK (INVITE)</td> <td>← →</td> <td>← SUS(user)</td> </tr> <tr> <td>ACK ←</td> <td></td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 100 Trying	ANM ←		← 180 Ringing	INVITE(sendonly) 200 OK (INVITE)	← →	← 200 OK (INVITE)	ACK ←		→ ACK	INVITE(sendrecv) 200 OK (INVITE)	← →	← SUS(user)	ACK ←			
ISUP	MGCF	Mg																								
IAM →		→ INVITE																								
ACM ←		← 100 Trying																								
ANM ←		← 180 Ringing																								
INVITE(sendonly) 200 OK (INVITE)	← →	← 200 OK (INVITE)																								
ACK ←		→ ACK																								
INVITE(sendrecv) 200 OK (INVITE)	← →	← SUS(user)																								
ACK ←																										
		<b>Apply post test routine</b>																								

### 6.2.12 Conference calling (CONF)/Three-Party Service (3PTY)

<b>TP number</b>	TP_312_001	<b>Reference</b>	7.4.14																	
<b>TSS reference</b>	PSTN-SS/CONF/																			
<b>Selection criteria</b>	PICS 6.3.2/13																			
<b>Test Purpose name</b>	I-MGCF: Session not on hold, notification 'conference established'																			
<b>Test Purpose</b>	A session at the I-MGCF is in the confirmed state and not set on hold. Ensure that on receipt of a CPG message the Generic notification indicator is set to 'Conference established' no reINVITE is sent.																			
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic notification Conference established																			
<b>SIP Parameter values</b>																				
<b>Comments</b>	This state is applicable for CONF and 3PTY																			
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<b>TP number</b>	TP_312_002	<b>Reference</b>	7.4.14																		
<b>TSS reference</b>	PSTN-SS/CONF/																				
<b>Selection criteria</b>	PICS 6.3.2/13																				
<b>Test Purpose name</b>	O-MGCF: Session not on hold, notification 'conference established'																				
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<b>TP number</b>	TP_312_003	<b>Reference</b>	7.4.14																																				
<b>TSS reference</b>	PSTN-SS/CONF/																																						
<b>Selection criteria</b>	PICS 6.3.2/13																																						
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<b>Test Purpose</b>	A session at the I-MGCF is in the confirmed state and set on hold. Ensure that on receipt of a CPG message the Generic notification indicator is set to 'Conference established' a reINVITE request is sent the 'a' attribute in the SDP is set to 'sendrecv'.																																						
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<b>TP number</b>	TP_312_004	<b>Reference</b>	7.4.14																	
<b>TSS reference</b>	PSTN-SS/CONF/																			
<b>Selection criteria</b>	PICS 6.3.2/13																			
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<b>TP number</b>	TP_312_005	<b>Reference</b>	7.4.14																		
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<b>Selection criteria</b>	PICS 6.3.2/13																				
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<b>TP number</b>	TP_312_006	<b>Reference</b>	7.4.14																	
<b>TSS reference</b>	PSTN-SS/CONF/																			
<b>Selection criteria</b>	PICS 6.3.2/13																			
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<b>TP number</b>	TP_312_007	<b>Reference</b>	7.4.14																																												
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<b>TP number</b>	TP_312_008	<b>Reference</b>	7.4.14																							
<b>TSS reference</b>	PSTN-SS/CONF/																									
<b>Selection criteria</b>	PICS 6.3.2/13																									
<b>Test Purpose name</b>	O-MGCF: Session on hold, notification 'Conference disconnected'																									
<b>Test Purpose</b>	A session at the O-MGCF is in the confirmed state set on hold and a conference is established. Ensure that on receipt of a CPG message the Generic notification indicator is set to 'Conference disconnected' a reINVITE request is sent the 'a' attribute in the SDP is set to 'sendonly'.																									
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<b>TP number</b>	TP_312_009	<b>Reference</b>	7.4.14
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/13		
<b>Test Purpose name</b>	I-MGCF: notification 'isolated' and 'reattached' interworked		
<b>Test Purpose</b>	A conference at the I-MFCF is established. Ensure that on receipt of a CPG message the Generic notification indicator is set to 'isolated' a reINVITE request is sent the 'a' attribute in the SDP is set to 'sendonly'. Subsequently on receipt of a CPG message the Generic notification indicator is set to 'reattached' a reINVITE request is sent the 'a' attribute in the SDP is set to 'sendrecv'.		
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<b>Comments</b>	This state is applicable for CONF.		
<b>Message flows</b>	<b>Mg</b>  INVITE → 100 Trying ← 180 Ringing ←  200 OK (INVITE) ← ACK →   INVITE 1 (sendonly) ← 200 OK INVITE (recvonly) → ACK ←  INVITE 2 (sendrecv) ← 200 OK INVITE (sendrecv) → ACK ←	<b>MGCF</b>  → IAM ← ACM  ← ANM  ← CPG 1  ← CPG 2  ← CPG 3	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_312_010	<b>Reference</b>	7.4.14																																			
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<b>SIP Parameter values</b>	INVITE 1: SDP a=sendonly INVITE 2: SDP a=sendrecv																																					
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<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM                    →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM                    ←</td> <td></td> <td>← 100 Trying</td> </tr> <tr> <td>ANM                    ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG 1                 →</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td>CPG 2                 →</td> <td></td> <td>→ ACK</td> </tr> <tr> <td>CPG 3                 →</td> <td></td> <td>→ INVITE 1 (sendonly)</td> </tr> <tr> <td></td> <td></td> <td>← 200 OK INVITE (recvonly)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td></td> <td></td> <td>→ INVITE 2 (sendrecv)</td> </tr> <tr> <td></td> <td></td> <td>← 200 OK INVITE (sendrecv)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM                    →		→ INVITE	ACM                    ←		← 100 Trying	ANM                    ←		← 180 Ringing	CPG 1                 →		← 200 OK (INVITE)	CPG 2                 →		→ ACK	CPG 3                 →		→ INVITE 1 (sendonly)			← 200 OK INVITE (recvonly)			→ ACK			→ INVITE 2 (sendrecv)			← 200 OK INVITE (sendrecv)			→ ACK	
ISUP	MGCF	Mg																																				
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		← 200 OK INVITE (sendrecv)																																				
		→ ACK																																				
		<b>Apply post test routine</b>																																				

### 6.2.13 Closed User Group (CUG)

<b>TP number</b>	TP_313_001	<b>Reference</b>	7.4.16									
<b>TSS reference</b>	PSTN-SS/CUG/											
<b>Selection criteria</b>	PICS 6.3.2/14											
<b>Test Purpose name</b>	oFCi CUG outgoing access allowed call successful											
<b>Test Purpose</b>	Ensure that on receipt of an IAM the optional Forward call indicator is set to 'CUG with outgoing access allowed' an INVITE is sent. No CUG information is present in the INVITE.											
<b>ISUP Parameter values</b>	IAM: Optional Forward Call indicator: CUG with outgoing access allowed											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM                    →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td></td> <td></td> <td>← 100 Trying</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM                    →		→ INVITE			← 100 Trying		
ISUP	MGCF	Mg										
IAM                    →		→ INVITE										
		← 100 Trying										
		<b>Apply post test routine</b>										

<b>TP number</b>	TP_313_002	<b>Reference</b>	7.4.16
<b>TSS reference</b>	PSTN-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/14		
<b>Test Purpose name</b>	oFCi CUG outgoing access not allowed		
<b>Test Purpose</b>	Ensure that on receipt of an IAM the optional Forward call indicator is set to 'CUG with outgoing access not allowed' a REL message is sent the cause value is set to 29 and diagnostics indicating CUG without access is sent towards the originating exchange.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call indicator: CUG with outgoing access not allowed <b>REL:</b> Cause value (if sent) 29 Diagnostics = CUG without access		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → REL #29 ← RLC →	MGCF	Mg

### 6.2.14 Multi-Level Precedence and Pre-emption (MLPP)

<b>TP number</b>	TP_314_001	<b>Reference</b>	7.4.17
<b>TSS reference</b>	PSTN-SS/MLPP/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Precedence parameter received in IAM, discarded		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Precedence parameter is present, this parameter is discarded without affecting the ongoing call setup.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Precedence		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → Apply post test routine	MGCF → INVITE ← 100 Trying	Mg

<b>TP number</b>	TP_314_002	<b>Reference</b>	7.4.17
<b>TSS reference</b>	PSTN-SS/MLPP/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL cause #9 terminates an early dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a REL message in an early dialogue at the O-MGCF and the Cause value is set to '9', a CANCEL request is sent. A Reason header is contained in the CANCEL request and the cause value is set to '9'.		
<b>ISUP Parameter values</b>	<b>REL:</b> Cause = 9		
<b>SIP Parameter values</b>	CANCEL: Reason: Q.850 [5]; cause=9		
<b>Comments</b>			
<b>Message flows</b>	ISUP REL → RLC ←	MGCF A Session is already in early dialogue → CANCEL ← 200 OK CANCEL ← 487 Request Terminated → ACK	Mg

<b>TP number</b>	TP_314_003	<b>Reference</b>	7.4.17
<b>TSS reference</b>	PSTN-SS/MLPP/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL cause #8 terminates an early dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a REL message in an early dialogue at the I-MGCF and the Cause value is set to '8', a 4xx or 5xx final response is sent. A Reason header is contained in the final response message and the cause value is set to '9'.		
<b>ISUP Parameter values</b>	REL: Cause = 8		
<b>SIP Parameter values</b>	480: Reason: Q.850 [5]; cause=8		
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>Mg</b>                    <b>MGCF</b>                    <b>ISUP</b>  <b>A Session is already in early dialogue</b>            4xx/5xx                    ←                    ← REL            ACK                    →                    → RLC         </div>		

<b>TP number</b>	TP_314_004	<b>Reference</b>	7.4.17
<b>TSS reference</b>	PSTN-SS/MLPP/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	A REL cause #9 terminates a confirmed dialogue		
<b>Test Purpose</b>	Ensure that on receipt of a REL message in a confirmed dialogue and the Cause value is set to '9', a BYE request is sent. A Reason header is contained in the BYE request and the cause value is set to '9'.		
<b>ISUP Parameter values</b>	REL: Cause = 9		
<b>SIP Parameter values</b>	BYE: Reason: Q.850 [5]; cause=9		
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>  <b>A Session is already established</b>            REL                    →                    → BYE            RLC                    ←                    ← 200 OK BYE         </div>		

## 6.2.15 Global Virtual Network Service (GVNS)

<b>TP number</b>	TP_315_001	<b>Reference</b>	7.4.18
<b>TSS reference</b>	PSTN-SS/GVNS/		
<b>Selection criteria</b>			
<b>Test Purpose name</b>	Forward GVNS parameter in IAM discarded		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a request for GVNS service, the Forward GVNS parameter is discarded without affect the ongoing call setup.		
<b>ISUP Parameter values</b>	IAM: Called party number Forward GVNS Originating participating service provider GVNS user group Terminating network routing number		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<div style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>            IAM                    →                    → INVITE                                      ←                    ← 100 Trying  <b>Apply post test routine</b> </div>		

### 6.2.16 Reverse charging (REV)

<b>TP number</b>	TP_316_001	<b>Reference</b>	7.4.20									
<b>TSS reference</b>	PSTN-SS/REV/											
<b>Selection criteria</b>	PICS 6.3.7/1											
<b>Test Purpose name</b>	REV request from the calling user at the call set-up time											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Remote Operation parameter is present containing a REVCallingReqSetup invoke component, the Remote Operation parameter is discarded without affect the ongoing call setup.											
<b>ISUP Parameter values</b>	IAM: Called party number Remote Operation REVCallingReqSetup invoke transferRequested = true callingUserNumber											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_316_002	<b>Reference</b>	7.4.20									
<b>TSS reference</b>	PSTN-SS/REV/											
<b>Selection criteria</b>	PICS 6.3.7/1											
<b>Test Purpose name</b>	REV request from the calling user during the active state of the call											
<b>Test Purpose</b>	Ensure that on receipt of a FAC message at the O-MGCF in the active state of a call and a Remote Operation parameter is present containing a REVCallingReqActive invoke component, the FAC message is discarded without affecting the present call.											
<b>ISUP Parameter values</b>	FAC: Remote Operation REVCallingReqActive invoke transferRequested = true callingUserNumber											
<b>SIP Parameter values</b>												
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">ISUP</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>FAC</td> <td>→</td> <td>A confirmed dialogue is already established</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	FAC	→	A confirmed dialogue is already established	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
FAC	→	A confirmed dialogue is already established										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_316_003	<b>Reference</b>	7.4.20												
<b>TSS reference</b>	PSTN-SS/REV/														
<b>Selection criteria</b>	PICS 6.3.7/1														
<b>Test Purpose name</b>	REV request from the called user during the active state of the call														
<b>Test Purpose</b>	Ensure that on receipt of a FAC message at the I-MGCF in the active state of a call and a Remote Operation parameter is present containing a REVCalledRequest invoke component, the FAC message is discarded without affecting the present call.														
<b>ISUP Parameter values</b>	FAC: Remote Operation REVCalledRequest invoke transferRequested = true calledUserNumber														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">Mg</td> <td style="width: 25%;">MGCF</td> <td style="width: 25%;">ISUP</td> </tr> <tr> <td colspan="3">A confirmed dialogue is already established</td> </tr> <tr> <td colspan="3">← FAC</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	Mg	MGCF	ISUP	A confirmed dialogue is already established			← FAC			<b>Apply post test routine</b>				
Mg	MGCF	ISUP													
A confirmed dialogue is already established															
← FAC															
<b>Apply post test routine</b>															

<b>TP number</b>	TP_316_004	<b>Reference</b>	7.4.20																																
<b>TSS reference</b>	PSTN-SS/REV/																																		
<b>Selection criteria</b>	PICS 6.3.7/2																																		
<b>Test Purpose name</b>	REV request in IAM explicit rejected																																		
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM message and a Remote Operation parameter is present containing REVCallingReqSetup invoke component and the explicit rejection of this service is supported, the SUT sends in a:</p> <ul style="list-style-type: none"> <li>• ANM a Remote Operation parameter containing a REVCallingReqSetup return error component set to rejectedByNetwork <b>OR</b></li> <li>• REL a Remote Operation parameter containing a REVCallingReqSetup return error component set to rejectedByNetwork and the Cause value is set to '29'.</li> </ul>																																		
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Remote Operation REVCallingReqSetup invoke transferRequested = true callingUserNumber <b>ANM:</b> Remote Operation REVCallingReqSetup return error rejectedByNetwork <b>REL:</b> Cause 29 Remote Operation REVCallingReqSetup return error rejectedByNetwork																																		
<b>SIP Parameter values</b>																																			
<b>Comments</b>																																			
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>CASE A</b></td> </tr> <tr> <td style="text-align: center;">ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td style="text-align: center;">ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td colspan="3" style="text-align: center; font-weight: bold;">Apply post test routine</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>CASE B</b></td> </tr> <tr> <td style="text-align: center;">REL</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td style="text-align: center;">RLC</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→		<b>CASE A</b>			ACM	←	→ INVITE	ANM	←	← 180 Ringing			← 200 OK INVITE			→ ACK	Apply post test routine			<b>CASE B</b>			REL	←		RLC	→		
ISUP	MGCF	Mg																																	
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ANM	←	← 180 Ringing																																	
		← 200 OK INVITE																																	
		→ ACK																																	
Apply post test routine																																			
<b>CASE B</b>																																			
REL	←																																		
RLC	→																																		

<b>TP number</b>	TP_316_005	<b>Reference</b>	7.4.20														
<b>TSS reference</b>	PSTN-SS/REV/																
<b>Selection criteria</b>	PICS 6.3.7/2																
<b>Test Purpose name</b>	REV request in the active state explicit rejected at the O-MGCF																
<b>Test Purpose</b>	Ensure that on receipt of an FAC message at the O-MGCF in the active state of the call and a Remote Operation parameter is present containing REVCallingReqSetup invoke component and the explicit rejection of this service is supported, the SUT sends in a FRJ message a Remote Operation parameter containing a REVCallingReqActive return error component set to rejectedByNetwork.																
<b>ISUP Parameter values</b>	<b>FAC:</b> Remote Operation REVCallingReqActive invoke transferRequested = true callingUserNumber <b>FRJ:</b> Remote Operation REVCallingReqActive return error rejectedByNetwork																
<b>SIP Parameter values</b>																	
<b>Comments</b>																	
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;">ISUP</th> <th style="text-align: center; width: 33.33%;">MGCF</th> <th style="text-align: center; width: 33.33%;">Mg</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;"><b>A confirmed dialogue is already established</b></td> </tr> <tr> <td style="text-align: center;">FAC</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td style="text-align: center;">FRJ</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center; font-weight: bold;">Apply post test routine</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	<b>A confirmed dialogue is already established</b>			FAC	→		FRJ	←		Apply post test routine			
ISUP	MGCF	Mg															
<b>A confirmed dialogue is already established</b>																	
FAC	→																
FRJ	←																
Apply post test routine																	

<b>TP number</b>	TP_316_006	<b>Reference</b>	7.4.20															
<b>TSS reference</b>	PSTN-SS/REV/																	
<b>Selection criteria</b>	PICS 6.3.7/2																	
<b>Test Purpose name</b>	REV request in the active state explicit rejected at the I-MGCF																	
<b>Test Purpose</b>	Ensure that on receipt of an FAC message at the O-MGCF in the active state of the call and a Remote Operation parameter is present containing REVCallingReqSetup invoke component and the explicit rejection of this service is supported, the SUT sends in a FRJ message a Remote Operation parameter containing a REVCalledRequest return error component set to rejectedByNetwork.																	
<b>ISUP Parameter values</b>	<b>FAC:</b> Remote Operation REVCalledRequest invoke transferRequested = true calledUserNumber <b>FRJ:</b> Remote Operation REVCalledRequest return error rejectedByNetwork																	
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33.33%;"><b>Mg</b></td> <td style="width: 33.33%;"><b>MGCF</b></td> <td style="width: 33.33%;"><b>ISUP</b></td> </tr> <tr> <td colspan="3"><b>A confirmed dialogue is already established</b></td></tr> <tr> <td></td><td style="text-align: center;">← FAC</td><td></td></tr> <tr> <td></td><td style="text-align: center;">→ FRJ</td><td></td></tr> <tr> <td colspan="3" style="text-align: center;"><b>Apply post test routine</b></td></tr> </table>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	<b>A confirmed dialogue is already established</b>				← FAC			→ FRJ		<b>Apply post test routine</b>		
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																
<b>A confirmed dialogue is already established</b>																		
	← FAC																	
	→ FRJ																	
<b>Apply post test routine</b>																		

## 6.2.17 User-to-User Signalling (UUS)

### 6.2.17.1 User-to-User Signalling (UUS) service 1 (implicit)

<b>TP number</b>	TP_317_001	<b>Reference</b>	7.4.21.1.2												
<b>TSS reference</b>	PSTN-SS/UUS/														
<b>Selection criteria</b>	PICS 6.3.2/18														
<b>Test Purpose name</b>	User-to-user information received in an INVITE is sent in an IAM														
<b>Test Purpose</b>	Ensure that on receipt of a User-to-User header field in an initial INVITE request and the 'encoding' parameter is set to 'hex' an ISUP IAM message is sent. A User-to-user parameter is present. The User Information is derived from the uuidata parameter of the SIP User-to-User header field and the ISUP User-to-user Protocol discriminator is set to '04'.														
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Information User Information														
<b>SIP Parameter values</b>	<b>INVITE:</b> User-to-User: <uuidata>; encoding=hex														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33.33%;"><b>Mg</b></td> <td style="width: 33.33%;"><b>MGCF</b></td> <td style="width: 33.33%;"><b>ISUP</b></td> </tr> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Apply post test routine</b></td></tr> </table>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	100 Trying	←		<b>Apply post test routine</b>		
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>													
INVITE	→	→ IAM													
100 Trying	←														
<b>Apply post test routine</b>															

<b>TP number</b>	TP_317_002	<b>Reference</b>	7.4.21.1.2																	
<b>TSS reference</b>	PSTN-SS/UUS/																			
<b>Selection criteria</b>	PICS 6.3.2/18																			
<b>Test Purpose name</b>	User-to-user information received in a Cancel is sent in a REL																			
<b>Test Purpose</b>	Ensure that on receipt of a User-to-User header field in a CANCEL request and the 'encoding' parameter is set to 'hex' an ISUP REL message is sent. A User-to-user parameter is present. The User Information is derived from the uuidata parameter of the SIP User-to-User header field and the ISUP User-to-user Protocol discriminator is set to '04'.																			
<b>ISUP Parameter values</b>	REL: User-to-user Information User Information																			
<b>SIP Parameter values</b>	CANCEL: User-to-User: <uuidata>; encoding=hex																			
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>CANCEL</td> <td>→</td> <td>→ REL</td> </tr> <tr> <td>200 OK CANCEL</td> <td>←</td> <td>← RLC</td> </tr> <tr> <td>487 Request Terminated</td> <td>←</td> <td></td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	CANCEL	→	→ REL	200 OK CANCEL	←	← RLC	487 Request Terminated	←		ACK	→		
Mg	MGCF	ISUP																		
INVITE	→	→ IAM																		
CANCEL	→	→ REL																		
200 OK CANCEL	←	← RLC																		
487 Request Terminated	←																			
ACK	→																			

<b>TP number</b>	TP_317_003	<b>Reference</b>	7.4.21.1.2											
<b>TSS reference</b>	PSTN-SS/UUS/													
<b>Selection criteria</b>	PICS 6.3.2/18													
<b>Test Purpose name</b>	User-to-user information received in a BYE is sent in a REL													
<b>Test Purpose</b>	Ensure that on receipt of a User-to-User header field in a BYE request after a confirmed dialogue was established and the 'encoding' parameter is set to 'hex' an ISUP REL message is sent. A User-to-user parameter is present. The User Information is derived from the uuidata parameter of the SIP User-to-User header field and the ISUP User-to-user Protocol discriminator is set to '04'.													
<b>ISUP Parameter values</b>	REL: User-to-user Information User Information													
<b>SIP Parameter values</b>	BYE: User-to-User: <uuidata>; encoding=hex													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> <tr> <td colspan="3" style="text-align: center;"><b>A confirmed dialogue is already established</b></td> </tr> <tr> <td>BYE</td> <td>→</td> <td>→ REL</td> </tr> <tr> <td>200 OK BYE</td> <td>←</td> <td>← RLC</td> </tr> </table>	Mg	MGCF	ISUP	<b>A confirmed dialogue is already established</b>			BYE	→	→ REL	200 OK BYE	←	← RLC	
Mg	MGCF	ISUP												
<b>A confirmed dialogue is already established</b>														
BYE	→	→ REL												
200 OK BYE	←	← RLC												

<b>TP number</b>	TP_317_004	<b>Reference</b>	7.4.21.1.3					
<b>TSS reference</b>	PSTN-SS/UUS/							
<b>Selection criteria</b>	PICS 6.3.2/18							
<b>Test Purpose name</b>	User-to-user information received in an IAM is sent in an INVITE							
<b>Test Purpose</b>	Ensure that on receipt of User-to-user parameter contained in an IAM, an INVITE request is sent and the User-to-User header is present. The uuidata parameter is derived from the User Information of the User-to-user parameter of the IAM, the encoding parameter is set to 'hex'.							
<b>ISUP Parameter values</b>	IAM: User-to-user Information User Information							
<b>SIP Parameter values</b>	INVITE: User-to-User: <uuidata>; encoding=hex							
<b>Comments</b>								
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	
ISUP	MGCF	Mg						
IAM	→	→ INVITE ← 100 Trying						

<b>TP number</b>	TP_317_005	<b>Reference</b>	7.4.21.1.3												
<b>TSS reference</b>	PSTN-SS/UUS/														
<b>Selection criteria</b>	PICS 6.3.2/18														
<b>Test Purpose name</b>	User-to-user information received in a REL is sent in a CANCEL														
<b>Test Purpose</b>	Ensure that on receipt of User-to-user parameter contained in a REL before the dialogue is confirmed, a CANCEL request is sent and the User-to-User header is present. The uuidata parameter is derived from the User Information of the User-to-user parameter of the REL, the encoding parameter is set to 'hex'.														
<b>ISUP Parameter values</b>	REL: User-to-user Information User Information														
<b>SIP Parameter values</b>	CANCEL: User-to-User: <uuidata>; encoding=hex														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td>REL</td> <td>→</td> <td>→ CANCEL ← 200 OK CANCEL</td> </tr> <tr> <td>RLC</td> <td>←</td> <td>← 487 Request Terminated → ACK</td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	REL	→	→ CANCEL ← 200 OK CANCEL	RLC	←	← 487 Request Terminated → ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE ← 100 Trying													
REL	→	→ CANCEL ← 200 OK CANCEL													
RLC	←	← 487 Request Terminated → ACK													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_317_006	<b>Reference</b>	7.4.21.1.3												
<b>TSS reference</b>	PSTN-SS/UUS/														
<b>Selection criteria</b>	PICS 6.3.2/18														
<b>Test Purpose name</b>	User-to-user information received in a REL is sent in a BYE														
<b>Test Purpose</b>	Ensure that on receipt of User-to-user parameter contained in a REL after the dialogue is confirmed, a BYE request is sent and the User-to-User header is present. The uuidata parameter is derived from the User Information of the User-to-user parameter of the REL, the encoding parameter is set to 'hex'.														
<b>ISUP Parameter values</b>	REL: User-to-user Information User Information														
<b>SIP Parameter values</b>	CANCEL: User-to-User: <uuidata>; encoding=hex														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td colspan="3" style="text-align: center;"><b>A confirmed dialogue is already established</b></td> </tr> <tr> <td>REL</td> <td>→</td> <td>→ BYE</td> </tr> <tr> <td>RLC</td> <td>←</td> <td>← 200 OK BYE</td> </tr> </table>	ISUP	MGCF	Mg	<b>A confirmed dialogue is already established</b>			REL	→	→ BYE	RLC	←	← 200 OK BYE		
ISUP	MGCF	Mg													
<b>A confirmed dialogue is already established</b>															
REL	→	→ BYE													
RLC	←	← 200 OK BYE													
		<b>Apply post test routine</b>													

### 6.2.17.2 User-to-User Signalling (UUS) service 1 (explicit)

<b>TP number</b>	TP_317_101	<b>Reference</b>	7.4.21.2												
<b>TSS reference</b>	PSTN-SS/UUS/														
<b>Selection criteria</b>	NOT PICS 6.3.8/1														
<b>Test Purpose name</b>	User-to-user indicator service 1 'not essential' received in IAM, discarded														
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 1 is present the request is 'not essential' the call setup is not disrupted.														
<b>ISUP Parameter values</b>	<p>IAM: User-to-user Indicator Request service 1 not essential</p> <p>User-to-user Information User Information</p>														
<b>SIP Parameter values</b>															
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK INVITE → ACK</td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	ANM	←	← 200 OK INVITE → ACK		
ISUP	MGCF	Mg													
IAM	→	→ INVITE													
ACM	←	← 180 Ringing													
ANM	←	← 200 OK INVITE → ACK													
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_317_102	<b>Reference</b>	7.4.21.2																				
<b>TSS reference</b>	PSTN-SS/UUS/																						
<b>Selection criteria</b>	PICS 6.3.8/1																						
<b>Test Purpose name</b>	User-to-user indicator service 1 'not essential' received in IAM, User-to-user indicator response in ACM or ANM 'not provided'																						
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 1 is present the request is 'not essential' the call setup is not disrupted A User-to-user indicator is sent in an ACM or ANM with a response for service 1 'not provided'.																						
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 1 not essential User-to-user Information User Information <b>ACM or ANM:</b> User-to-user Indicator Response service 1 not Provided																						
<b>SIP Parameter values</b>																							
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→</td> <td>INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>←</td> <td>180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td>←</td> <td>200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→</td> <td>ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>		ISUP	MGCF	Mg	IAM	→	→	INVITE	ACM	←	←	180 Ringing	ANM	←	←	200 OK INVITE			→	ACK		
	ISUP	MGCF	Mg																				
IAM	→	→	INVITE																				
ACM	←	←	180 Ringing																				
ANM	←	←	200 OK INVITE																				
		→	ACK																				

<b>TP number</b>	TP_317_103	<b>Reference</b>	7.4.21.2																
<b>TSS reference</b>	PSTN-SS/UUS/																		
<b>Selection criteria</b>	PICS 6.3.8/1																		
<b>Test Purpose name</b>	User-to-user indicator service 1 'essential' received in IAM, call is rejected																		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 1 is present the request is 'essential' the call setup is rejected. A REL is sent the Cause value is set to '29' the Diagnostics field contains the parameter name of the User-to-user indicator '42'.																		
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 1 essential User-to-user Information User Information <b>REL:</b> Cause indicator Cause 29 Diagnostics 42																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td></td> </tr> <tr> <td>REL</td> <td>←</td> <td></td> <td></td> </tr> <tr> <td>RLC</td> <td>→</td> <td></td> <td></td> </tr> </tbody> </table>		ISUP	MGCF	Mg	IAM	→			REL	←			RLC	→				
	ISUP	MGCF	Mg																
IAM	→																		
REL	←																		
RLC	→																		

### 6.2.17.3 User-to-User Signalling (UUS) service 2

<b>TP number</b>	TP_317_201	<b>Reference</b>	7.4.21.2
<b>TSS reference</b>	PSTN-SS/UUS/		
<b>Selection criteria</b>	NOT PICS 6.3.8/1		
<b>Test Purpose name</b>	User-to-user indicator service 2 'not essential' received in IAM, discarded		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 2 is present the request is 'not essential' the call setup is not disrupted.		
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 2 not essential User-to-user Information User Information		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                        →                              → INVITE                                    ←                              ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_317_202	<b>Reference</b>	7.4.21.2
<b>TSS reference</b>	PSTN-SS/UUS/		
<b>Selection criteria</b>	PICS 6.3.8/1		
<b>Test Purpose name</b>	User-to-user indicator service 2 'not essential' received in IAM, User-to-user indicator response in ACM or ANM 'not provided'		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 2 is present the request is 'not essential', the call setup is not disrupted A User-to-user indicator is sent in an ACM or ANM with a response for service 2 'not provided'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 2 not essential User-to-user Information User Information <b>ACM or ANM:</b> User-to-user Indicator Response service 2 not Provided		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                        →                              → INVITE          ACM                        ←                              ← 180 Ringing          ANM                        ←                              ← 200 OK INVITE                                    →                              → ACK  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_317_203	<b>Reference</b>	7.4.21.2																
<b>TSS reference</b>	PSTN-SS/UUS/																		
<b>Selection criteria</b>	PICS 6.3.8/1																		
<b>Test Purpose name</b>	User-to-user indicator service 2 'essential' received in IAM, call is rejected																		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 2 is present the request is 'essential', the call setup is rejected. A REL is sent the Cause value is set to '29' the Diagnostics field contains the parameter name of the User-to-user indicator '42'.																		
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 2 essential User-to-user Information User Information <b>REL:</b> Cause indicator Cause 29 Diagnostics 42																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>ISUP</th> <th>MGCF</th> <th>Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td></td> </tr> <tr> <td>REL</td> <td>←</td> <td></td> <td></td> </tr> <tr> <td>RLC</td> <td>→</td> <td></td> <td></td> </tr> </tbody> </table>				ISUP	MGCF	Mg	IAM	→			REL	←			RLC	→		
	ISUP	MGCF	Mg																
IAM	→																		
REL	←																		
RLC	→																		

#### 6.2.17.4 User-to-User Signalling (UUS) service 3

<b>TP number</b>	TP_317_301	<b>Reference</b>	7.4.21.2																
<b>TSS reference</b>	PSTN-SS/UUS/																		
<b>Selection criteria</b>	PICS 6.3.2/18 AND NOT PICS 6.3.8/1																		
<b>Test Purpose name</b>	User-to-user indicator service 3 'not essential' received in IAM, discarded																		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 3 is present the request is 'not essential' the call setup is not disrupted.																		
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 3 not essential User-to-user Information User Information																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>ISUP</th> <th>MGCF</th> <th>Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→</td> <td>INVITE</td> </tr> <tr> <td></td> <td></td> <td>←</td> <td>100 Trying</td> </tr> <tr> <td></td> <td></td> <td colspan="2" style="text-align: center;">Apply post test routine</td> </tr> </tbody> </table>				ISUP	MGCF	Mg	IAM	→	→	INVITE			←	100 Trying			Apply post test routine	
	ISUP	MGCF	Mg																
IAM	→	→	INVITE																
		←	100 Trying																
		Apply post test routine																	

<b>TP number</b>	TP_317_302	<b>Reference</b>	7.4.21.2															
<b>TSS reference</b>	PSTN-SS/UUS/																	
<b>Selection criteria</b>	PICS 6.3.2/18 AND PICS 6.3.8/1																	
<b>Test Purpose name</b>	User-to-user indicator service 3 'not essential' received in IAM, User-to-user indicator response in ACM or ANM 'not provided'																	
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 3 is present the request is 'not essential', the call setup is not disrupted A User-to-user indicator is sent in an ACM or ANM with a response for service 3 'not provided'.																	
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 3 not essential User-to-user Information User Information <b>ACM or ANM:</b> User-to-user Indicator Response service 3 not Provided																	
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	ANM	←	← 200 OK INVITE			→ ACK		
ISUP	MGCF	Mg																
IAM	→	→ INVITE																
ACM	←	← 180 Ringing																
ANM	←	← 200 OK INVITE																
		→ ACK																

<b>TP number</b>	TP_317_303	<b>Reference</b>	7.4.21.2															
<b>TSS reference</b>	PSTN-SS/UUS/																	
<b>Selection criteria</b>	PICS 6.3.8/1																	
<b>Test Purpose name</b>	User-to-user indicator service 3 'essential' received in IAM, call is rejected																	
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a User-to-user indicator parameter for the service 3 is present the request is 'essential', the call setup is rejected. A REL is sent the Cause value is set to '29' the Diagnostics field contains the parameter name of the User-to-user indicator '42'.																	
<b>ISUP Parameter values</b>	<b>IAM:</b> User-to-user Indicator Request service 3 essential User-to-user Information User Information <b>REL:</b> Cause indicator Cause 29 Diagnostics 42																	
<b>SIP Parameter values</b>																		
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM</td> <td>←</td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	ANM	←	← 200 OK INVITE			→ ACK		
ISUP	MGCF	Mg																
IAM	→	→ INVITE																
ACM	←	← 180 Ringing																
ANM	←	← 200 OK INVITE																
		→ ACK																

### 6.2.18 Anonymous Call rejection

<b>TP number</b>	TP_318_001	<b>Reference</b>	7.4.23																
<b>TSS reference</b>	PSTN-SS/ACR/																		
<b>Selection criteria</b>																			
<b>Test Purpose name</b>	Receipt of REL cause 24																		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP REL message cause #24 after the IAM was sent, a 433 (Anonymity Disallowed) final response is sent.																		
<b>ISUP Parameter values</b>	REL: Cause = 24 (call rejected due to ACR supplementary service)																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span>Mg</span> <span>MGCF</span> <span>ISUP</span> </div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">IAM</td> </tr> <tr> <td style="text-align: center;">100 Trying</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">433 (Anonymity Disallowed)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">←</td> <td style="text-align: center;">REL</td> </tr> <tr> <td style="text-align: center;">ACK</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">RLC</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	INVITE	→	→	IAM	100 Trying	←			433 (Anonymity Disallowed)	←	←	REL	ACK	→	→	RLC		
INVITE	→	→	IAM																
100 Trying	←																		
433 (Anonymity Disallowed)	←	←	REL																
ACK	→	→	RLC																

<b>TP number</b>	TP_318_002	<b>Reference</b>	7.4.23																
<b>TSS reference</b>	PSTN-SS/ACR/																		
<b>Selection criteria</b>																			
<b>Test Purpose name</b>	Receipt of 433																		
<b>Test Purpose</b>	Ensure that on receipt of a 433 (Anonymity Disallowed) final response after an initial INVITE request was sent, an ISUP REL cause #24 is sent.																		
<b>ISUP Parameter values</b>	REL: Cause = 24 (call rejected due to ACR supplementary service)																		
<b>SIP Parameter values</b>																			
<b>Comments</b>																			
<b>Message flows</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span>ISUP</span> <span>MGCF</span> <span>Mg</span> </div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→</td> <td style="text-align: center;">INVITE</td> </tr> <tr> <td style="text-align: center;">REL</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">100 Trying</td> </tr> <tr> <td style="text-align: center;">RLC</td> <td style="text-align: center;">→</td> <td style="text-align: center;">←</td> <td style="text-align: center;">433 (Anonymity Disallowed)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→</td> <td style="text-align: center;">ACK</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	IAM	→	→	INVITE	REL	←		100 Trying	RLC	→	←	433 (Anonymity Disallowed)			→	ACK		
IAM	→	→	INVITE																
REL	←		100 Trying																
RLC	→	←	433 (Anonymity Disallowed)																
		→	ACK																

## 6.3 IMS Supplementary Services

### 6.3.1 Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR)

<b>TP number</b>	TP_401_001	<b>Reference</b>	7.5.1
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/1 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity not present. Network provided number is sent		
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header does not contain an URI that encodes an E.164 [i.1] Address, an IAM is sent.</p> <p>A Calling party number parameter is present and the address digits are provided by the SUT.</p>		
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>/SDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then  national (significant) number  else  international number  Screening indicator = Network Provided  Presentation restriction = restricted or allowed  Address signal <b>provided by the Network</b>  if NOA is "national (significant) number" then set to "NDC" + "SN"  If NOA is 'international number" then set to "CC"+" NDC"+"SN"</p>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> P-Asserted-Identity: not present  From: sip:unavailable@unknown.invalid</p>		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP → IAM

<b>TP number</b>	TP_401_002	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/1 AND PICS 6.3.3/4 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity not present. Network provided number is sent		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header does not contain an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is present and the address digits are provided by the SUT. The Presentation restriction indicator is set to 'presentation restricted by network'.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>/ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = presentation restricted by network Address signal <b>provided by the Network</b> if NOA is " <i>national (significant) number</i> " then set to "NDC" + "SN" If NOA is ' <i>international number</i> ' then set to "CC"+ "NDC"+"SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: not present From: sip:unavailable@unknown.invalid		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ←	<b>ISUP</b> IAM <b>Apply post test routine</b>

<b>TP number</b>	TP_401_003	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	NOT PICS 6.3.3/1 AND NOT PICS 6.3.3/2 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity not present. Calling party number omitted		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header does not contain an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is not present.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> not present		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: not present From: sip:unavailable@unknown.invalid		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ←	<b>ISUP</b> IAM <b>Apply post test routine</b>

<b>TP number</b>	TP_401_004	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/1 AND PICS 6.3.3/2 AND PICS 6.3.3/3 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity not present APRI is set to 'Address not available'		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header does not contain an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is present and the address digits omitted. The Presentation restriction indicator is set to 'Address not available'.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = '000' Nature of Address Indicator = '0000000' Screening indicator = Network Provided Presentation restriction = Address not available Address signal Address digits not present		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: not present From: sip:unavailable@unknown.invalid		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

<b>TP number</b>	TP_401_005	<b>Reference</b>	7.5.1, 7.2.3.1.2.6						
<b>TSS reference</b>	IMS-SS/OIP-OIR/								
<b>Selection criteria</b>	PICS 6.3.3/1 PICS 6.3.2/1								
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity not present. Network provided number is sent								
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is present and the address digits are provided by the SUT. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header.								
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then <i>national (significant) number</i>  else  <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = restricted or allowed  Address signal <b>provided by the Network</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then <i>national (significant) number</i>  else  <i>international number</i>  Number incomplete indicator = Complete  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Presentation restriction = restricted or allowed  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>								
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: not present From: contains a URI that encodes an E.164 [i.1] address								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE 100 Trying	→ ←	→ IAM
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>							
INVITE 100 Trying	→ ←	→ IAM							

<b>TP number</b>	TP_401_006	<b>Reference</b>	7.5.1, 7.2.3.1.2.6								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.3/1 AND PICS 6.3.3/4 AND PICS 6.3.2/1										
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity not present. Network provided number is sent										
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is present and the address digits are provided by the SUT. The Presentation restriction indicator is set to 'presentation restricted by network'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header and the Presentation restriction indicator is set to 'presentation allowed'.										
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = presentation restricted by network  Address signal <b>provided by the Network</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Number incomplete indicator = Complete  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Presentation restriction = allowed  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is '<i>international number</i>' set to "CC" + "NDC" + "SN"</p>										
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: not present From: contains a URI that encodes an E.164 [i.1] address										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3">Apply post test routine</td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE 100 Trying	→ ←	→ IAM	Apply post test routine			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>									
INVITE 100 Trying	→ ←	→ IAM									
Apply post test routine											

<b>TP number</b>	TP_401_007	<b>Reference</b>	7.5.1, 7.2.3.1.2.6									
<b>TSS reference</b>	IMS-SS/OIP-OIR/											
<b>Selection criteria</b>	NOT PICS 6.3.3/1 AND PICS 6.3.3/2 AND PICS 6.3.3/3 AND PICS 6.3.2/1											
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity not present. Address digits omitted											
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is present and the address digits omitted. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header.											
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '000'  Nature of Address Indicator = '0000000'  Screening indicator = Network Provided  Presentation restriction = Address not available  Address signal Address digits not present</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then <i>national (significant) number</i>  else  <i>international number</i></p> <p>Number incomplete indicator = Complete  Numbering Plan Indicator = 'ISDN/Telephony (<i>Recommendation E.164</i>)'  Presentation restriction = restricted or allowed  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b></p> <p>if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>											
<b>SIP Parameter values</b>	INVITE: P-Asserted-Identity: not present From: contains a URI that encodes an E.164 [i.1] address											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;">Mg</th> <th style="width: 33.33%;">MGCF</th> <th style="width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM	<b>Apply post test routine</b>				
Mg	MGCF	ISUP										
INVITE 100 Trying	→ ←	→ IAM										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_401_008	<b>Reference</b>	7.5.1, 7.2.3.1.2.6									
<b>TSS reference</b>	IMS-SS/OIP-OIR/											
<b>Selection criteria</b>	NOT PICS 6.3.3/1 AND NOT PICS 6.3.3/2 AND PICS 6.3.3/5 AND PICS 6.3.2/1											
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity not present. Calling party number omitted											
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is not present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent. A Calling party number parameter is omitted. In addition, the Additional calling party number is omitted.											
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> not present <b>Additional calling party number</b> not present											
<b>SIP Parameter values</b>	INVITE: P-Asserted-Identity: not present From: contains a URI that encodes an E.164 [i.1] address											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;">Mg</th> <th style="width: 33.33%;">MGCF</th> <th style="width: 33.33%;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE 100 Trying	→ ←	→ IAM	<b>Apply post test routine</b>				
Mg	MGCF	ISUP										
INVITE 100 Trying	→ ←	→ IAM										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_401_009	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity present Privacy not present		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header does not contain an URI that encodes an E.164 [i.1] Address a Privacy header is not present, an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = allowed Address signal <b>derived from the P-Asserted-Identity</b> if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is 'international number" then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: sip:unavailable@unknown.invalid Privacy not present		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>ISUP</b> <b>Apply post test routine</b>	IAM

<b>TP number</b>	TP_401_010	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity present, Privacy value 'none'		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header does not contain an URI that encodes an E.164 [i.1] Address and a Privacy header is present set to 'none', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header. The Presentation restriction is set to 'presentation allowed'.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = allowed Address signal <b>derived from the P-Asserted-Identity</b> if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is 'international number" then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: sip:unavailable@unknown.invalid Privacy: none		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>ISUP</b> <b>Apply post test routine</b>	IAM

<b>TP number</b>	TP_401_011	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity present, Privacy value 'id'		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header does not contain an URI that encodes an E.164 [i.1] Address and a Privacy header is present set to 'id', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header. The Presentation restriction is set to 'presentation 'restricted'.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = restricted Address signal <b>derived from the P-Asserted-Identity</b> if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is 'international number" then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: sip:unavailable@unknown.invalid Privacy: id		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ←	<b>ISUP</b> IAM <b>Apply post test routine</b>

<b>TP number</b>	TP_401_012	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity present, Privacy value 'user'		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header does not contain an URI that encodes an E.164 [i.1] Address and a Privacy header is present set to 'user', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header. The Presentation restriction is set to 'presentation 'restricted'.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = restricted Address signal <b>derived from the P-Asserted-Identity</b> if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is 'international number" then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: sip:unavailable@unknown.invalid Privacy: user		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ←	<b>ISUP</b> IAM <b>Apply post test routine</b>

<b>TP number</b>	TP_401_013	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header not present, P-Asserted-Identity present, Privacy value 'header'		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header does not contain an URI that encodes an E.164 [i.1] Address and a Privacy header is present set to 'header', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header. The Presentation restriction is set to 'presentation restricted'.		
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'</p> <p>Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then  national (significant) number</p> <p>else  international number</p> <p>Screening indicator = Network Provided</p> <p>Presentation restriction = restricted</p> <p>Address signal <b>derived from the P-Asserted-Identity</b></p> <p>if NOA is "national (significant) number" then set to "NDC" + "SN"  If NOA is 'international number" then set to "CC" + "NDC" + "SN"</p>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b> P-Asserted-Identity: present  From: sip:unavailable@unknown.invalid  Privacy: header</p>		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p>INVITE                   →                   →           IAM</p> <p>100 Trying              ←                   Apply post test routine</p>		

<b>TP number</b>	TP_401_014	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	NOT PICS 6.3.3/6 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header not present, additional calling party number not omitted		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is not present, an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation allowed'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header the Presentation restriction indicator is set to 'presentation allowed'.		
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = allowed  Address signal <b>derived from the P-Asserted-Identity</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Number incomplete indicator = Complete  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Presentation restriction = allowed  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy not present		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ←	<b>ISUP</b> → IAM <b>Apply post test routine</b>

TP number	TP_401_015	Reference	7.5.1, 7.2.3.1.2.6
TSS reference	IMS-SS/OIP-OIR/		
Selection criteria	NOT PICS 6.3.3/6 AND PICS 6.3.2/1		
Test Purpose name	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'none', additional calling party number not omitted		
Test Purpose	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent Privacy header is present set to 'none'. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation allowed'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header the Presentation restriction indicator is set to 'presentation allowed'.		
ISUP Parameter values	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then <i>national (significant) number</i>  else  <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = allowed  Address signal <b>derived from the P-Asserted-Identity</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then <i>national (significant) number</i>  else  <i>international number</i>  Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Presentation restriction = allowed  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>		
SIP Parameter values	INVITE: P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: none		
Comments			
Message flows	Mg INVITE 100 Trying	MGCF → ←	ISUP IAM
			Apply post test routine

<b>TP number</b>	TP_401_016	<b>Reference</b>	7.5.1, 7.2.3.1.2.6						
<b>TSS reference</b>	IMS-SS/OIP-OIR/								
<b>Selection criteria</b>	NOT PICS 6.3.3/6 AND PICS 6.3.2/1								
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'id', additional calling party number not omitted								
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent Privacy header is present set to 'id'.</p> <p>A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header the Presentation restriction indicator is set to 'presentation restricted'.</p>								
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = restricted  Address signal <b>derived from the P-Asserted-Identity</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Number incomplete indicator=Complete  Numbering Plan Indicator='ISDN/Telephony (<i>Recommendation E.164</i>)'  Presentation restriction=restricted  Screening indicator=user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>								
<b>SIP Parameter values</b>	<p><b>INVITE:</b> P-Asserted-Identity: present  From: contains a URI that encodes an E.164 [i.1] address  Privacy: id</p>								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE 100 Trying	→ ←	→ IAM
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>							
INVITE 100 Trying	→ ←	→ IAM							

TP number	TP_401_017	Reference	7.5.1, 7.2.3.1.2.6
TSS reference	IMS-SS/OIP-OIR/		
Selection criteria	NOT PICS 6.3.3/6 AND PICS 6.3.2/1		
Test Purpose name	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'user', additional calling party number not omitted		
Test Purpose	<p>Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent Privacy header is present set to 'user'.</p> <p>A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header the Presentation restriction indicator is set to 'presentation restricted'.</p>		
ISUP Parameter values	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator=Complete Numbering Plan Indicator='ISDN/Telephony (Recommendation E.164)' Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number</p> <p>else</p> <p>international number</p> <p>Screening indicator = Network Provided Presentation restriction = restricted <b>Address signal derived from the P-Asserted-Identity</b></p> <p>if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is "international number" then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator</p> <p>If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number</p> <p>else</p> <p>international number</p> <p>Number incomplete indicator = Complete Numbering Plan Indicator = 'ISDN/Telephony (Recommendation E.164)' Presentation restriction = restricted Screening indicator = user provided not verified <b>Address digits derived from the 'From' header</b></p> <p>if NOA is national (significant) number then set to "NDC" + "SN" If NOA is "international number" set to "CC" + "NDC" + "SN"</p>		
SIP Parameter values	INVITE: P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: user		
Comments			
Message flows	Mg INVITE 100 Trying	MGCF → ←	ISUP → IAM

<b>TP number</b>	TP_401_018	<b>Reference</b>	7.5.1, 7.2.3.1.2.6						
<b>TSS reference</b>	IMS-SS/OIP-OIR/								
<b>Selection criteria</b>	NOT PICS 6.3.3/6 AND PICS 6.3.2/1								
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'header', additional calling party number not omitted								
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address, an IAM is sent Privacy header is present set to 'header'.</p> <p>A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number is sent in a Generic number parameter and the Address signals are derived from the Userpart of the From header the Presentation restriction indicator is set to 'presentation restricted'.</p>								
<b>ISUP Parameter values</b>	<p><b>IAM: Calling party Number</b></p> <p>Number incomplete indicator = <i>Complete</i>  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Screening indicator = Network Provided  Presentation restriction = restricted  Address signal <b>derived from the P-Asserted-Identity</b>  if NOA is "<i>national (significant) number</i>" then set to "NDC" + "SN"  If NOA is '<i>international number</i>' then set to "CC" + "NDC" + "SN"</p> <p><b>Additional calling party number</b></p> <p>Nature of Address Indicator  If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then      <i>national (significant) number</i>  else      <i>international number</i>  Number incomplete indicator = Complete  Numbering Plan Indicator = '<i>ISDN/Telephony (Recommendation E.164)</i>'  Presentation restriction = restricted  Screening indicator = user provided not verified  Address digits <b>derived from the 'From' header</b>  if NOA is <i>national (significant) number</i> then set to "NDC" + "SN"  If NOA is "<i>international number</i>" set to "CC" + "NDC" + "SN"</p>								
<b>SIP Parameter values</b>	<p><b>INVITE:</b> P-Asserted-Identity: present  From: contains a URI that encodes an E.164 [i.1] address  Privacy: header</p>								
<b>Comments</b>									
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE 100 Trying	→ ←	→ IAM
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>							
INVITE 100 Trying	→ ←	→ IAM							

<b>TP number</b>	TP_401_019	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/6 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header not present, additional calling party number omitted		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is not present, an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation allowed'. An Additional calling Party number parameter is not present.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = allowed Address signal <b>derived from the P-Asserted-Identity</b> if NOA is " <i>national (significant) number</i> " then set to "NDC" + "SN" If NOA is ' <i>international number</i> ' then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy not present		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP → IAM

<b>TP number</b>	TP_401_020	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/6 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'none', additional calling party number omitted		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is set to 'none', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation allowed'. An Additional calling Party number parameter is not present.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = allowed Address signal <b>derived from the P-Asserted-Identity</b> if NOA is " <i>national (significant) number</i> " then set to "NDC" + "SN" If NOA is ' <i>international number</i> ' then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: none		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP → IAM

<b>TP number</b>	TP_401_021	<b>Reference</b>	7.5.1, 7.2.3.1.2.6								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.3/6 AND PICS 6.3.2/1										
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'id', additional calling party number omitted										
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is set to 'id', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number parameter is not present.										
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = restricted Address signal <b>derived from the P-Asserted-Identity</b> if NOA is " <i>national (significant) number</i> " then set to "NDC" + "SN" If NOA is ' <i>international number</i> ' then set to "CC" + "NDC" + "SN"										
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: id										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>Mg</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE 100 Trying</td> <td>→ ←</td> <td>→ IAM</td> </tr> <tr> <td colspan="3">Apply post test routine</td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE 100 Trying	→ ←	→ IAM	Apply post test routine			
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>									
INVITE 100 Trying	→ ←	→ IAM									
Apply post test routine											

<b>TP number</b>	TP_401_022	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/6 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'user', additional calling party number omitted		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is set to 'user', an IAM is sent. A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number parameter is not present.		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = restricted Address signal <b>derived from the P-Asserted-Identity</b> if NOA is " <i>national (significant) number</i> " then set to "NDC" + "SN" If NOA is ' <i>international number</i> ' then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: user		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP → IAM

<b>TP number</b>	TP_401_023	<b>Reference</b>	7.5.1, 7.2.3.1.2.6
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.3/6 AND PICS 6.3.2/1		
<b>Test Purpose name</b>	INVITE received. From header present, P-Asserted-Identity present. Privacy header 'header', additional calling party number omitted		
<b>Test Purpose</b>	<p>Ensure that on receipt of an INVITE request the P-Asserted-Identity is present and the From header contains an URI that encodes an E.164 [i.1] Address a Privacy header is set to 'header', an IAM is sent.</p> <p>A Calling party number parameter is present and the address digits are derived from the P-Asserted-Identity header the Presentation restriction indicator is set to 'presentation restricted'. An Additional calling Party number parameter is not present.</p>		
<b>ISUP Parameter values</b>	<b>IAM: Calling party Number</b> Number incomplete indicator = <i>Complete</i> Numbering Plan Indicator = ' <i>ISDN/Telephony (Recommendation E.164)</i> ' Nature of Address Indicator If CC encoded in the URI is equal to the CC of the country where MGCF is located AND the next BICC/ISUP node is located in the same country then national (significant) number else international number Screening indicator = Network Provided Presentation restriction = restricted Address signal <b>derived from the P-Asserted-Identity</b> if NOA is "national (significant) number" then set to "NDC" + "SN" If NOA is "international number" then set to "CC" + "NDC" + "SN"		
<b>SIP Parameter values</b>	<b>INVITE:</b> P-Asserted-Identity: present From: contains a URI that encodes an E.164 [i.1] address Privacy: header		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> 	<b>ISUP</b>  IAM  <b>Apply post test routine</b>

<b>TP number</b>	TP_401_024	<b>Reference</b>	7.5.1, 7.2.3.2.2.3
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	Calling party number not received, Additional calling party number not received, unavailable From header is sent		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number and no Additional calling party number is present, an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is set to 'sip:unavailable@unknown.invalid'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number not present Generic number (Additional calling party number) not present		
<b>SIP Parameter values</b>	<b>INVITE:</b> From: sip:unavailable@unknown.invalid P-Asserted-Identity not present		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM	<b>MGCF</b> 	<b>Mg</b>  INVITE  100 Trying  <b>Apply post test routine</b>

<b>TP number</b>	TP_401_025	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number not received, Additional calling party number received presentation allowed, From header containing a E.164 URI is sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number is present and an Additional calling party number is present, an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is derived from the additional calling party number or is network provided.										
<b>ISUP Parameter values</b>	IAM: Calling party number not present Generic number (Additional calling party number) present presentation allowed										
<b>SIP Parameter values</b>	INVITE: From: derived from the additional calling party number or network provided P-Asserted-Identity not present										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_026	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number not received, Additional calling party number received presentation restricted, unavailable From header is sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and no Calling party number and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation restricted', an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is set to 'sip:unavailable@unknown.invalid'.										
<b>ISUP Parameter values</b>	IAM: Calling party number not present Generic number (Additional calling party number) present presentation restricted										
<b>SIP Parameter values</b>	INVITE: From: sip:unavailable@unknown.invalid P-Asserted-Identity not present										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_027	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number received presentation allowed, Additional calling party number not received, P-Asserted-Identity header and From header are sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation allowed' and an Additional calling party number is not present, an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is derived from the address signals of the calling party number. A Privacy header is not present or if present the value is not equal to 'id'.										
<b>ISUP Parameter values</b>	IAM: Calling party number present presentation allowed Generic number (Additional calling party number) not present										
<b>SIP Parameter values</b>	INVITE: From derived from the calling party number P-Asserted-Identity derived from the calling party number Privacy not 'id' or Privacy header not present										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_028	<b>Reference</b>	7.5.1, 7.2.3.2.2.3									
<b>TSS reference</b>	IMS-SS/OIP-OIR/											
<b>Selection criteria</b>	PICS 6.3.2/1											
<b>Test Purpose name</b>	Calling party number received presentation allowed, Additional calling party number received presentation allowed, P-Asserted-Identity header and From header are sent											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation allowed' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation allowed', an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is derived from the address signals of the additional calling party number. A Privacy header is not present or if present the value is not equal to 'id'.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation allowed Generic number (Additional calling party number) present presentation allowed											
<b>SIP Parameter values</b>	<b>INVITE:</b> From derived from the additional calling party number P-Asserted-Identity derived from the calling party number Privacy not 'id' or Privacy header not present											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_401_029	<b>Reference</b>	7.5.1, 7.2.3.2.2.3									
<b>TSS reference</b>	IMS-SS/OIP-OIR/											
<b>Selection criteria</b>	PICS 6.3.2/1											
<b>Test Purpose name</b>	Calling party number received presentation allowed, Additional calling party number received presentation restricted, P-Asserted-Identity header and From header are sent											
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation allowed' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation restricted', an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is derived from the address signals of the calling party number. A Privacy header is not present or if present the value is not equal to 'id'.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation allowed Generic number (Additional calling party number) present presentation restricted											
<b>SIP Parameter values</b>	<b>INVITE:</b> From derived from the calling party number P-Asserted-Identity derived from the calling party number Privacy not 'id' or Privacy header not present											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>				
ISUP	MGCF	Mg										
IAM	→	→ INVITE ← 100 Trying										
<b>Apply post test routine</b>												

<b>TP number</b>	TP_401_030	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number received presentation restricted, Additional calling party number not received, P-Asserted-Identity header and From header are sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted' and an Additional calling party number is not present, an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is set to 'sip:anonymous@anonymous.invalid'. A Privacy header is present the value is equal to 'id'.										
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation restricted Generic number (Additional calling party number) not present										
<b>SIP Parameter values</b>	<b>INVITE:</b> From: sip:anonymous@anonymous.invalid P-Asserted-Identity derived from the calling party number Privacy: 'id'										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_031	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number received presentation restricted, Additional calling party number received presentation allowed, P-Asserted-Identity header and From header are sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation allowed', an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is derived from the address signals of the additional calling party number. A Privacy header is present the value is equal to 'id'.										
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation restricted Generic number (Additional calling party number) present presentation allowed										
<b>SIP Parameter values</b>	<b>INVITE:</b> From derived from the additional calling party number P-Asserted-Identity derived from the calling party number Privacy: 'id'										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_032	<b>Reference</b>	7.5.1, 7.2.3.2.2.3
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	Calling party number received presentation restricted, Additional calling party number received presentation restricted, P-Asserted-Identity header and From header are sent		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation restricted', an INVITE is sent. A P-Asserted-Identity is present the URI is derived from the address signals of the calling party number and the URI of the From header is set to the value 'sip:anonymous@anonymous.invalid'. A Privacy header is present the value is equal to 'id'.		
<b>ISUP Parameter values</b>	IAM: Calling party number present presentation restricted Generic number (Additional calling party number) present presentation restricted		
<b>SIP Parameter values</b>	INVITE: From: sip:anonymous@anonymous.invalid P-Asserted-Identity derived from the calling party number Privacy: 'id'		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                         →                         → INVITE                                    ←                         ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_401_033	<b>Reference</b>	7.5.1, 7.2.3.2.2.3
<b>TSS reference</b>	IMS-SS/OIP-OIR/		
<b>Selection criteria</b>	PICS 6.3.2/1		
<b>Test Purpose name</b>	Calling party number received presentation restricted by the network, Additional calling party number not received, From header is sent		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted by the network' and an Additional calling party number is not present, an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is set to the value 'sip: unavailable @hostportion'. A Privacy header is not present or if present the value is not equal to 'id'.		
<b>ISUP Parameter values</b>	IAM: Calling party number present presentation restricted by the network Generic number (Additional calling party number) not present		
<b>SIP Parameter values</b>	INVITE: From: sip:unavailable@hostportion P-Asserted-Identity not present Privacy not 'id' or Privacy header not present		
<b>Comments</b>	The 'hostportion' is implementation dependent		
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                         →                         → INVITE                                    ←                         ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_401_034	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number received presentation restricted by the network, Additional calling party number received presentation allowed, From header is sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted by the network' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation allowed', an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is derived from the address signals of the additional calling party number. A Privacy header is not present or if present the value is not equal to 'id'.										
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation restricted by the network Generic number (Additional calling party number) present presentation allowed										
<b>SIP Parameter values</b>	<b>INVITE:</b> From: derived from the additional calling party number P-Asserted-Identity not present Privacy not 'id' or Privacy header not present										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_401_035	<b>Reference</b>	7.5.1, 7.2.3.2.2.3								
<b>TSS reference</b>	IMS-SS/OIP-OIR/										
<b>Selection criteria</b>	PICS 6.3.2/1										
<b>Test Purpose name</b>	Calling party number received presentation restricted by the network, Additional calling party number received presentation restricted, From header is sent										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Calling party number Presentation restriction indicator is set to 'presentation restricted by the network' and an Additional calling party number is present the Presentation restriction indicator is set to 'presentation restricted', an INVITE is sent. A P-Asserted-Identity is not present and the URI of the From header is set to the value 'sip: unavailable@hostportion'. A Privacy header is not present or if present the value is not equal to 'id'.										
<b>ISUP Parameter values</b>	<b>IAM:</b> Calling party number present presentation restricted by the network Generic number (Additional calling party number) present presentation restricted										
<b>SIP Parameter values</b>	<b>INVITE:</b> From: sip: unavailable@hostportion P-Asserted-Identity not present Privacy not 'id' or Privacy header not present										
<b>Comments</b>	The 'hostportion' is implementation dependent										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

### 6.3.2 Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR)

<b>TP number</b>	TP_402_001	<b>Reference</b>	7.5.2								
<b>TSS reference</b>	IMS-SS/TIP-TIR/										
<b>Selection criteria</b>	PICS 6.3.2/25										
<b>Test Purpose name</b>	INVITE is sent the supported header contains the option tag 'from-change'										
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested', an INVITE is sent and the Supported header contains the option tag 'from-change'.										
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested										
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change										
<b>Comments</b>											
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE ← 100 Trying</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE ← 100 Trying	<b>Apply post test routine</b>			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>									
IAM	→	→ INVITE ← 100 Trying									
<b>Apply post test routine</b>											

<b>TP number</b>	TP_402_002	<b>Reference</b>	7.5.2															
<b>TSS reference</b>	IMS-SS/TIP-TIR/																	
<b>Selection criteria</b>	PICS 6.3.2/25																	
<b>Test Purpose name</b>	'from-change' tag not included in a received provisional response																	
<b>Test Purpose</b>	Ensure that on receipt of a provisional response and the 'from-change' tag is not included the ANM is sent as soon as the 200 OK (INVITE) is received.																	
<b>ISUP Parameter values</b>	IAM: Optional Forward Call Indicators Connected Line Identity Request = requested																	
<b>SIP Parameter values</b>	INVITE: Supported: from-change 180: from-change tag not included in the Supported header																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE)			→ ACK		
ISUP	MGCF	Mg																
IAM →		→ INVITE																
ACM ←		← 180 Ringing																
ANM ←		← 200 OK (INVITE)																
		→ ACK																

<b>TP number</b>	TP_402_003	<b>Reference</b>	7.5.2															
<b>TSS reference</b>	IMS-SS/TIP-TIR/																	
<b>Selection criteria</b>	PICS 6.3.2/25																	
<b>Test Purpose name</b>	'from-change' tag not included in a received final response																	
<b>Test Purpose</b>	Ensure that on receipt of a final successful response and the 'from-change' tag is not included the ANM is sent.																	
<b>ISUP Parameter values</b>	IAM: Optional Forward Call Indicators Connected Line Identity Request = requested																	
<b>SIP Parameter values</b>	INVITE: Supported: from-change 200: from-change tag not included in the Supported header																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>ANM ←</td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	ANM ←		← 200 OK (INVITE)			→ ACK		
ISUP	MGCF	Mg																
IAM →		→ INVITE																
ACM ←		← 180 Ringing																
ANM ←		← 200 OK (INVITE)																
		→ ACK																

<b>TP number</b>	TP_402_004	<b>Reference</b>	7.5.2																												
<b>TSS reference</b>	IMS-SS/TIP-TIR/																														
<b>Selection criteria</b>	PICS 6.3.2/25																														
<b>Test Purpose name</b>	'from-change' tag included in a received provisional response																														
<b>Test Purpose</b>	<p>Ensure that on receipt of a provisional response and the 'from-change' tag is included the timer <math>T_{TIR1}</math> is started. The ANM is sent as soon as the UPDATE request is received and a Generic number with a Number qualifier indicator set to 'additional connected number' is present. The additional connected number is coded as follows:</p> <p>Nature of Address Indicator  If CC is equal to the country code of the country where SUT is located AND the next ISUP node is located in the same country, then set to  "<i>national (significant) number</i>"  else set to  "<i>international number</i>"</p> <p>Number Incomplete Indicator = complete  Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan (Recommendation E.164)</i>  Address Presentation Restricted Indicator = <b>Privacy_VA</b> as indicated in table 6.3.2-1  Screening Indicator = user provided, not verified  Address Signals  If NOA is "<i>national (significant) number</i>" then set to <b>NDC + SN</b>.  If NOA is "<i>international number</i>" then set to <b>CC + NDC + SN</b>  In addition a Connected number is present the address signal are derived from the P-Asserted-Identity in UPDATE request.</p>																														
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested <b>ANM:</b> Connected number Generic number - additional connected number																														
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change 180: from-change tag included in the Supported header																														
<b>Comments</b>																															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><math>T_{TIR1}</math> started</td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td>ANM</td> <td>←</td> <td></td> <td>← UPDATE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ 200 OK (UPDATE)</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>		ISUP	MGCF	Mg	IAM	→		→ INVITE	ACM	←		← 180 Ringing			$T_{TIR1}$ started	← 200 OK (INVITE)				→ ACK	ANM	←		← UPDATE				→ 200 OK (UPDATE)		
	ISUP	MGCF	Mg																												
IAM	→		→ INVITE																												
ACM	←		← 180 Ringing																												
		$T_{TIR1}$ started	← 200 OK (INVITE)																												
			→ ACK																												
ANM	←		← UPDATE																												
			→ 200 OK (UPDATE)																												

<b>TP number</b>	TP_402_005	<b>Reference</b>	7.5.2																												
<b>TSS reference</b>	IMS-SS/TIP-TIR/																														
<b>Selection criteria</b>	PICS 6.3.2/25																														
<b>Test Purpose name</b>	'from-change' tag included in a received final response																														
<b>Test Purpose</b>	<p>Ensure that on receipt of a final successful response and the 'from-change' tag is included the timer <math>T_{TIR1}</math> is started. The ANM is sent as soon as the UPDATE request is received and a Generic number with a Number qualifier indicator set to 'additional connected number' is present. The additional connected number is coded as follows:</p> <ul style="list-style-type: none"> <li>Nature of Address Indicator           <ul style="list-style-type: none"> <li>If CC is equal to the country code of the country where SUT is located AND the next ISUP node is located in the same country, then set to "<i>national (significant) number</i>"</li> <li>else set to "<i>international number</i>"</li> </ul> </li> <li>Number Incomplete Indicator = complete</li> <li>Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan (Recommendation E.164)</i></li> <li>Address Presentation Restricted Indicator = <b>Privacy_VA</b> as indicated in table 6.3.2-1</li> <li>Screening Indicator = user provided, not verified</li> <li>Address Signals           <ul style="list-style-type: none"> <li>If NOA is "<i>national (significant) number</i>" then set to <b>NDC + SN</b>.</li> <li>If NOA is "<i>international number</i>" then set to <b>CC + NDC + SN</b></li> </ul> </li> </ul> <p>In addition a Connected number is present the address signal are derived from the P-Asserted-Identity in UPDATE request.</p>																														
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<b>Comments</b>																															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><math>T_{TIR1}</math> started</td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td>ANM</td> <td>←</td> <td></td> <td>← UPDATE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ 200 OK (UPDATE)</td> </tr> </tbody> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>		ISUP	MGCF	Mg	IAM	→		→ INVITE	ACM	←		← 180 Ringing			$T_{TIR1}$ started	← 200 OK (INVITE)				→ ACK	ANM	←		← UPDATE				→ 200 OK (UPDATE)		
	ISUP	MGCF	Mg																												
IAM	→		→ INVITE																												
ACM	←		← 180 Ringing																												
		$T_{TIR1}$ started	← 200 OK (INVITE)																												
			→ ACK																												
ANM	←		← UPDATE																												
			→ 200 OK (UPDATE)																												

Table 6.3.2-1: Mapping of Privacy value into Address presentation restriction indicator

Privacy_VA	Privacy value	Address Presentation Restricted Indicator
Privacy_VA_01	Header	Presentation restricted
Privacy_VA_02	User	Presentation restricted
Privacy_VA_03	None	Presentation allowed
Privacy_VA_04	Id	Presentation restricted
Privacy_VA_05	Privacy header not present	Presentation allowed

<b>TP number</b>	TP_402_006	<b>Reference</b>	7.5.2																					
<b>TSS reference</b>	IMS-SS/TIP-TIR/																							
<b>Selection criteria</b>	PICS 6.3.2/25																							
<b>Test Purpose name</b>	Timer T <sub>TIR1</sub> expires																							
<b>Test Purpose</b>	Ensure that on receipt of a 200 OK (INVITE) and the 'from-change' tag is present in the Supported header the timer T <sub>TIR1</sub> is started. After expiry of T <sub>TIR1</sub> the ANM is sent.																							
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested <b>ANM:</b> Connected number																							
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change 200: from-change tag included in the Supported header																							
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td>T<sub>TIR1</sub> started</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td>← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> <tr> <td>ANM ←</td> <td>T<sub>TIR1</sub> expired</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="color: red;"><b>Apply post test routine</b></td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←	T <sub>TIR1</sub> started	← 180 Ringing			← 200 OK (INVITE)			→ ACK	ANM ←	T <sub>TIR1</sub> expired				<b>Apply post test routine</b>		
ISUP	MGCF	Mg																						
IAM →		→ INVITE																						
ACM ←	T <sub>TIR1</sub> started	← 180 Ringing																						
		← 200 OK (INVITE)																						
		→ ACK																						
ANM ←	T <sub>TIR1</sub> expired																							
		<b>Apply post test routine</b>																						

<b>TP number</b>	TP_402_007	<b>Reference</b>	7.5.2												
<b>TSS reference</b>	IMS-SS/TIP-TIR/														
<b>Selection criteria</b>	PICS 6.3.1/2 AND PICS 6.3.2/2														
<b>Test Purpose name</b>	Interworking of SIP Supported header into Optional forward call indicator														
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and the Supported header contains the 'from-change' tag, an IAM is sent. The Connected Line Identity Request indicator in the Optional Forward Call Indicators parameter is set to 'requested'.														
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional Forward Call Indicators Connected Line Identity Request = requested														
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">Mg</th> <th style="text-align: left;">MGCF</th> <th style="text-align: left;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE →</td> <td></td> <td>→ IAM</td> </tr> <tr> <td>100 Trying ←</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="color: red;"><b>Apply post test routine</b></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE →		→ IAM	100 Trying ←					<b>Apply post test routine</b>		
Mg	MGCF	ISUP													
INVITE →		→ IAM													
100 Trying ←															
		<b>Apply post test routine</b>													

<b>TP number</b>	TP_402_008	<b>Reference</b>	7.5.2
<b>TSS reference</b>	IMS-SS/TIP-TIR/		
<b>Selection criteria</b>	PICS 6.3.2/25		
<b>Test Purpose name</b>	Mapping of Additional connected number presentation allowed into the From header in an UPDATE request		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ANM and a Generic number additional connected number is present, a 200 OK (INVITE) is sent and the P-Asserted-Identity copied from the P-Called-Party-ID header and the 'from-change' tag in the Supported header is present. The 200 OK (INVITE) is followed by an UPDATE request, containing the 'additional connected number' received in the ANM copied into the From header as described below</p> <p><b>Generic number</b></p> <p>Nature of Address Indicator  <i>"national (significant) number"</i>            Add "+" CC (of the country where the IWU is located) to Generic Number Address Signals then map to user portion of URI scheme used  <i>"international number"</i>            Map complete Generic Number Address Signals used prefixed with a "+" to user portion of URI scheme used</p> <p>Address Presentation restriction indicator            presentation allowed then no Privacy header present or not <i>"header"</i> or not <i>"user"</i>            Address Signals: "+" CC NDC SN mapped to user portion of URI scheme used</p> <p>The P-Asserted-Identity is derived from the Connected number as follows</p> <p><b>Connected number</b></p> <p>Nature of Address Indicator  <i>"national (significant) number"</i>            Add "+" CC (of the country where the IWU is located) to Connected Number Address Signals then map to user portion of URI scheme used  <i>"international number"</i>            Map complete Connected Number Address Signals used prefixed with a "+" to user portion of URI scheme used</p> <p>Address Presentation restriction indicator            presentation allowed then no Privacy header present or not <i>"header"</i> or not <i>"user"</i>            Address Signals: "+" CC NDC SN mapped to user portion of URI scheme used.</p>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Connected Line Identity Request = requested <b>ANM:</b> Generic number additional connected number Address Presentation restriction indicator = presentation allowed		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change <b>200 OK:</b> P-Asserted-Identity Supported: from-change <b>UPDATE:</b> From: <derived from the additional connected number>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ← 200 OK (INVITE) ←	<b>MGCF</b> → IAM ← ACM ← ANM	<b>ISUP</b> ← →
	UPDATE ← 200 OK (UPDATE) →		
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_402_009	<b>Reference</b>	7.5.2
<b>TSS reference</b>	IMS-SS/TIP-TIR/		
<b>Selection criteria</b>	PICS 6.3.2/25		
<b>Test Purpose name</b>	Mapping of Additional connected number presentation restricted into the From header in an UPDATE request		
<b>Test Purpose</b>	<p>Ensure that on receipt of an ANM and a Generic number additional connected number is present, a 200 OK (INVITE) is sent and the P-Asserted-Identity copied from the P-Called-Party-ID header and the 'from-change' tag in the Supported header is present. The 200 OK (INVITE) is followed by an UPDATE request, containing the 'additional connected number' received in the ANM copied into the <b>From header</b> as described below</p> <p><b>Generic number</b></p> <p>Nature of Address Indicator  <i>"national (significant) number"</i>            Add "+" CC (of the country where the IWU is located) to Generic Number Address Signals then map to user portion of URI scheme used  <i>"international number"</i>            Map complete Generic Number Address Signals used prefixed with a "+" to user portion of URI scheme used</p> <p>Address Presentation restriction indicator            presentation restricted then Privacy: <b>header</b>            Address Signals: "+" CC NDC SN mapped to user portion of URI scheme used</p> <p>The P-Asserted-Identity is derived from the Connected number as follows</p> <p><b>Connected number</b></p> <p>Nature of Address Indicator  <i>"national (significant) number"</i>            Add "+" CC (of the country where the IWU is located) to Connected Number Address Signals then map to user portion of URI scheme used  <i>"international number"</i>            Map complete Connected Number Address Signals used prefixed with a "+" to user portion of URI scheme used</p> <p>Address Presentation restriction indicator            presentation restricted then Privacy: <b>header</b>            Address Signals: "+" CC NDC SN mapped to user portion of URI scheme used.</p>		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Connected Line Identity Request = requested <b>ANM:</b> Generic number additional connected number Address Presentation restriction indicator = presentation restricted		
<b>SIP Parameter values</b>	<b>INVITE:</b> Supported: from-change <b>200 OK:</b> P-Asserted-Identity Supported: from-change <b>UPDATE:</b> From: <derived from the additional connected number> P-Asserted-Identity: <derived from the connected number>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ← 200 OK (INVITE) ←  UPDATE ← 200 OK (UPDATE) →	<b>MGCF</b> → IAM ← ACM ← ANM	<b>ISUP</b>
	<b>Apply post test routine</b>		

### 6.3.3 Communication Diversion (CDIV)

<b>TP number</b>	TP_403_001	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.2																
<b>TSS reference</b>	IMS-SS/CDIV/																		
<b>Selection criteria</b>	PICS 6.3.2/27																		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into ACM Redirection number																		
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) an ACM is sent. The History-Info entry containing a cause parameter is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>																		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry																		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1																		
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	ACM	←		← 181 Call Is Being Forwarded				<b>Apply post test routine</b>		
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→		→ INVITE																
ACM	←		← 181 Call Is Being Forwarded																
			<b>Apply post test routine</b>																

<b>TP number</b>	TP_403_002	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6																
<b>TSS reference</b>	IMS-SS/CDIV/																		
<b>Selection criteria</b>	PICS 6.3.2/27																		
<b>Test Purpose name</b>	Sending of Generic Notification in ACM																		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) an ACM is sent. The History-Info entry containing a cause parameter. A Generic Notification parameter is sent in the ACM set to 'call is diverting'.																		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic Notification call is diverting																		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1																		
<b>Comments</b>																			
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>Apply post test routine</b></td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	ACM	←		← 181 Call Is Being Forwarded				<b>Apply post test routine</b>		
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→		→ INVITE																
ACM	←		← 181 Call Is Being Forwarded																
			<b>Apply post test routine</b>																

<b>TP number</b>	TP_403_003	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into ACM Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded), an ACM is sent. The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 181 Call Is Being Forwarded <b>Apply post test routine</b>

<b>TP number</b>	TP_403_004	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 181 Privacy header into ACM Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded), an ACM is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	181: <b>Privacy=Priv-value</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 181 Call Is Being Forwarded <b>Apply post test routine</b>

Table 6.3.3-1: Mapping of Privacy value into Redirection number restriction

CAUSE	Priv-value	PRES_restr
VA_01	history	Presentation restricted
VA_02	session	Presentation restricted
VA_03	header	Presentation restricted
VA_04	none or absent	Presentation allowed or absent

<b>TP number</b>	TP_403_005	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.4									
<b>TSS reference</b>	IMS-SS/CDIV/											
<b>Selection criteria</b>	PICS 6.3.2/27											
<b>Test Purpose name</b>	Mapping of 181 Privacy header into ACM Notification subscription options											
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header, an ACM is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.3.3-2.</p>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>											
<b>SIP Parameter values</b>	<p>181: <i>Privacy: Priv-value</i> History-Info: &lt;sip:any proper URI;cause=any value&gt;; index=1, &lt;sip:any proper URI&gt;; index=1.1</p>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call Is Being Forwarded</td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
ACM	←	← 181 Call Is Being Forwarded										

**Table 6.3.3-2: Mapping of Privacy value into Notification subscription options**

<b>CAUSE</b>	<b>Priv-value</b>	<b>SUBS_options</b>
VA_01	history	presentation not allowed
VA_02	session	presentation not allowed
VA_03	header	presentation not allowed
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_403_006	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.4									
<b>TSS reference</b>	IMS-SS/CDIV/											
<b>Selection criteria</b>	PICS 6.3.2/27											
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into ACM Notification subscription options											
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing an escaped Privacy header field in the last hi-targeted-to-uri, an ACM is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.3.3-3.</p>											
<b>ISUP Parameter values</b>	<b>ACM:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>											
<b>SIP Parameter values</b>	<p>181: History-Info: &lt;sip:any proper URI &gt;; index=1, &lt;sip:any proper URI;cause=any value?Privacy=<i>Priv-value</i>&gt;; index=1.1</p>											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"><b>ISUP</b></td> <td style="width: 33%;"><b>MGCF</b></td> <td style="width: 33%;"><b>Mg</b></td> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 181 Call Is Being Forwarded</td> </tr> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>										
IAM	→	→ INVITE										
ACM	←	← 181 Call Is Being Forwarded										

**Table 6.3.3-3: Mapping of Privacy value into Notification subscription options**

<b>CAUSE</b>	<b>Priv-value</b>	<b>SUBS_options</b>
VA_01	history	presentation allowed without redirection number
VA_02	session	presentation allowed without redirection number
VA_03	header	presentation allowed without redirection number
VA_04	None or absent	Presentation allowed with redirection number

<b>TP number</b>	TP_403_007	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.6 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into ACM Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) an ACM is sent. The cause parameter of the last hi-entry is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.3.3-4.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause= <b>CAUSE_value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE ← 181 Call Is Being Forwarded <b>Apply post test routine</b>

**Table 6.3.3-4: Mapping of cause parameter into Redirecting reason**

<b>CAUSE</b>	<b>CAUSE_value</b>	<b>Redirecting_Reason</b>
VA_01	404	Unknown
VA_02	302	Unconditional
VA_03	486	User busy
VA_04	408	No reply
VA_05	480	Deflection immediate
VA_06	503	Mobile subscriber not reachable
VA_07	487	Deflection during alerting

<b>TP number</b>	TP_403_008	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.5/3 AND PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri cause parameter into CPG Event indicator		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The Event indicator is set to ' <b>Redirecting_Reason</b> ' as indicated in table 6.3.3-5.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause= <b>CAUSE_value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE ← 180 Ringing ← 181 Call Is Being Forwarded <b>Apply post test routine</b>

**Table 6.3.3-5: Mapping of cause parameter into Event indicator**

	<b>CAUSE_value</b>	<b>Redirecting_Reason</b>
VA_01	486	CFB (national use)
VA_02	408	CFNR (national use)
VA_03	302	CFU (national use)

<b>TP number</b>	TP_403_009	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.2												
<b>TSS reference</b>	IMS-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/27														
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into CPG Redirection number														
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The History-Info entry containing a cause parameter is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>														
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry														
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip: <b>any proper URI</b> ;cause=any>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </tbody> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM →		→ INVITE													
ACM ←		← 180 Ringing													
CPG ←		← 181 Call Is Being Forwarded													

<b>TP number</b>	TP_403_010	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7												
<b>TSS reference</b>	IMS-SS/CDIV/														
<b>Selection criteria</b>	PICS 6.3.2/27														
<b>Test Purpose name</b>	Sending of Generic Notification in the CPG														
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The History-Info entry containing a cause parameter. A Generic Notification parameter is sent in the CPG message set to 'call is diverting'.														
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic Notification call is diverting														
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip: <b>any proper URI</b> ;cause=any>; index=1.1														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </tbody> </table>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded	<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM →		→ INVITE													
ACM ←		← 180 Ringing													
CPG ←		← 181 Call Is Being Forwarded													

<b>TP number</b>	TP_403_010A	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7										
<b>TSS reference</b>	IMS-SS/CDIV/												
<b>Selection criteria</b>	PICS 6.3.2/27 AND NOT PICS 6.3.5/3												
<b>Test Purpose name</b>	Sending of CPG Event indicator 'Progress'												
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The History-Info entry contains a cause parameter. The Event indicator in the CPG is set to 'Progress'												
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator Progress												
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1												
<b>Comments</b>													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded
ISUP	MGCF	Mg											
IAM →		→ INVITE											
ACM ←		← 180 Ringing											
CPG ←		← 181 Call Is Being Forwarded											

<b>TP number</b>	TP_403_011	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.3										
<b>TSS reference</b>	IMS-SS/CDIV/												
<b>Selection criteria</b>	PICS 6.3.2/27												
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into CPG Redirection number restriction												
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded), a CPG is sent. The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.												
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>												
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1												
<b>Comments</b>													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded
ISUP	MGCF	Mg											
IAM →		→ INVITE											
ACM ←		← 180 Ringing											
CPG ←		← 181 Call Is Being Forwarded											

<b>TP number</b>	TP_403_012	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.3										
<b>TSS reference</b>	IMS-SS/CDIV/												
<b>Selection criteria</b>	PICS 6.3.2/27												
<b>Test Purpose name</b>	Mapping of 181 Privacy header into early CPG Redirection number restriction												
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded), a CPG is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.												
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>												
<b>SIP Parameter values</b>	181: <b>Privacy=Priv-value</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1												
<b>Comments</b>													
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </table> <p style="text-align: right;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded
ISUP	MGCF	Mg											
IAM →		→ INVITE											
ACM ←		← 180 Ringing											
CPG ←		← 181 Call Is Being Forwarded											

<b>TP number</b>	TP_403_013	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.4											
<b>TSS reference</b>	IMS-SS/CDIV/													
<b>Selection criteria</b>	PICS 6.3.2/27													
<b>Test Purpose name</b>	Mapping of 181 Privacy header into CPG Notification subscription options													
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing a Privacy header, a CPG is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the Privacy header in the message body as indicated in table 6.3.3-2.</p>													
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>													
<b>SIP Parameter values</b>	<p>181: <i>Privacy: Priv-value</i> History-Info: &lt;sip:any proper URI&gt;; index=1, &lt;sip:any proper URI;cause=any value&gt;; index=1.1</p>													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM →</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>ACM ←</td> <td></td> <td>← 180 Ringing</td> </tr> <tr> <td>CPG ←</td> <td></td> <td>← 181 Call Is Being Forwarded</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM →		→ INVITE	ACM ←		← 180 Ringing	CPG ←		← 181 Call Is Being Forwarded	<b>Apply post test routine</b>
ISUP	MGCF	Mg												
IAM →		→ INVITE												
ACM ←		← 180 Ringing												
CPG ←		← 181 Call Is Being Forwarded												

<b>TP number</b>	TP_403_014	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.4											
<b>TSS reference</b>	IMS-SS/CDIV/													
<b>Selection criteria</b>	PICS 6.3.2/27													
<b>Test Purpose name</b>	Mapping of 181 escaped Privacy header into CPG Notification subscription options													
<b>Test Purpose</b>	<p>Ensure that on receipt of 181 (Call Is Being Forwarded) containing an escaped Privacy header field in the last hi-targeted-to-uri, a CPG is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the escaped Privacy header in the last History entry as indicated in table 6.3.3-3.</p>													
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>													
<b>SIP Parameter values</b>	<p>181: History-Info: &lt;sip:any proper URI&gt;; index=1, &lt;sip:any proper URI;cause=any value?Privacy=<i>Priv-value</i>&gt;; index=1.1</p>													
<b>Comments</b>														
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ISUP	MGCF	Mg												
IAM →		→ INVITE												
ACM ←		← 180 Ringing												
CPG ←		← 181 Call Is Being Forwarded												

<b>TP number</b>	TP_403_015	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.7 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 181 hi-targeted-to-uri into CPG Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 181 (Call Is Being Forwarded) a CPG is sent. The History-Info entry containing a cause parameter is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.3.3-4.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=CAUSE_value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 180 Ringing 181 Call Is Being Forwarded <b>Apply post test routine</b>

<b>TP number</b>	TP_403_016	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into ACM Redirection number		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM (subscriber free) is sent. The last History-Info entry containing a cause parameter is mapped into the Redirection number: <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_403_017	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8							
<b>TSS reference</b>	IMS-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/27									
<b>Test Purpose name</b>	Sending of Generic Notification in an ACM free									
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM (subscriber free) is sent. The last History-Info entry containing a cause parameter. A Generic Notification parameter is sent in the ACM set to 'call is diverting'.									
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Generic Notification call is diverting									
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 180 Ringing								

<b>TP number</b>	TP_403_018	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.3							
<b>TSS reference</b>	IMS-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/27									
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into ACM Redirection number restriction									
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing), an ACM (subscriber free) is sent. The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.									
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any?Privacy= <b>Priv-value</b> >; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 180 Ringing								

<b>TP number</b>	TP_403_019	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.3							
<b>TSS reference</b>	IMS-SS/CDIV/									
<b>Selection criteria</b>	PICS 6.3.2/27									
<b>Test Purpose name</b>	Mapping of 180 Privacy header into ACM Redirection number restriction									
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing), an ACM (subscriber free) is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.									
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Redirection number restriction = <b>PRES_restr</b>									
<b>SIP Parameter values</b>	180: <b>Privacy=Priv-value</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1									
<b>Comments</b>										
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="width: 33%;">ISUP</th> <th style="width: 33%;">MGCF</th> <th style="width: 33%;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 180 Ringing</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing
ISUP	MGCF	Mg								
IAM	→	→ INVITE								
ACM	←	← 180 Ringing								

<b>TP number</b>	TP_403_020	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 Privacy header into ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing a Privacy header, an ACM (subscriber free) is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the <b>Privacy header</b> in the message body as indicated in table 6.3.3-2.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_021	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into ACM Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing an escaped Privacy header field in the last hi-targeted-to-uri, an ACM (subscriber free) is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-3.</p>		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = subscriber free Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ←	MGCF → INVITE ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_022	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.8 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into ACM Redirecting Reason		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) an ACM (subscriber free) is sent. The last History-Info entry containing a cause parameter is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.3.3-4.		
<b>ISUP Parameter values</b>	ACM: Backward call indicator Called party status = subscriber free Redirection number Call Diversion Information Redirecting reason = <b>Redirecting_Reason</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI;cause= <b>CAUSE_value</b> >; index=1, <sip:any proper URI>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM	MGCF → ←	Mg INVITE 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_403_023	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Redirection number		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG Alerting is sent. The last History-Info entry containing a cause parameter is mapped into the Redirection number: <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>		
<b>ISUP Parameter values</b>	CPG: Event = Alerting Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM CPG	MGCF → ← ←	Mg INVITE 181 Call Is Being Forwarded 180 Ringing <b>Apply post test routine</b>

<b>TP number</b>	TP_403_024	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Sending of Generic Notification in a CPG after 180		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG Alerting is sent. The last History-Info entry containing a cause parameter. The CPG contains the Generic Notification parameter set to 'call is diverting'.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic Notification call is diverting		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_024A	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Sending of Event indicator 'Alerting' in a CPG after 180 was received		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) a CPG Alerting is sent. The last History-Info entry containing a cause parameter. The Event indicator in the sent CPG is set to 'Alerting'		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Alerting		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_025	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing), a CPG Alerting is sent. The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → ACM ← CPG ←	MGCF → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_026	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 Privacy header into CPG Redirection number restriction		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing), a CPG Alerting is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: <i>Privacy=Priv-value</i> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_027	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 Privacy header into CPG Notification subscription options		
<b>Test Purpose</b>	Ensure that on receipt of 180 (Ringing) containing a Privacy header, a CPG Alerting is sent. The Notification subscription options in the Call Diversion Information parameter is set according the <b>Privacy header</b> in the message body as indicated in table 6.3.3-2.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: <i>Privacy: Priv-value</i> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_028	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 escaped Privacy header into CPG Notification subscription options		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) containing an escaped Privacy header field in the last hi-targeted-to-uri, a CPG Alerting is sent.</p> <p>The Notification subscription options in the Call Diversion Information parameter is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-3.</p>		
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Notification subscription options = <b>SUBS_options</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b> <b>Apply post test routine</b>

<b>TP number</b>	TP_403_029	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.9 Table 7.5.4.2.1.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 180 hi-targeted-to-uri into CPG Redirecting Reason		
<b>Test Purpose</b>	<p>Ensure that on receipt of 180 (Ringing) a CPG Alerting is sent. The last History-Info entry containing a cause parameter is mapped into the Redirecting reason in the Call Diversion Information parameter is set as indicated in table 6.3.3-4.</p>		
<b>ISUP Parameter values</b>	<b>CPG:</b> Call Diversion Information Redirecting reason = <b>Redirecting Reason</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI >; index=1, <sip:any proper URI;cause= <b>CAUSE_value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing	<b>Mg</b> <b>Apply post test routine</b>

<b>TP number</b>	TP_403_030	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 200 OK hi-targeted-to-uri into ANM Redirection number		
<b>Test Purpose</b>	<p>Ensure that on receipt of 200 OK (INVITE) an ANM is sent. The last History-Info entry containing a cause parameter is mapped into the Redirection number:</p> <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>		
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry		
<b>SIP Parameter values</b>	200: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ← ANM ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing ← 200 OK INVITE → ACK	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_031	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of 200 escaped Privacy header into ANM Redirection number restriction		
<b>Test Purpose</b>	<p>Ensure that on receipt of 200 (INVITE), an ANM is sent.</p> <p>The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.</p>		
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	200 OK: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → ACM ← CPG ← ANM ←	<b>MGCF</b> → INVITE ← 181 Call Is Being Forwarded ← 180 Ringing ← 200 OK INVITE → ACK	<b>Mg</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_032	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.3																						
<b>TSS reference</b>	IMS-SS/CDIV/																								
<b>Selection criteria</b>	PICS 6.3.2/27																								
<b>Test Purpose name</b>	Mapping of 200 Privacy header into ANM Redirection number restriction																								
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE), an ANM is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.																								
<b>ISUP Parameter values</b>	<b>ANM:</b> Redirection number restriction = <b>PRES_restr</b>																								
<b>SIP Parameter values</b>	200 OK: <i>Privacy=Priv-value</i> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1																								
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	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																						
IAM	→		→ INVITE																						
ACM	←		← 181 Call Is Being Forwarded																						
CPG	←		← 180 Ringing																						
ANM	←		← 200 OK INVITE																						
			→ ACK																						

<b>TP number</b>	TP_403_033	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.2														
<b>TSS reference</b>	IMS-SS/CDIV/																
<b>Selection criteria</b>	PICS 6.3.2/27																
<b>Test Purpose name</b>	Mapping of 200 OK hi-targeted-to-uri into CON Redirection number																
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE) a CON is sent. The History-Info entry containing a cause parameter is mapped into the Redirection number: <ul style="list-style-type: none"> <li>If CC of the hi-targeted-to-uri is equal the country code where the SUT is located: Nature of address indicator is set to '<b>national (significant) number</b>', '+' and the country code is removed from the digit string and sent in the Address signal of the Redirection number.</li> <li>If the country code of the hi-targeted-to-uri is not equal the country code where the SUT is located: Nature of address indicator is set to '<b>international number</b>' '+' is removed from the digit string and sent in the Address signal of the Redirection number.</li> </ul>																
<b>ISUP Parameter values</b>	<b>CON:</b> Redirection number <b>Nature of address indicator</b> <b>Address signal</b> Derived from the last History-Info entry																
<b>SIP Parameter values</b>	200 OK: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value ; index=1.1																
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"></th> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td></td> <td>→ INVITE</td> </tr> <tr> <td>CON</td> <td>←</td> <td></td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ ACK</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE	CON	←		← 200 OK INVITE				→ ACK
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>														
IAM	→		→ INVITE														
CON	←		← 200 OK INVITE														
			→ ACK														

<b>TP number</b>	TP_403_034	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.3											
<b>TSS reference</b>	IMS-SS/CDIV/													
<b>Selection criteria</b>	PICS 6.3.2/27													
<b>Test Purpose name</b>	Mapping of 200 escaped Privacy header into CON Redirection number restriction													
<b>Test Purpose</b>	Ensure that on receipt of 200 (INVITE), a CON is sent. The Redirection number restriction is set according the <b>escaped Privacy header</b> in the last History entry as indicated in table 6.3.3-1.													
<b>ISUP Parameter values</b>	<b>CON:</b> Redirection number restriction = <b>PRES_restr</b>													
<b>SIP Parameter values</b>	200 OK: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value?Privacy= <b>Priv-value</b> >; index=1.1													
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>CON</td> <td>←</td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	CON	←	← 200 OK INVITE			→ ACK	
ISUP	MGCF	Mg												
IAM	→	→ INVITE												
CON	←	← 200 OK INVITE												
		→ ACK												

<b>TP number</b>	TP_403_035	<b>Reference</b>	7.5.4.2.1 Table 7.5.4.2.1.10 Table 7.5.4.2.1.3											
<b>TSS reference</b>	IMS-SS/CDIV/													
<b>Selection criteria</b>	PICS 6.3.2/27													
<b>Test Purpose name</b>	Mapping of 200 Privacy header into CON Redirection number restriction													
<b>Test Purpose</b>	Ensure that on receipt of 200 OK (INVITE), a CON is sent. The Redirection number restriction is set according the <b>Privacy header</b> as indicated in table 6.3.3-1.													
<b>ISUP Parameter values</b>	<b>CON:</b> Redirection number restriction = <b>PRES_restr</b>													
<b>SIP Parameter values</b>	200 OK: <b>Privacy=Priv-value</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any value>; index=1.1													
<b>Comments</b>														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th style="text-align: left;">ISUP</th> <th style="text-align: left;">MGCF</th> <th style="text-align: right;">Mg</th> </tr> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>CON</td> <td>←</td> <td>← 200 OK INVITE</td> </tr> <tr> <td></td> <td></td> <td>→ ACK</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	ISUP	MGCF	Mg	IAM	→	→ INVITE	CON	←	← 200 OK INVITE			→ ACK	
ISUP	MGCF	Mg												
IAM	→	→ INVITE												
CON	←	← 200 OK INVITE												
		→ ACK												

<b>TP number</b>	TP_403_036	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Redirecting number Address signals into History-Info header URI		
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM containing a Redirecting number parameter, an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The value of the second last hi-targeted-to-uri <b>Value of Redirecting number</b> is mapped from the Redirecting number Address Signals as indicated in table 6.3.3-6.</p>		
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Redirecting number            Nature of Address: <b>NoA_value</b>            Address Signals &lt;any appropriate value&gt;            Redirection Information            Redirection counter = 2            Original called number</p>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b>            History-Info:  &lt;sip:any proper URI&gt;; index=1,  &lt;sip:<b>Value of Redirecting number</b>;cause=any&gt;; index=1.1  &lt;sip: any proper URI;cause=any&gt;; index=1.1.1</p>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.3.3-6: Mapping of Redirecting number into second last Hist-entry**

	<b>NoA_value</b>	<b>Value of Redirecting number second last hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Redirecting number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Redirecting number

<b>TP number</b>	TP_403_037	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Redirecting number Address presentation restricted into History-Info header Privacy value		
<b>Test Purpose</b>	<p>Ensure that on receipt of an IAM containing a Redirecting, an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. A Privacy header is escaped in the second last hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Address presentation restricted indicator of the Redirecting number as indicated in table 6.2.5-7.</p>		
<b>ISUP Parameter values</b>	<p><b>IAM:</b> Redirecting number            Address presentation restricted indicator: <b>APRI_value</b>            Redirection Information            Redirection counter = 2            Original called number</p>		
<b>SIP Parameter values</b>	<p><b>INVITE:</b>            History-Info:  &lt;sip:any proper URI&gt;; index=1,  &lt;sip: any proper URI;cause=any?Privacy=<b>PRIV_value</b>&gt;; index=1.1  &lt;sip: any proper URI;cause=any&gt;; index=1.1.1</p>		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.3.3-7: Mapping of Redirecting number APRI into Privacy header in the second last Hist-entry**

	APRI_value	PRIV_value second last hi-targeted-to-uri
VA_01	presentation restricted	history
VA_02	presentation allowed	Header absent or 'none'

TP number	TP_403_038	Reference	7.5.4.2.2 Table 7.5.4.2.2.1
TSS reference	IMS-SS/CDIV/		
Selection criteria	PICS 6.3.2/27		
Test Purpose name	Mapping of Redirection Information Redirecting indicator		
Test Purpose	Ensure that on receipt of an IAM containing a Redirecting number, an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. A Privacy header is escaped in the second last hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Redirecting indicator of the Redirection Information as indicated in table 6.2.5-21.		
ISUP Parameter values	<b>IAM:</b> Redirection Information Redirection counter = 2 Redirecting indicator = <b>RDIND_value</b>		
SIP Parameter values	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip: any proper URI;cause=any?Privacy= <b>PRIV_value</b> >; index=1.1 <sip: any proper URI;cause=any>; index=1.1.1		
Comments			
Message flows	<b>ISUP</b> IAM	<b>MGCF</b> →	<b>Mg</b> → INVITE Apply post test routine

**Table 6.3.3-8: Mapping of Redirecting indicator into Privacy header in the second last Hist-entry**

	RDIND_value	PRIV_value second last hi-targeted-to-uri
VA_01	Call diverted, all redirection info presentation restricted	history
VA_02	Call diverted	none

TP number	TP_403_039	Reference	7.5.4.2.2 Table 7.5.4.2.2.1
TSS reference	IMS-SS/CDIV/		
Selection criteria	PICS 6.3.2/27		
Test Purpose name	Mapping of Redirection Information Redirection counter		
Test Purpose	Ensure that on receipt of an IAM containing a Redirecting number, an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a the hi-targeted-to-uri and the index parameter of the Redirection counter as indicated in table 6.3.3-9.		
ISUP Parameter values	<b>IAM:</b> Redirection Information Redirection counter = <b>RDCONT_value</b>		
SIP Parameter values	<b>INVITE:</b> History-Info: <b>HI-ENTRY_values</b>		
Comments			
Message flows	<b>ISUP</b> IAM	<b>MGCF</b> →	<b>Mg</b> → INVITE Apply post test routine

**Table 6.3.3-9: Mapping of Redirection counter into index parameter of History-Info header**

	RDCONT_value	HI-ENTRY_values
VA_01	1	<sip:represents the Original called number>; <b>index=1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1</b>
VA_02	2	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents the Redirecting number;cause=any>; <b>index=1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1</b>
VA_03	3	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=any>; <b>index=1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1</b>
VA_04	4	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=any>; <b>index=1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1.1</b>
VA_05	5	<sip: represents the Original called number>; <b>index=1</b> , <sip: represents any placeholder value;cause=any>; <b>index=1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1</b> , <sip: represents any placeholder value;cause=404>; <b>index=1.1.1.1</b> , <sip: represents the Redirecting number;cause=404>; <b>index=1.1.1.1.1</b> , <sip: represents the Called party number;cause=any>; <b>index=1.1.1.1.1.1</b>

TP number	TP_403_040	Reference	7.5.4.2.2 Table 7.5.4.2.2.1
TSS reference	IMS-SS/CDIV/		
Selection criteria	PICS 6.3.2/27		
Test Purpose name	Mapping of Redirection Information Original redirection reason		
Test Purpose	Ensure that on receipt of an IAM containing a Redirecting number an Original called number and a Redirection Information parameter, an INVITE request is sent. The Original redirection reason indicator ' <b>unknown</b> ' of the Redirection Information is mapped into the cause parameter ' <b>404</b> ' of the second hi-targeted-to-uri of the History-Info header in the sent INVITE as indicated in table 6.3.3-10.		
ISUP Parameter values	IAM: Redirection Information Redirection counter = 2 Original redirection reason = ' <b>unknown</b> '		
SIP Parameter values	INVITE: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause= <b>404</b> >; index=1.1, <sip: any proper URI;cause=any>; index=1.1.1		
Comments			
Message flows	ISUP IAM	MGCF → INVITE Apply post test routine	Mg

**Table 6.3.3-10: Void**

<b>TP number</b>	TP_403_041	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Redirection Information Redirecting reason		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirection number an Original called number and a Redirection Information parameter, an INVITE request is sent. The Redirecting reason indicator <b>REAS_value</b> of the Redirection Information is mapped into the cause parameter <b>Cause_value</b> of the last hi-targeted-to-uri of the History-Info header in the sent INVITE as indicated in table 6.3.3-11.		
<b>ISUP Parameter values</b>	IAM: Redirection Information Redirection counter = 2 Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1, <sip: any proper URI;cause= <b>Cause_value</b> >; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → MGCF → INVITE <b>Apply post test routine</b>		Mg

**Table 6.3.3-11: Mapping of Redirecting reason into Reason header in the last Hist-entry**

	<b>REAS_value</b>	<b>Cause_value</b> <b>Second last hi-targeted-to-uri</b>
VA_01	unknown	404
VA_02	unconditional	302
VA_03	User Busy	486
VA_04	No reply	408
VA_05	Deflection during alerting	302
VA_06	Deflection immediate response	302
VA_07	Mobile subscriber not reachable	503

<b>TP number</b>	TP_403_042	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Called party number Address Signals		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing a Redirection number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The Called party number is mapped into the last hi-targeted-to-uri of the History-Info header as indicated in table 6.3.3-12.		
<b>ISUP Parameter values</b>	IAM: Called party number Nature of Address: <b>NoA_value</b> Address Signals		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1, <sip:Value of Called party number;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM → MGCF → INVITE <b>Apply post test routine</b>		Mg

**Table 6.3.3-12: Mapping of Called party number into last Hist-entry**

	<b>NoA_value</b>	<b>Value of Called party number</b> <b>last hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Called party number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Called party number

<b>TP number</b>	TP_403_043	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Original called number Address Signals		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing an Original called number parameter and a Redirection Information parameter, an INVITE request is sent and a History-Info header is present. The value of the first hi-targeted-to-uri <b>Value of Original called number</b> is mapped from the Original called number Address Signals as indicated in table 6.3.3-13.		
<b>ISUP Parameter values</b>	IAM: Original called number Nature of Address: <b>NoA_value</b> Address Signals <Digits>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip: <b>Value of Original called number</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.3.3-13: Mapping of Original called number into first Hist-entry**

	<b>NoA_value</b>	<b>Value of Original called number First hi-targeted-to-uri</b>
VA_01	<i>national (significant) number</i>	Add '+' and the country code where the SUT is located to the Address Signal digits of the Original called number
VA_02	<i>international number</i>	Add '+' to the Address Signal digits of the Original called number

<b>TP number</b>	TP_403_044	<b>Reference</b>	7.5.4.2.2 Table 7.5.4.2.2.1
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an IAM containing an Original called number parameter, an INVITE request is sent and a History-Info header is present. A Privacy header escaped in the first hi-targeted-to-uri and the <b>PRIV_value</b> is mapped from the Address presentation restricted indicator of the Original called number as indicated in table 6.3.3-14.		
<b>ISUP Parameter values</b>	IAM: Original called number Address presentation restricted indicator: <b>APRI_value</b> Address Signals <any appropriate value>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI?Privacy= <b>PRIV_value</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM	MGCF →	Mg INVITE Apply post test routine

**Table 6.3.3-14: Mapping of Original called number APRI into Privacy header in the first Hist-entry**

	<b>APRI_value</b>	<b>PRIV_value first hi-targeted-to-uri</b>
VA_01	presentation restricted	history
VA_02	presentation allowed	none

<b>TP number</b>	TP_403_045	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Second latest History-Info header field entry mapped into Redirecting number Nature of address indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Nature of address indicator</b> of the Redirecting number is mapped from the hi-targeted-to-uri in hi-entry before last hi-entry containing a cause-param URI parameter as indicated in table 6.3.3-15.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number Nature of address indicator = <b>NoA_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip: <b>Second last entry URI</b> ;cause=any>; index=1.1, <sip:any proper URI;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.3-15: Mapping of second last first Hist-entry into Redirecting number  
Nature of address indicator**

	<b>Second last entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	<i>national (significant) number</i>
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	<i>international number</i>

<b>TP number</b>	TP_403_046	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Second latest History-Info header field entry is mapped into Redirecting number Address signal		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address signal</b> of the Redirecting number is mapped from the hi-targeted-to-uri in hi-entry before last hi-entry containing a cause-param URI parameter in the format <b>+CC+NDC+SN</b> as indicated in table 6.3.3-16.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirecting number <i>Address signal derived from the second last Hist-entry</i>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip: <b>Second last entry URI</b> ;cause=any>; index=1.1, <sip:any proper URI;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.3-16: Mapping of second last first Hist-entry into Redirecting number Address signal**

	<b>Second last entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	'+CC' is removed from the userpart digit string used in the Redirecting number Address signal
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	'+' is removed from the userpart digit string used in the Redirecting number Address signal

<b>TP number</b>	TP_403_047	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Second latest History-Info header escaped Privacy header is mapped into Redirecting number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Redirecting number is mapped from the escaped Privacy header of the second latest History-Info header field entry containing a cause parameter as indicated in table 6.3.3-17.		
<b>ISUP Parameter values</b>	IAM: Redirecting number Address presentation restricted indicator = APRI_value		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any?Privacy=PRIV_value>; index=1.1, <sip:any proper URI;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_403_048	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.2
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Privacy header is mapped into Redirecting number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Redirecting number is mapped from the Privacy header of the received INVITE request as indicated in table 6.3.3-17.		
<b>ISUP Parameter values</b>	IAM: Redirecting number Address presentation restricted indicator = APRI_value		
<b>SIP Parameter values</b>	INVITE: Privacy: PRIV_value History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.3-17: Mapping of Privacy header into Redirecting number  
Address presentation restricted indicator**

	PRIV_value	APRI_value
VA_01	history	presentation restricted
VA_02	session	presentation restricted
VA_03	header	presentation restricted
VA_04	none	presentation allowed
VA_05	Header absent	presentation allowed

<b>TP number</b>	TP_403_049	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Escaped Privacy header is mapped into Redirection information Redirecting indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting indicator</b> of the Redirection information is mapped from the escaped Privacy header of the second last History-Info header field entry and last History-Info header field in the received INVITE request as indicated in table 6.3.3-18.		
<b>ISUP Parameter values</b>	IAM: Redirection information Redirecting indicator = <b>RDIND_value</b>		
<b>SIP Parameter values</b>	INVITE: History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any?Privacy= <b>PRIV_value</b> >; index=1.1, <sip:any proper URI;cause=any?Privacy= <b>PRIV_value</b> >; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_403_050	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Privacy header is mapped into Redirection information Redirecting indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting indicator</b> of the Redirection information is mapped from the Privacy header in the received INVITE request as indicated in table 6.3.3-18.		
<b>ISUP Parameter values</b>	IAM: Redirection information Redirecting indicator = <b>RDIND_value</b>		
<b>SIP Parameter values</b>	INVITE: Privacy: <b>PRIV_value</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1, <sip:any proper URI;cause=any>; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.3-18: Mapping of Privacy header into Redirecting indicator**

	<b>PRIV_value</b>	<b>RDIND_value</b>
VA_01	history	Call diverted, all redirection info presentation restricted
VA_02	session	Call diverted, all redirection info presentation restricted
VA_03	header	Call diverted, all redirection info presentation restricted
VA_04	none	Call diverted
VA_05	Privacy header field absent	Call diverted

<b>TP number</b>	TP_403_051	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	'cause' parameter is mapped into Redirection information Redirecting reason		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirecting reason</b> of the Redirection information is mapped from the cause parameter of the latest History-Info header field entry containing a cause parameter in the received INVITE request as indicated in table 6.3.3-19.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection information Original redirection reason = unknown/not available Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip:any proper URI>; index=1, <sip:any proper URI;cause=any>; index=1.1, <sip:any proper URI; cause= <b>Cause_value</b> >; index=1.1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ←	ISUP IAM  Apply post test routine

**Table 6.3.3-19: Mapping of cause parameter in the last Hist-entry into Redirecting reason**

	<b>Cause_value Last hi-targeted-to-uri</b>	<b>REAS_value</b>
VA_01	404	Unknown/not available
VA_02	302	Unconditional
VA_03	486	User busy
VA_04	408	No reply
VA_05	480	Deflection immediate response
VA_06	487	Deflection during alerting
VA_07	503	Mobile subscriber not reachable

<b>TP number</b>	TP_403_052	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.3
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Hi-index is mapped into Redirection information Redirection counter		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Redirection counter</b> of the Redirection information is mapped from the hi-index of the last History-Info header field entry in the received INVITE request as indicated in table 6.3.3-20. The number of dots in the hi-index value is equal to the value of the Redirection counter.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Redirection information Redirection counter = <b>RDCONT_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <b>ENTRY_values</b>		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.3-20: Mapping of Redirection counter into index parameters of History-Info header**

	<b>ENTRY_values</b>	<b>RDCONT_value</b>
VA_01	<sip:represents the Original called number>; <b>index=1</b> , <sip:represents the Called party number;cause=any>; <b>index=1.1</b>	1
VA_02	<sip:represents the Original called number>; <b>index=1</b> , <sip:represents the Redirecting number;cause=any>; <b>index=1.1</b> , <sip:represents the Called party number;cause=any>; <b>index=1.1.1</b>	2
VA_03	<sip:represents the Original called number>; <b>index=1</b> , <sip:any proper URI;cause=any>; <b>index=1.1</b> , <sip:represents the Redirecting number;cause=any>; <b>index=1.1.1</b> , <sip:represents the Called party number;cause=any>; <b>index=1.1.1.1</b>	3
VA_04	<sip:represents the Original called number>; <b>index=1</b> , <sip:any proper URI;cause=any>; <b>index=1.1</b> , <sip:any proper URI;cause=any>; <b>index=1.1.1</b> , <sip:represents the Redirecting number;cause=any>; <b>index=1.1.1.1</b> , <sip:represents the Called party number;cause=any>; <b>index=1.1.1.1.1</b>	4
VA_05	<sip:represents the Original called number>; <b>index=1</b> , <sip:any proper URI;cause=any>; <b>index=1.1</b> , <sip:any proper URI;cause=any>; <b>index=1.1.1</b> , <sip:any proper URI;cause=any>; <b>index=1.1.1.1</b> , <sip:represents the Redirecting number;cause=any>; <b>index=1.1.1.1.1</b> , <sip:represents the Called party number;cause=any>; <b>index=1.1.1.1.1.1</b>	5

<b>TP number</b>	TP_403_053	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	First History-Info header field entry is mapped into Original called number Nature of address indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Nature of address indicator</b> of the Original called is mapped from the first History-Info header field entry in the format +'CC+NDC+SN' as indicated in table 6.3.3-21.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called number Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan</i> ( <i>Recommendation E.164</i> ) Nature of address indicator = <b>NoA_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip: <b>First entry URI</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

**Table 6.3.3-21: Mapping of first Hist-entry into Original called number**  
**Nature of address indicator**

	<b>First entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	<i>national (significant) number</i>
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	<i>international number</i>

<b>TP number</b>	TP_403_054	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	First History-Info header field entry is mapped into Original called Address signal		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address signal</b> of the Original called number is mapped from the first History-Info header field entry in the format +'CC+NDC+SN' as indicated in table 6.3.3-22.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Numbering Plan Indicator = <i>ISDN (Telephony) numbering plan</i> ( <i>Recommendation E.164</i> ) Address signal <i>derived from the first Hist-entry</i>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip: <b>First entry URI</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying	<b>MGCF</b> → ← <b>Apply post test routine</b>	<b>ISUP</b> IAM

**Table 6.3.3-22: Mapping of first Hist-entry into Original called number Address signal**

	<b>First entry URI</b>	<b>NoA_value</b>
VA_01	CC is equal to the country code of the country where MGCF is located AND the next ISUP node is located in the same country	'+CC' is removed from the userpart digit string used in the Original called number Address signal
VA_02	CC is <b>not</b> equal to the country code of the country where MGCF is located	'+' is removed from the userpart digit string used in the Original called number Address signal

<b>TP number</b>	TP_403_055	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	First History-Info header field entry escaped Privacy header is mapped into Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Original called number is mapped from the escaped Privacy header of the first History-Info header field entry as indicated in table 6.3.3-23.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> History-Info: <sip: <b>First entry URI</b> ?Privacy= <b>PRIV_value</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

<b>TP number</b>	TP_403_056	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.4
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Privacy header is mapped into Original called number Address presentation restricted indicator		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing a History-Info header, an IAM is sent and a Redirecting number an Original called number and a Redirection information parameter is present. The <b>Address presentation restricted indicator</b> of the Original called number is mapped from the Privacy header of the received INVITE request as indicated in table 6.3.3-23.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Original called Address presentation restricted indicator = <b>APRI_value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> Privacy: <b>PRIV_value</b> History-Info: <sip: <b>First entry URI</b> >; index=1, <sip:any proper URI;cause=any>; index=1.1		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

**Table 6.3.3-23: Mapping of Privacy header into Redirecting number Address presentation restricted indicator**

	PRIV_value	APRI_value
VA_01	history	presentation restricted
VA_02	session	presentation restricted
VA_03	header	presentation restricted
VA_04	none	presentation allowed
VA_05	Header absent	presentation allowed

<b>TP number</b>	TP_403_057	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of ACM Redirection number into 181 (Being forwarded) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Redirection number is mapped into the hi-targeted-to-uri in a History-Info header containing one hi-entry in the sent 181 as indicated in table 6.3.3-24.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party statue = 'no indication' Generic notification = call is diverting Call diversion information Redirection number Nature of address indicator = <b>NOA_value</b> Address signal <b>Digits</b>		
<b>SIP Parameter values</b>	181: History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any>; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 181 Being forwarded ←	<b>MGCF</b> → IAM ← ACM	<b>ISUP</b>  <b>Apply post test routine</b>

**Table 6.3.3-24: Mapping Redirection number into History-Info header**

	<b>NOA_value</b>	<b>History-Info header: LAST_HIST_URI</b>
VA_01	<i>national (significant) number</i>	Add '+' and CC (of the country where the MGCF is located) to Redirection number Address Signals then map to user portion of the last hi-targeted-to-uri in the format '+ CC NDC SN'.
VA_01	<i>international number</i>	Map complete Redirection number Address Signals and '+' to user portion of the last hi-targeted-to-uri in the format '+ CC NDC SN'.

<b>TP number</b>	TP_403_058	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of ACM Redirecting reason into 181 (Being forwarded) History-Info header cause parameter		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Call diversion information Redirecting reason is mapped into the <b>cause parameter</b> of the hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.3.3-25.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party statue = 'no indication' Generic notification = call is diverting Redirection number Call diversion information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	181: History-Info: sip: <b>LAST_HIST_URI;cause=CAUSE_value&gt;</b> ; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 181 Being forwarded	<b>MGCF</b> → ←	<b>ISUP</b> IAM ← ACM <b>Apply post test routine</b>

Table 6.3.3-25: Mapping of Redirecting reason into cause parameter

<b>CAUSE</b>	<b>Redirecting_Reason REAS_value</b>	<b>Cause parameter, CAUSE_value</b>
VA_01	unknown	404
VA_02	unconditional	302
VA_03	User Busy	486
VA_04	No reply	408
VA_05	Deflection during alerting	487
VA_06	Deflection immediate response	480
VA_07	Mobile subscriber not reachable	503

<b>TP number</b>	TP_403_059	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of ACM Notification subscription options no 181 (Being forwarded) is sent		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, if the Call diversion information Notification subscription options is set to <b>presentation not allowed</b> no 181 (Being forwarded) is sent.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = presentation not allowed		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE	<b>MGCF</b> → ←	<b>ISUP</b> IAM ← ACM <b>Apply post test routine</b>

<b>TP number</b>	TP_403_060	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of ACM Notification subscription options into 181 (Being forwarded) escaped Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of an ACM a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The escaped Privacy header of the hi-targeted-to-uri in a History-Info header in the sent 181 is set to 'history'. On receipt of an ISUP ANM message is received, a 200 OK INVITE is sent and a History-Info header may be present. If present an escaped Privacy header is present the value is set as indicated in table 6.3.3-26.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = <b>NSO_value</b>		
<b>SIP Parameter values</b>	181: History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any?Privacy= <b>history</b> >; index=1 200 OK History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any?Privacy= <b>PRIV_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 181 Being forwarded ← 180 Ringing ← 200 OK INVITE ← ACK →	<b>MGCF</b> → IAM ← ACM ← CPG(Alerting) ← ANM	<b>ISUP</b>
	<b>Apply post test routine</b>		

**Table 6.3.3-26: Mapping of Notification subscription options into Privacy header**

<b>CAUSE</b>	<b>NSO_value</b>	<b>PRIV_value</b>
VA_01	presentation allowed with redirection number	Header not present or 'none'
VA_02	presentation allowed without redirection number	'history'

<b>TP number</b>	TP_403_061	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of CPG Redirection number into 181 (Being forwarded) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Redirection number is mapped into the hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.3.3-24.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Call diversion information Redirection number Nature of address indicator = <b>NOA_value</b> Address signal <b>Digits</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip: <b>LAST_HIST_URI</b> ;cause=any>; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ← 181 Being forwarded ←	<b>MGCF</b> → IAM ← ACM ← CPG	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_062	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of CPG Redirecting reason into 181 (Being forwarded) History-Info header cause parameter		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The Call diversion information Redirecting reason is mapped into the <b>cause parameter</b> of the hi-targeted-to-uri in a History-Info header in the sent 181 as indicated in table 6.3.3-25.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Redirecting reason = <b>REAS_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:derived from Redirection number in ACM;cause= <b>CAUSE_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing 181 Being forwarded	<b>MGCF</b> → ← ←	ISUP IAM ACM CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_063	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of CPG Notification subscription options presentation not allowed no 181 (Being forwarded) is sent		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, if the Call diversion information Notification subscription options is set to <b>presentation not allowed</b> no 181 (Being forwarded) is sent.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = presentation not allowed		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 180 Ringing	<b>MGCF</b> → ←	ISUP IAM ACM CPG
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_064	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.9
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of CPG Notification subscription options into 181 (Being forwarded) escaped Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Progress' a Redirection number and the Call diversion parameter is present as an indication a call diversion occurred, a 181 (Being forwarded) is sent. The escaped Privacy header of the hi-targeted-to-uri in a History-Info header in the sent 181 is set to 'history'. On receipt of an ISUP ANM message is received, a 200 OK INVITE is sent and a History-Info header may be present. If present an escaped Privacy header is present the value is set as indicated in table 6.3.3-26.		
<b>ISUP Parameter values</b>	<b>CPG:</b> Event = Progress Generic notification = call is diverting Redirection number Call diversion information Notification subscription options = <b>NSO_value</b>		
<b>SIP Parameter values</b>	181: History-Info: <sip:any proper URI;cause=any?Privacy= <b>history</b> >; index=1 200 OK History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any?Privacy= <b>PRIV_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 180 Ringing ← 181 Being forwarded ← 180 Ringing ← 200 OK INVITE ← ACK →	<b>MGCF</b> → IAM ← ACM ← CPG ← CPG(Alerting) ← ANM	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>Redirection number</b> into 180 (Ringing) History-Info header <b>URI</b> parameter		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection number is present, a 180 (Ringing) is sent. The Redirection number Address signal digits are mapped into the hi-targeted-to-uri in a History-Info header in the sent 180 (Ringing) as indicated in table 6.3.3-24.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Call diversion information Redirection number <b>CPG:</b> Event indicator = Alerting Call diversion information Redirection number Nature of address indicator = <b>NOA_value</b> Address signal <b>Digits</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:derived from Redirection number in CPG;cause=any>; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 181 Being forwarded ← 180 Ringing ←	<b>MGCF</b> → IAM ← ACM ← CPG	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065A	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.8 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>Redirecting reason</b> is mapped into the cause parameter in the 180 (Ringing) History-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection number and Call diversion indicator parameter are present, a 180 (Ringing) is sent. The cause parameter value is mapped from the Redirecting reason as indicated in table 6.3.3-25.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call diversion information <b>CPG:</b> Event indicator = Alerting Call diversion information Redirecting reason = <b>REAS_value</b> Redirection number		
<b>SIP Parameter values</b>	180: History-Info: <sip: any proper URI;cause= <b>Cause_value</b> ; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE →	→ IAM	
	181 Being forwarded ←	← ACM	
	180 Ringing ←	← CPG	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065B	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting and Notification subscription options the 180 (Ringing) containing a History-Info header is sent, <b>Privacy value</b>		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection number and Call diversion indicator parameters are present, a 180 (Ringing) is sent. The Privacy value is set to 'history'. On receipt of an ISUP ANM message is received, a 200 OK INVITE is sent and a History-Info header may be present. If present an escaped Privacy header is present as indicated in table 6.3.3-26.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call diversion information <b>CPG:</b> Event indicator = Alerting Call diversion information Notification subscription options = <b>NSO_value</b> Redirection number		
<b>SIP Parameter values</b>	180: History-Info: <sip: any proper URI;cause=any?Privacy=history>; index=1 200 OK History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any?Privacy=PRIV_value>; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE →	→ IAM	
	181 Being forwarded ←	← ACM	
	180 Ringing ←	← CPG	
	200 OK INVITE ←	← ANM	
	ACK →		
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065C	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>without Call Diversion Information parameters</b> the 180 (Ringing) containing a History-Info header is sent, <b>cause parameter</b>		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' no Call diversion Information parameters are present, a 180 (Ringing) is sent. The cause parameter value is derived from the Redirection reason indicator of a previous received Call diversion information parameter as indicated in table 6.3.3-25.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call diversion information Redirecting reason = <b>REAS_value</b> Redirection number <b>CPG:</b> Event indicator = Alerting		
<b>SIP Parameter values</b>	180: History-Info: <sip: any proper URI;cause = <b>CAUSE_value</b> ?Privacy=history>; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE →	→ IAM	
	181 Being forwarded ←	← ACM	
	180 Ringing ←	← CPG	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065D	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting <b>without Call Diversion Information parameters</b> the 180 (Ringing) containing a History-Info header is sent, <b>Privacy header</b>		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' no Call diversion Information parameters are present, a 180 (Ringing) is sent. The Privacy value is set to 'history'. On receipt of an ISUP ANM message is received, a 200 OK INVITE is sent and a History-Info header may be present. If present an escaped Privacy header is present as indicated in table 6.3.3-26.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call diversion information Notification subscription options = <b>NSO_value</b> Redirection number <b>CPG:</b> Event indicator = Alerting		
<b>SIP Parameter values</b>	180: History-Info: <sip: any proper URI;cause=any?Privacy=history>; index=1 <b>200 OK</b> History-Info: sip: <b>LAST_HIST_URI</b> ;cause=any?Privacy= <b>PRIV_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>
	INVITE →	→ IAM	
	181 Being forwarded ←	← ACM	
	180 Ringing ←	← CPG	
	200 OK INVITE ←	← ANM	
	ACK →		
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_403_065E	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of a CPG Alerting without Call Diversion Information parameters the 180 (Ringing) a History-Info header is not present		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' no Call diversion Information parameters are present, a 180 (Ringing) is sent. The Notification subscription options in the previous received encapsulated ACM was set to presentation not allowed.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Redirection number Call diversion information Notification subscription options = presentation not allowed Redirection number <b>CPG:</b> Event indicator = Alerting		
<b>SIP Parameter values</b>	180: History-Info header not present		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE	<b>MGCF</b> → 180 Ringing	<b>ISUP</b> → IAM ← ACM ← CPG <b>Apply post test routine</b>

<b>TP number</b>	TP_403_066	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.10
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of CPG Alerting Redirection Number Restriction into 180 (Ringing) Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' a Redirection Number Restriction parameter is present, a 180 (Ringing) is sent. The Redirection Number Restriction parameter value is mapped into the Privacy header in the sent 180 as indicated in table 6.3.3-27.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status = no indication Generic notification = call is diverting Call diversion information Notification subscription options = <b>NSO_value</b> Redirection number <b>CPG:</b> Event indicator = Alerting Redirection Number Restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	180: History-Info: <sip:any proper URI;cause=any?Privacy= <b>PRIIV_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE	<b>MGCF</b> → 181 Being forwarded	<b>ISUP</b> → IAM ← ACM ← CPG <b>Apply post test routine</b>

**Table 6.3.3-27: Mapping of Redirection Number Restriction parameter into Privacy header**

CAUSE	Redirection Number Restriction PRES_restr	Privacy PRIV_value
VA_01	Presentation allowed AND previous received Notification subscription option <b>NSO_value</b> was NOT "presentation not allowed" AND was NOT "presentation allowed without redirection number"	'none' OR Header not present
VA_02	Presentation restricted	'History'
VA_03	Parameter absent AND previous received Notification subscription option <b>NSO_value</b> was NOT "presentation not allowed" AND was NOT "presentation allowed without redirection number"	'none' OR Header not present

<b>TP number</b>	TP_403_068	<b>Reference</b>	7.5.4.3 Table 7.5.4.3.7
<b>TSS reference</b>	IMS-SS/CDIV/		
<b>Selection criteria</b>	PICS 6.3.2/27		
<b>Test Purpose name</b>	Mapping of ANM Redirection Number Restriction into 200 OK INVITE Privacy header		
<b>Test Purpose</b>	Ensure that on receipt of an ANM a Redirection Number Restriction parameter is present as an indication a call diversion occurred, a 200 OK INVITE is sent. The Redirection Number Restriction parameter value is mapped into the Privacy header in the sent 200 OK INVITE as indicated in table 6.3.3-27.		
<b>ISUP Parameter values</b>	<b>ACM:</b> Generic notification = call is diverting Call diversion information Notification subscription options = <b>NSO_value</b> <b>ANM:</b> Redirection number Redirection Number Restriction = <b>PRES_restr</b>		
<b>SIP Parameter values</b>	200 OK INVITE: History-Info: <sip:any proper URI;cause=any?Privacy= <b>PRIV_value</b> >; index=1		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 181 Being forwarded ← 180 Ringing ← 200 OK INVITE ← ACK →  <b>MGCF</b> → IAM ← ACM ← CPG ← ANM  <b>ISUP</b> → IAM ← ACM ← CPG ← ANM		<b>Apply post test routine</b>

### 6.3.4 Conference call (CONF)

<b>TP number</b>	TP_404_001	<b>Reference</b>	7.5.6.2																							
<b>TSS reference</b>	PSTN-SS/CONF/																									
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1																									
<b>Test Purpose name</b>	'isfocus' parameter and conference URI in Contact header in ACK received, a SUBSCRIBE is sent																									
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and a Contact header field is present containing the conference URI and the 'isfocus' parameter, a SUBSCRIBE request is sent after the ACK was received. The Request URI contains the value received in the Contact header in the ACK, the To header is set to the value sent in the 180 Ringing, the P-Asserted-Identity is set to the value of the P-Asserted-Identity sent in the 180 Ringing or the 200 OK INVITE the Privacy header is sent as in the 180 Ringing or 200 OK INVITE.																									
<b>ISUP Parameter values</b>																										
<b>SIP Parameter values</b>	INVITE: Contact: <conference URI>; isfocus SUBSCRIBE: Request URI derived from the Contact header To: <URI equal to the value in the 180> P-Asserted-Identity: < URI equal to the value in the 180 or 200>																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mg</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">ISUP</th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>SUBSCRIBE</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">→</td> <td></td> </tr> </tbody> </table>	Mg	MGCF	ISUP	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM	200 OK (INVITE)	←	← ANM	ACK	→		SUBSCRIBE	←		202 Accepted	→		<b>Apply post test routine</b>
Mg	MGCF	ISUP																								
INVITE	→	→ IAM																								
100 Trying	←																									
180 Ringing	←	← ACM																								
200 OK (INVITE)	←	← ANM																								
ACK	→																									
SUBSCRIBE	←																									
202 Accepted	→																									

<b>TP number</b>	TP_404_002	<b>Reference</b>	7.5.6.2																							
<b>TSS reference</b>	PSTN-SS/CONF/																									
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1																									
<b>Test Purpose name</b>	'isfocus' parameter and conference URI in Contact header in 200 OK received, a SUBSCRIBE is sent																									
<b>Test Purpose</b>	Ensure that on receipt of a 200 OK INVITE successful final response and a Contact header field is present containing the conference URI and the 'isfocus' parameter, a SUBSCRIBE request is sent. The Request URI contains the value received in the Contact header in the 200 OK, the From header is set to the value sent in the initial INVITE request, the P-Asserted-Identity is set to the value of the P-Asserted-Identity sent in the initial INVITE request the Privacy header is sent as in the initial INVITE.																									
<b>ISUP Parameter values</b>																										
<b>SIP Parameter values</b>	200: Contact: <conference URI>; isfocus SUBSCRIBE: From: <URI equal to the value in the INVITE> P-Asserted-Identity: < URI equal to the value in the INVITE>																									
<b>Comments</b>																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ISUP</th> <th style="text-align: center;">MGCF</th> <th style="text-align: center;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 100 Trying</td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 200 OK (INVITE)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ ACK</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ SUBSCRIBE</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 202 Accepted</td> </tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 100 Trying	ANM	←	← 180 Ringing			← 200 OK (INVITE)			→ ACK			→ SUBSCRIBE			← 202 Accepted	<b>Apply post test routine</b>
ISUP	MGCF	Mg																								
IAM	→	→ INVITE																								
ACM	←	← 100 Trying																								
ANM	←	← 180 Ringing																								
		← 200 OK (INVITE)																								
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		← 202 Accepted																								

<b>TP number</b>	TP_404_003	<b>Reference</b>	7.5.6.3																																							
<b>TSS reference</b>	PSTN-SS/CONF/																																									
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1																																									
<b>Test Purpose name</b>	Interworking of notification of 'Conference established' at the I-MGCF																																									
<b>Test Purpose</b>	Ensure that on receipt of an initial INVITE request and the Contact header contains the <b>isfocus</b> parameter, a SUBSCRIBE request is sent. Ensure that on receipt of a NOTIFY request as a response to the SUBSCRIBE request and a XML conference-info instance is present, the 'conference-state' 'active' element is set to 'true' an ISUP CPG message is set and the Generic notification parameter is set to ' <b>Conference established</b> '.																																									
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic notification Conference established																																									
<b>SIP Parameter values</b>	<b>INVITE:</b> Contact: <conference URI>; isfocus <b>NOTIFY:</b> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info conference-state active>true<																																									
<b>Comments</b>																																										
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>180 Ringing</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ACM</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>200 OK (INVITE)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← ANM</td> </tr> <tr> <td>ACK</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>SUBSCRIBE</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>202 Accepted</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>NOTIFY</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ CPG</td> </tr> <tr> <td>200 OK (NOTIFY)</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	100 Trying	←		180 Ringing	←	← ACM				200 OK (INVITE)	←	← ANM	ACK	→					SUBSCRIBE	←		202 Accepted	→					NOTIFY	→	→ CPG	200 OK (NOTIFY)	←		<b>Apply post test routine</b>	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																																								
INVITE	→	→ IAM																																								
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NOTIFY	→	→ CPG																																								
200 OK (NOTIFY)	←																																									

<b>TP number</b>	TP_404_004	<b>Reference</b>	7.5.6.3																											
<b>TSS reference</b>	PSTN-SS/CONF/																													
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1																													
<b>Test Purpose name</b>	Interworking of notification of 'Conference established' at the O-MGCF																													
<b>Test Purpose</b>	Ensure that on receipt of a 200 OK INVITE response and the Contact header contains the <b>isfocus</b> parameter, a SUBSCRIBE request is sent. Ensure that on receipt of a NOTIFY request as a response to the SUBSCRIBE request and a XML conference-info instance is present, the 'active' sub element of the 'conference-state' element is set to 'true' an ISUP CPG message is sent and the Generic notification parameter is set to ' <b>Conference established</b> '.																													
<b>ISUP Parameter values</b>	CPG: Generic notification Conference established																													
<b>SIP Parameter values</b>	NOTIFY: Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info conference-state active>true< BYE: CallID: xxx																													
<b>Comments</b>	Note that the INVITE received in the confirmed dialogue is originated by the conference focus. The originally dialogue have to terminated.																													
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 33.33%;"></th> <th style="text-align: center; width: 33.33%;"><b>ISUP</b></th> <th style="text-align: center; width: 33.33%;"><b>MGCF</b></th> <th style="text-align: center; width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td></td> <td>→ INVITE ← 100 Trying ← 180 Ringing</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td></td> <td></td> </tr> <tr> <td>ANM</td> <td style="text-align: center;">←</td> <td></td> <td>← 200 OK (INVITE) → ACK</td> </tr> <tr> <td></td> <td></td> <td></td> <td>→ SUBSCRIBE ← 202 Accepted</td> </tr> <tr> <td>CPG</td> <td style="text-align: center;">←</td> <td></td> <td>← NOTIFY → 200 OK (NOTIFY)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>← BYE → 200 OK (BYE)</td> </tr> </tbody> </table>		<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→		→ INVITE ← 100 Trying ← 180 Ringing	ACM	←			ANM	←		← 200 OK (INVITE) → ACK				→ SUBSCRIBE ← 202 Accepted	CPG	←		← NOTIFY → 200 OK (NOTIFY)				← BYE → 200 OK (BYE)	<b>Apply post test routine</b>
	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																											
IAM	→		→ INVITE ← 100 Trying ← 180 Ringing																											
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ANM	←		← 200 OK (INVITE) → ACK																											
			→ SUBSCRIBE ← 202 Accepted																											
CPG	←		← NOTIFY → 200 OK (NOTIFY)																											
			← BYE → 200 OK (BYE)																											

<b>TP number</b>	TP_404_005	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party added' at the I-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party added</b> '.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party added		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>connected<		
<b>Comments</b>			
<b>Message flows</b>	Mg NOTIFY 200 OK (NOTIFY)	MGCF Session is established and joined in a conference → ←	ISUP CPG Apply post test routine

<b>TP number</b>	TP_404_006	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party added' at the O-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the O-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party added</b> '.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party added		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>connected<		
<b>Comments</b>			
<b>Message flows</b>	CPG	ISUP Session is established and joined in a conference ← Mg NOTIFY → 200 OK (NOTIFY)	Apply post test routine

<b>TP number</b>	TP_404_007	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'isolated' at the I-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element contains the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>on-hold</b> , an ISUP CPG message is sent the Generic notification indicator is set to <b>'isolated'</b> .		
<b>ISUP Parameter values</b>	<b>CPG:</b> Generic notification Isolated		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<URI of ISUP> status>on-hold<		
<b>Comments</b>			
<b>Message flows</b>	Mg	MGCF	ISUP
	<b>Session is established and joined in a conference</b>		
<b>CASE A</b>			
NOTIFY	→		→ CPG
200 OK (NOTIFY)	←		
<b>CASE B</b>			
NOTIFY	→		→ CPG
200 OK (NOTIFY)	←		
<i>INVITE(sendonly)</i>	→		
200 OK (INVITE)	←		
ACK	→		
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_404_008	<b>Reference</b>	7.5.6.3			
<b>TSS reference</b>	PSTN-SS/CONF/					
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1					
<b>Test Purpose name</b>	Interworking of notification of 'isolated' at the O-MGCF					
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the O-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element contains the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>on-hold</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>isolated</b> '.					
<b>ISUP Parameter values</b>	CPG: Generic notification isolated					
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<URI of ISUP> status>on-hold<					
<b>Comments</b>						
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <p style="text-align: center;"><b>Session is established and joined in a conference</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <b>CASE A</b>            CPG                    ←         </td> <td style="width: 33%; vertical-align: top;">           ←           NOTIFY            →           200 OK (NOTIFY)         </td> </tr> <tr> <td style="width: 33%; vertical-align: top;"> <b>CASE B</b>            CPG                    ←         </td> <td style="width: 33%; vertical-align: top;">           ←           NOTIFY            →           200 OK (NOTIFY)             ←           INVITE(sendonly)            →           200 OK (INVITE)            ←           ACK         </td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	<b>CASE A</b> CPG                    ←	←           NOTIFY →           200 OK (NOTIFY)	<b>CASE B</b> CPG                    ←	←           NOTIFY →           200 OK (NOTIFY)  ←           INVITE(sendonly) →           200 OK (INVITE) ←           ACK	
<b>CASE A</b> CPG                    ←	←           NOTIFY →           200 OK (NOTIFY)					
<b>CASE B</b> CPG                    ←	←           NOTIFY →           200 OK (NOTIFY)  ←           INVITE(sendonly) →           200 OK (INVITE) ←           ACK					

<b>TP number</b>	TP_404_009	<b>Reference</b>	7.5.6.3	
<b>TSS reference</b>	PSTN-SS/CONF/			
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1			
<b>Test Purpose name</b>	Interworking of notification of 'other party isolated' at the I-MGCF			
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>on-hold</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party isolated</b> '.			
<b>ISUP Parameter values</b>	CPG: Generic notification other party isolated			
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP> status>on-hold<			
<b>Comments</b>				
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>ISUP</b></p> <p style="text-align: center;"><b>Session is established and other party joined in a conference</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;">           NOTIFY                   →            200 OK (NOTIFY)        ←         </td> <td style="width: 33%; vertical-align: top;">           →           CPG         </td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	NOTIFY                   → 200 OK (NOTIFY)        ←	→           CPG	
NOTIFY                   → 200 OK (NOTIFY)        ←	→           CPG			

<b>TP number</b>	TP_404_010	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party isolated' at the O-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the O-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>on-hold</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party isolated</b> '.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party isolated		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>on-hold<		
<b>Comments</b>			
<b>Message flows</b>	ISUP MGCF Mg Session is established and other party joined in a conference CPG ← NOTIFY → 200 OK (NOTIFY) Apply post test routine		

<b>TP number</b>	TP_404_011	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'reattached' at the I-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request and isolated at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element contains the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>reattached</b> '.		
<b>ISUP Parameter values</b>	CPG: Generic notification reattached		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<URI of ISUP>" status>connected<		
<b>Comments</b>			
<b>Message flows</b>	Mg MGCF ISUP Session is established joined in a conference and isolated <b>CASE A</b> NOTIFY → CPG 200 OK (NOTIFY) ← <b>CASE B</b> NOTIFY → CPG 200 OK (NOTIFY) ← INVITE(sendrecv) → 200 OK (INVITE) ← ACK → Apply post test routine		

<b>TP number</b>	TP_404_012	<b>Reference</b>	7.5.6.3				
<b>TSS reference</b>	PSTN-SS/CONF/						
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1						
<b>Test Purpose name</b>	Interworking of notification of 'reattached' at the O-MGCF						
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request and isolated at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element contains the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>reattached</b> '.						
<b>ISUP Parameter values</b>	CPG: Generic notification Reattached						
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<URI of ISUP> status>connected<						
<b>Comments</b>							
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP                    MGCF                    Mg</b></p> <p style="text-align: center;"><b>Session is established joined in a conference and isolated</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <b>CASE A</b>            CPG                    ←         </td> <td style="width: 33%; vertical-align: top;">           ← NOTIFY            → 200 OK (NOTIFY)         </td> </tr> <tr> <td style="width: 33%; vertical-align: top;"> <b>CASE B</b>            CPG                    ←         </td> <td style="width: 33%; vertical-align: top;">           ← NOTIFY            → 200 OK (NOTIFY)             ← INVITE(sendrecv)            → 200 OK (INVITE)            ← ACK         </td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	<b>CASE A</b> CPG                    ←	← NOTIFY → 200 OK (NOTIFY)	<b>CASE B</b> CPG                    ←	← NOTIFY → 200 OK (NOTIFY)  ← INVITE(sendrecv) → 200 OK (INVITE) ← ACK		
<b>CASE A</b> CPG                    ←	← NOTIFY → 200 OK (NOTIFY)						
<b>CASE B</b> CPG                    ←	← NOTIFY → 200 OK (NOTIFY)  ← INVITE(sendrecv) → 200 OK (INVITE) ← ACK						

<b>TP number</b>	TP_404_013	<b>Reference</b>	7.5.6.3	
<b>TSS reference</b>	PSTN-SS/CONF/			
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1			
<b>Test Purpose name</b>	Interworking of notification of 'other party reattached' at the I-MGCF			
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request and another party is isolated at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party reattached</b> '.			
<b>ISUP Parameter values</b>	CPG: Generic notification other party reattached			
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP> status>connected<			
<b>Comments</b>				
<b>Message flows</b>	<p style="text-align: center;"><b>Mg                    MGCF                    ISUP</b></p> <p style="text-align: center;"><b>Session is established joined in a conference and another party was isolated</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;">           NOTIFY                    →                    → CPG            200 OK (NOTIFY)            ←         </td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	NOTIFY                    →                    → CPG 200 OK (NOTIFY)            ←		
NOTIFY                    →                    → CPG 200 OK (NOTIFY)            ←				

<b>TP number</b>	TP_404_014	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party reattached' at the O-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request and another party is isolated at the O-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>connected</b> , an ISUP CPG message is sent the Generic notification indicator is set to 'other party reattached'.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party reattached		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>connected<		
<b>Comments</b>			
<b>Message flows</b>	ISUP Session is established joined in a conference and another party was isolated CPG	MGCF ← NOTIFY → 200 OK (NOTIFY) <b>Apply post test routine</b>	Mg

<b>TP number</b>	TP_404_015	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party disconnected' at the I-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the I-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>disconnected</b> , an ISUP CPG message is sent the Generic notification indicator is set to 'other party disconnected'.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party disconnected		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>disconnected< joining-method>dialled-in< or joining-method>dialled-out<		
<b>Comments</b>			
<b>Message flows</b>	Mg NOTIFY 200 OK (NOTIFY)	MGCF Session is established and joined in a conference → ← <b>Apply post test routine</b>	ISUP CPG

<b>TP number</b>	TP_404_016	<b>Reference</b>	7.5.6.3
<b>TSS reference</b>	PSTN-SS/CONF/		
<b>Selection criteria</b>	PICS 6.3.2/20 AND PICS 6.3.9/1		
<b>Test Purpose name</b>	Interworking of notification of 'other party disconnected' at the O-MGCF		
<b>Test Purpose</b>	An established conference is already indicated by receipt of an adequate NOTIFY request at the O-MGCF. Ensure that on receipt of a NOTIFY request and the 'entity' attribute of the 'endpoint' element does not contain the ISUP address as received in the To header and the 'status' sub element of the 'endpoint' element is set to <b>disconnected</b> , an ISUP CPG message is sent the Generic notification indicator is set to ' <b>other party disconnected</b> '.		
<b>ISUP Parameter values</b>	CPG: Generic notification other party disconnected		
<b>SIP Parameter values</b>	NOTIFY: To: <ISUP address> Subscription-State: active Event: conference Content-Type: application/conference-info+xml <?xml version="1.0" conference-info users user endpoint entity=<not URI of ISUP>" status>disconnected< or joining-method>dialled-out<		
<b>Comments</b>			
<b>Message flows</b>	ISUP CPG	MGCF <b>Session is established and joined in a conference</b> ← NOTIFY → 200 OK (NOTIFY) <b>Apply post test routine</b>	Mg

### 6.3.5 Message Waiting Indication (MWI)

Void.

### 6.3.6 Malicious Communication Identification (MCID)

<b>TP number</b>	TP_406_001	<b>Reference</b>	7.5.9.1
<b>TSS reference</b>	IMS-SS/MCID/		
<b>Selection criteria</b>	PICS 6.3.2/26		
<b>Test Purpose name</b>	Receipt of INFO request an IDR is sent		
<b>Test Purpose</b>	Ensure that on receipt of an INFO request containing a 'mcid' XML element and the 'McidRequestIndicator' subelement is set to <b>XML_McidReq</b> , an ISUP IDR message is sent and the MCID request indicators is set to <b>MCID_req</b> as indicated in table 6.3.6-1.		
<b>ISUP Parameter values</b>	IDR: MCID request indicators <b>MCID_req</b>		
<b>SIP Parameter values</b>	INFO: <?xml version="1.0" mcid request> McidRequestIndicator> <b>XML_McidReq</b> </ HoldingIndicator>1</		
<b>Comments</b>			
<b>Message flows</b>	ISUP IAM ACM IDR	MGCF → INVITE ← 180 Ringing ← INFO → 200 OK INFO <b>Apply post test routine</b>	Mg

**Table 6.3.6-1: Mapping of XML McidRequestIndicator  
into ISUP MCID request indicator**

	<b>XML_McidReq</b>	<b>MCID_req</b>
VA_01	0	MCID not requested
VA_02	1	MCID requested

<b>TP number</b>	TP_406_002	<b>Reference</b>	7.5.9.1																				
<b>TSS reference</b>	IMS-SS/MCID/																						
<b>Selection criteria</b>	PICS 6.3.2/26																						
<b>Test Purpose name</b>	Receipt of IRS an INFO request is sent																						
<b>Test Purpose</b>	Ensure that on receipt of an IRS message containing a MCID response indicator set to <b>MCID_rsp</b> , an INFO is sent and a MCID XML response element is present. The McidResponseIndicator is set to <b>XML_McidRsp</b> as indicated in table 6.3.6-2.																						
<b>ISUP Parameter values</b>	IRS: MCID response indicator <b>MCID_rsp</b>																						
<b>SIP Parameter values</b>	INFO: <?xml version="1.0" mcid response> McidResponseIndicator> <b>XML_McidRsp</b> </																						
<b>Comments</b>																							
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><b>ISUP</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>IDR</td> <td></td> <td style="text-align: center;">← INFO</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">→ 200 OK INFO</td> </tr> <tr> <td>IRS</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INFO</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 200 OK INFO</td> </tr> </tbody> </table> <p><b>Apply post test routine</b></p>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 180 Ringing	IDR		← INFO			→ 200 OK INFO	IRS	→	→ INFO			← 200 OK INFO	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																					
IAM	→	→ INVITE																					
ACM	←	← 180 Ringing																					
IDR		← INFO																					
		→ 200 OK INFO																					
IRS	→	→ INFO																					
		← 200 OK INFO																					

**Table 6.3.6-2: Mapping of ISUP MCID response indicator  
into XML McidResponseIndicator**

	<b>MCID_rsp</b>	<b>XML_McidRsp</b>
VA_01	MCID not included	0
VA_02	MCID included	1

<b>TP number</b>	TP_406_003	<b>Reference</b>	7.5.9.1.3
<b>TSS reference</b>	IMS-SS/MCID/		
<b>Selection criteria</b>	PICS 6.3.2/26		
<b>Test Purpose name</b>	Receipt of IRS an INFO request is sent, a Calling party number is interworked		
<b>Test Purpose</b>	<p>Ensure that on receipt of an IRS message containing a 'mcid' response indicator is set to MCID included, an INFO request is sent and a MCID XML response element is present the McidResponseIndicator is set to 1.</p> <p>A Calling party number 'user provided' or 'network provided' is contained in the IRS a XML mcid OrigPartyIdentity element is present in the INFO request and the URI is derived from the address signals of the calling party number.</p> <p>Nature of address indicator:</p> <ul style="list-style-type: none"> <li>• <b>National (significant) number:</b> add '+' and 'CC' the county code where the SUT is located to the Address signal of the Calling party number and sent in the 'mcid' XML OrigPartyIdentity element.</li> <li>• <b>International number:</b> add '+' to the Address signal of the Calling party number and sent in the 'mcid' XML OrigPartyIdentity element.</li> </ul> <p>The Calling party number Address Presentation restriction indicator value <b>APRI_value</b> is mapped into the XML mcid OrigPartyPresentationRestriction is set to <b>XML_orig_restr</b> as indicated in table 6.3.6-3.</p>		
<b>ISUP Parameter values</b>	<p>IRS: MCID response indicator MCID included Calling Party number Address presentation restriction indicator = <b>APRI_value</b> Address signal</p>		
<b>SIP Parameter values</b>	<p>INFO: &lt;?xml version="1.0" mcid response&gt;     McidResponseIndicator&gt;1&lt;/     OrigPartyIdentity&gt;<i>derived from the Calling Party number Address signal</i>&lt;/     OrigPartyPresentationRestriction&gt;<b>XML_orig_restr</b>&lt;/</p>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>
	IAM → ACM ← IDR		→ INVITE ← 180 Ringing ← INFO → 200 OK INFO
	IRS →		→ INFO ← 200 OK INFO
	<b>Apply post test routine</b>		

**Table 6.3.6-3: Mapping of ISUP Calling party number APRI into XML OrigPartyPresentationRestriction**

	<b>APRI_value</b>	<b>XML_orig_restr</b>
VA_01	Presentation restricted	true
VA_02	Presentation allowed	false

<b>TP number</b>	TP_406_004	<b>Reference</b>	7.5.9.1.4																	
<b>TSS reference</b>	IMS-SS/MCID/																			
<b>Selection criteria</b>	PICS 6.3.2/26																			
<b>Test Purpose name</b>	Receipt of IRS an INFO request is sent, an Additional calling party number is interworked																			
<b>Test Purpose</b>	<p>Ensure that on receipt of an IRS message containing a 'mcid' response indicator is set to MCID included, an INFO request is sent and a MCID XML response element is present the McidResponseIndicator is set to 1.</p> <p>An Additional calling party number 'user provided' or '<i>user provided, not verified</i>' or 'network provided' is contained in the IRS a XML mcid GenericNumber element is present in the INFO request and the URI is derived from the address signals of the Additional calling party number.</p> <p>Nature of address indicator:</p> <ul style="list-style-type: none"> <li>• <b>National (significant) number:</b> add '+' and 'CC' the county code where the SUT is located to the Address signal of the Additional calling party number and sent in the 'mcid' XML GenericNumber element.</li> <li>• <b>International number:</b> add '+' to the Address signal of the Additional calling party number and sent in the 'mcid' XML GenericNumber element.</li> </ul> <p>The Additional calling party number Address Presentation restriction indicator value <b>APRI_value</b> is mapped into the XML mcid GenericNumberPresentationRestriction is set to <b>XML_gen_restr</b> as indicated in table 6.3.6-4.</p>																			
<b>ISUP Parameter values</b>	IRS: MCID response indicator MCID included Generic number Additional calling Party number Address presentation restriction indicator = <b>APRI_value</b> Address signal																			
<b>SIP Parameter values</b>	INFO: <?xml version="1.0" mcid response> McidResponseIndicator>1</ GenericNumber> <i>derived from the Generic number Address signal</i> </ GenericNumberPresentationRestriction> <b>XML_gen_restr</b> </																			
<b>Comments</b>																				
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 30%;">ISUP</th> <th style="text-align: center; width: 30%;">MGCF</th> <th style="text-align: center; width: 40%;">Mg</th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INVITE</td> </tr> <tr> <td>ACM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 180 Ringing</td> </tr> <tr> <td>IDR</td> <td></td> <td style="text-align: center;">← INFO → 200 OK INFO</td> </tr> <tr> <td>IRS</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ INFO ← 200 OK INFO</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Apply post test routine</b></td></tr> </tbody> </table>	ISUP	MGCF	Mg	IAM	→	→ INVITE	ACM	←	← 180 Ringing	IDR		← INFO → 200 OK INFO	IRS	→	→ INFO ← 200 OK INFO	<b>Apply post test routine</b>			
ISUP	MGCF	Mg																		
IAM	→	→ INVITE																		
ACM	←	← 180 Ringing																		
IDR		← INFO → 200 OK INFO																		
IRS	→	→ INFO ← 200 OK INFO																		
<b>Apply post test routine</b>																				

**Table 6.3.6-4: Mapping of ISUP Additional calling party number APRI into XML GenericNumberPresentationRestriction**

	APRI_value	XML_gen_restr
VA_01	Presentation restricted	true
VA_02	Presentation allowed	false

<b>TP number</b>	TP_406_005	<b>Reference</b>	7.5.9.2.2
<b>TSS reference</b>	IMS-SS/MCID/		
<b>Selection criteria</b>	PICS 6.3.2/26		
<b>Test Purpose name</b>	ISUP IDR is mapped into INFO request		
<b>Test Purpose</b>	Ensure that on receipt of an ISUP IDR containing a MCID request indicators indicator set to <b>MCID_req</b> , an INFO request is sent. A XML 'mcid' McidRequestIndicator is included set to <b>XML_McidReq</b> as indicated in table 6.3.6-5.		
<b>ISUP Parameter values</b>	IDR: MCID request indicators <b>MCID_req</b>		
<b>SIP Parameter values</b>	INFO: <?xml version="1.0" mcid request> McidRequestIndicator> <b>XML_McidReq</b> </ HoldingIndicator>1</		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying INFO 200 OK INFO	<b>MGCF</b> → ← ← →	ISUP IAM IDR
			Apply post test routine

**Table 6.3.6-5: Mapping of ISUP MCID request indicator into XML McidRequestIndicator**

	<b>MCID_req</b>	<b>XML_McidReq</b>
VA_01	MCID not requested	0
VA_02	MCID requested	1

<b>TP number</b>	TP_406_006	<b>Reference</b>	7.5.9.2.3
<b>TSS reference</b>	IMS-SS/MCID/		
<b>Selection criteria</b>	PICS 6.3.2/26		
<b>Test Purpose name</b>	INFO request is mapped into ISUP IRS		
<b>Test Purpose</b>	Ensure that on receipt of an INFO request the XML 'mcid' McidResponseIndicator is set to <b>MCID_rsp</b> , an ISUP IRS is sent. The MCID response indicator is set to MCID_rsp as indicated in table 6.3.6-6.		
<b>ISUP Parameter values</b>	IRS: MCID response indicator <b>MCID_rsp</b>		
<b>SIP Parameter values</b>	INFO: <?xml version="1.0" mcid response> McidResponseIndicator> <b>XML_McidRsp</b> </		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying INFO 200 OK INFO  INFO 200 OK INFO	<b>MGCF</b> → ← ← →  → ←	ISUP IAM IDR  IRS
			Apply post test routine

**Table 6.3.6-6: Mapping of XML McidResponseIndicator into ISUP MCID response indicator**

	<b>XML_McidRsp</b>	<b>MCID_rsp</b>
VA_01	0	MCID not included
VA_02	1	MCID included

<b>TP number</b>	TP_406_007	<b>Reference</b>	7.5.9.2.3																					
<b>TSS reference</b>	IMS-SS/MCID/																							
<b>Selection criteria</b>	PICS 6.3.2/26																							
<b>Test Purpose name</b>	XML OrigPartyIdentity is mapped into ISUP IRS Calling Party number																							
<b>Test Purpose</b>	<p>Ensure that on receipt of an INFO request the XML 'mcid' McidResponseIndicator is set to '1', an ISUP IRS is sent.</p> <p>The XML OrigPartyIdentity is mapped into the Calling party:</p> <ul style="list-style-type: none"> <li>If the country code of the OrigPartyIdentity URI is equal to the country code where the SUT is located the Nature of address is set to '<b>National (significant) number</b>', the '+' and the country code is removed from the user part of the XML OrigPartyIdentity URI and send in the Address signals of the Calling party number.</li> <li>If the country code of the OrigPartyIdentity URI is not equal to the country code where the SUT is located the Nature of address is set to '<b>International number</b>', the '+' is removed from the user part of the XML OrigPartyIdentity URI and send in the Address signals of the Calling party number.</li> </ul> <p>The XML OrigPartyPresentationRestriction value <b>XML_orig_restr</b> is mapped into the Address presentation restriction indicator <b>APRI_value</b> of the Calling party number as indicated in table 6.3.6-7.</p>																							
<b>ISUP Parameter values</b>	<p><b>IRS:</b> MCID response indicator MCID included Calling Party number Address presentation restriction indicator = <b>APRI_value</b> Address signal = <b>derived from the OrigPartyIdentity</b></p>																							
<b>SIP Parameter values</b>	<p>INFO: &lt;?xml version="1.0" mcid response&gt;     McidResponseIndicator&gt;1&lt;/br&gt;     OrigPartyIdentity&gt;<b>any valid URI</b>&lt;/br&gt;     OrigPartyPresentationRestriction&gt;<b>XML_orig_restr</b>&lt;/br&gt;</p>																							
<b>Comments</b>																								
<b>Message flows</b>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><b>Mg</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IAM</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← IDR</td> </tr> <tr> <td>INFO</td> <td style="text-align: center;">←</td> <td></td> </tr> <tr> <td>200 OK INFO</td> <td style="text-align: center;">→</td> <td></td> </tr> <tr> <td>INFO</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ IRS</td> </tr> <tr> <td>200 OK INFO</td> <td style="text-align: center;">←</td> <td></td> </tr> </tbody> </table>	<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM	100 Trying	←	← IDR	INFO	←		200 OK INFO	→		INFO	→	→ IRS	200 OK INFO	←		<b>Apply post test routine</b>	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>																						
INVITE	→	→ IAM																						
100 Trying	←	← IDR																						
INFO	←																							
200 OK INFO	→																							
INFO	→	→ IRS																						
200 OK INFO	←																							

**Table 6.3.6-7: Mapping of XML OrigPartyPresentationRestriction into ISUP Calling party number APRI**

	<b>XML_orig_restr</b>	<b>APRI_value</b>
VA_01	true	Presentation restricted
VA_02	false	Presentation allowed

<b>TP number</b>	TP_406_008	<b>Reference</b>	7.5.9.2.3
<b>TSS reference</b>	IMS-SS/MCID/		
<b>Selection criteria</b>	PICS 6.3.2/26		
<b>Test Purpose name</b>	XML GenericNumber is mapped into ISUP IRS Additional calling Party number		
<b>Test Purpose</b>	<p>Ensure that on receipt of an INFO request the XML 'mcid' McidResponseIndicator is set to <b>MCID_rsp</b>, an ISUP IRS is sent.</p> <p>The XML GenericNumber is mapped into the Additional calling party:</p> <ul style="list-style-type: none"> <li>If the country code of the GenericNumber URI is equal to the country code where the SUT is located the Nature of address is set to '<b>National (significant) number</b>', the '+' and the country code is removed from the user part of the XML GenericNumber URI and send in the Address signals of the Additional calling party number.</li> <li>If the country code of the GenericNumber URI is not equal to the country code where the SUT is located the Nature of address is set to '<b>International number</b>', the '+' is removed from the user part of the XML GenericNumber URI and send in the Address signals of the Additional calling party number.</li> </ul> <p>The XML GenericNumberPresentationRestriction value <b>XML_gen_restr</b> is mapped into the Address presentation restriction indicator <b>APRI_value</b> of the Additional calling party number as indicated in table 6.3.6-8.</p>		
<b>ISUP Parameter values</b>	<p><b>IRS:</b> MCID response indicator            MCID included            Generic number            Additional calling Party number            Address presentation restriction indicator = <b>APRI_value</b>            Address signal</p>		
<b>SIP Parameter values</b>	<pre>INFO:  &lt;?xml version="1.0"  mcid        response&gt;        McidResponseIndicator&gt;1&lt;/br/&gt;        GenericNumber&gt;<i>derived from the Generic number Address signal</i>&lt;/br/&gt;        GenericNumberPresentationRestriction&gt;XML_gen_restr&lt;/br/&gt;</pre>		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE 100 Trying INFO 200 OK INFO  INFO 200 OK INFO	<b>MGCF</b>   <b>ISUP</b> IAM IDR IRS	<b>ISUP</b>  <b>Apply post test routine</b>

**Table 6.3.6-8: Mapping of XML GenericNumberPresentationRestriction into ISUP Additional calling party number APRI**

	<b>XML_gen_restr</b>	<b>APRI_value</b>
VA_01	true	Presentation restricted
VA_02	false	Presentation allowed

### 6.3.7 Closed User Group (CUG)

<b>TP number</b>	TP_407_001	<b>Reference</b>	7.5.10.1 Table 7.5.10.1.1, Table 7.5.10.1.2
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23		
<b>Test Purpose name</b>	Mapping of the SIP XML CUG Element to the ISUP closed usergroup interlock code parameter		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing the Content-Type application/vnd.etsi.cug+xml and the 'cug' XML body, an IAM is sent. The XML 'networkIndicator' is mapped into the ISUP Closed user group interlock code Network Identity indicator and the XML 'cugInterlockBinaryCode' is mapped into the ISUP Closed user group interlock code Binary code indicator.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator Closed user group interlock code <b>Network Identity</b> mapped from XML networkIndicator <b>Binary code</b> mapped from XML cugInterlockBinaryCode		
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator=any proper value cugInterlockBinaryCode=any proper value cugCommunicationIndicator		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

<b>TP number</b>	TP_407_002	<b>Reference</b>	7.5.10.1 Table 7.5.10.1.1, Table 7.5.10.1.3
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23		
<b>Test Purpose name</b>	Mapping of the SIP XML CUG Element to the ISUP <i>closed user group call indicator included in the optional Forward Call Indicator Parameter</i>		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing the Content-Type application/vnd.etsi.cug+xml and the 'cug' XML body, an IAM is sent. The XML 'cugCommunicationIndicator' is mapped into the ISUP Optional forward call indicator Closed user group call indicator as indicated in table 6.3.7-1.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator = <b>CUG_ind</b> Closed user group interlock code Network Identity Binary code		
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator cugInterlockBinaryCode cugCommunicationIndicator= <b>CUG_COM_ind</b>		
<b>Comments</b>	CUG_ind non-CUG call or spare		
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← Apply post test routine	ISUP IAM

**Table 6.3.7-1: Mapping of XML cugCommunicationIndicator into ISUP Optional forward call indicator Closed user group call indicator**

	CUG_COM_ind	CUG_ind
VA_01	00	non-CUG call
VA_02	01	spare
VA_03	10	closed user group call, outgoing access allowed
VA_04	11	closed user group call, outgoing access not allowed

<b>TP number</b>	TP_407_003	<b>Reference</b>	7.5.10.1 Table 7.5.10.1.4
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23 AND PICS 6.3.10/2		
<b>Test Purpose name</b>	Communication is released if the PSTN/ISDN network does not support CUG, CUG without outgoing access		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing the Content-Type application/vnd.etsi.cug+xml and the 'cug' XML body the cugCommunicationIndicator set to '11', the communication is released with 403 (Forbidden) final response if the PSTN/ISDN network does not support CUG.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator cugInterlockBinaryCode cugCommunicationIndicator='11'		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 403 Forbidden ← ACK → <b>Apply post test routine</b>	<b>MGCF</b>	<b>ISUP</b>

<b>TP number</b>	TP_407_004	<b>Reference</b>	7.5.10.1 Table 7.5.10.1.4
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23 AND PICS 6.3.10/2		
<b>Test Purpose name</b>	Communication is treated as an ordinary call if the PSTN/ISDN network does not support CUG, CUG with outgoing access		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing the Content-Type application/vnd.etsi.cug+xml and the 'cug' XML body the cugCommunicationIndicator set to '10', the communication is treated as an ordinary call if the PSTN/ISDN network does not support CUG. A Closed user group interlock code is not present in the sent IAM.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator cugInterlockBinaryCode cugCommunicationIndicator='10'		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → 100 Trying ← <b>Apply post test routine</b>	<b>MGCF</b> → IAM	<b>ISUP</b>

<b>TP number</b>	TP_407_005	<b>Reference</b>	7.5.10.1 Table 7.5.10.1.4
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23 AND PICS 6.3.10/2		
<b>Test Purpose name</b>	Communication is treated as an ordinary call if the PSTN/ISDN network does not support CUG, Non-CUG call		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request containing the Content-Type application/vnd.etsi.cug+xml and the 'cug' XML body the cugCommunicationIndicator set to '00', the communication is treated as an ordinary call if the PSTN/ISDN network does not support CUG. A Closed user group interlock code is not present in the sent IAM.		
<b>ISUP Parameter values</b>			
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator cugInterlockBinaryCode cugCommunicationIndicator='00'		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF	ISUP → IAM ← <b>Apply post test routine</b>

<b>TP number</b>	TP_407_006	<b>Reference</b>	7.5.10.2 Table 7.5.10.2.2
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.1/2 AND PICS 6.3.2/23		
<b>Test Purpose name</b>	Mapping of the ISUP closed usergroup interlockcode to SIP XML CUG element		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a Closed user group interlock code parameter is present, an INVITE request is sent. The Network Identity indicator is mapped into the XML networkIndicator element, the Binary code is mapped into the XML cugInterlockBinaryCode.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator Closed user group interlock code <b>Network Identity = any proper value</b> <b>Binary code = any proper value</b>		
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug <b>networkIndicator = mapped from Network Identity</b> <b>cugInterlockBinaryCode = mapped from Binary code</b> cugCommunicationIndicator		
<b>Comments</b>			
<b>Message flows</b>	IAM	ISUP → MGCF → INVITE ← 100 Trying	Mg <b>Apply post test routine</b>

<b>TP number</b>	TP_407_007	<b>Reference</b>	7.5.10.2 Table 7.5.10.2.3
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23		
<b>Test Purpose name</b>	Mapping of the ISUP closed usergroup call indicator to SIP XML CUG element		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and an Optional forward call indicator is present set to <b>CUG_ind</b> , an INVITE request is sent. The XML cugCommunicationIndicator is mapped from the ISUP Closed user group call indicator set to <b>CUG_ind</b> as indicated in table 6.3.7-2.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator = <b>CUG_ind</b> Closed user group interlock code Network Identity Binary code		
<b>SIP Parameter values</b>	<b>INVITE:</b> Content-Type: application/vnd.etsi.cug+xml <?xml version="1.0" cug networkIndicator cugInterlockBinaryCode cugCommunicationIndicator= <b>CUG_COM_ind</b>		
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → INVITE ← 100 Trying <b>Apply post test routine</b>	<b>Mg</b>	

**Table 6.3.7-2: Mapping of ISUP Optional forward call indicator Closed user group call indicator into XML cugCommunicationIndicator**

	<b>CUG_ind</b>	<b>CUG_COM_ind</b>
VA_01	non-CUG call	00
VA_02	spare	01
VA_03	closed user group call, outgoing access allowed	10
VA_04	closed user group call, outgoing access not allowed	11

<b>TP number</b>	TP_407_008	<b>Reference</b>	7.5.10.2, 1.5.2.4.2/Q.735.1
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23 AND PICS 6.3.10/1		
<b>Test Purpose name</b>	Communication is released if the IMS network does not support CUG, CUG without outgoing access		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Optional forward call indicator Closed user group call indicator is set to closed user group call, outgoing access not allowed and the IMS network does not support the CUG supplementary service, a REL is sent and the Cause value is set to #29 Facility rejected the diagnostics indicating CUG without access.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator = CUG call, outgoing access not allowed Closed user group interlock code Network Identity Binary code <b>REL:</b> Cause indicator Cause value = 29 Diagnostics = 3		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → Mg REL ← RLC → <b>Apply post test routine</b>	<b>Mg</b>	

<b>TP number</b>	TP_407_009	<b>Reference</b>	7.5.10.2, 1.5.2.4.2/Q.735.1
<b>TSS reference</b>	IMS-SS/CUG/		
<b>Selection criteria</b>	PICS 6.3.2/23 AND PICS 6.3.10/1		
<b>Test Purpose name</b>	Communication is treated as an ordinary call if the IMS network does not support CUG, CUG with outgoing access		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and the Optional forward call indicator Closed user group call indicator is set to closed user group call, outgoing access allowed and the IMS network does not support the CUG supplementary service, the communication is treated as an ordinary call.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Optional forward call indicator Closed user group call indicator = C UG call, outgoing access allowed Closed user group interlock code Network Identity Binary code		
<b>SIP Parameter values</b>			
<b>Comments</b>			
<b>Message flows</b>	<b>ISUP</b> IAM → MGCF → INVITE ← 100 Trying	<b>MGCF</b>	<b>Mg</b>
	<b>Apply post test routine</b>		

### 6.3.8 CCBS/CCNR

<b>TP number</b>	TP_408_001	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.1
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Mapping of CCNR possible indication in the ACM		
<b>Test Purpose</b>	Ensure that on receipt of an ACM and a CCNR possible indicator is present set to 'CCNR possible' a 180 Ringing is sent. A Call-Info header is present, the URI is derived from the Called party number, the purpose parameter is set to 'call-completion', the m parameter is set to 'NR'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Number digits <b>ACM:</b> Called party status Subscriber free CCNR possible indicator CCNR possible		
<b>SIP Parameter values</b>	180: Call-Info: <sip:Called party number digits>;purpose=call-completion;m=NR		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> INVITE → MGCF → ISUP ← 180 Ringing ← ACM	<b>MGCF</b>	<b>ISUP</b>
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_002	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.1									
<b>TSS reference</b>	IMS-SS/CC/											
<b>Selection criteria</b>	PICS 6.3.2/24											
<b>Test Purpose name</b>	Mapping of CCNR possible indication in the CPG											
<b>Test Purpose</b>	Ensure that on receipt of a CPG Event indicator set to 'Alerting' and a CCNR possible indicator is present set to 'CCNR possible' a 180 Ringing is sent. A Call-Info header is present, the URI is derived from the Called party number, the purpose parameter is set to 'call-completion', the m parameter is set to 'NR'.											
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Number digits <b>ACM:</b> Called party status No indication <b>CPG:</b> Event indicator Alerting CCNR possible indicator CCNR possible											
<b>SIP Parameter values</b>	180: Call-Info: <sip:Called party number digits>;purpose=call-completion;m=NR											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: center;"><b>Mg</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM ← ACM(no indication) ← CPG(Alerting)</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM ← ACM(no indication) ← CPG(Alerting)	180 Ringing	←	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>										
INVITE	→	→ IAM ← ACM(no indication) ← CPG(Alerting)										
180 Ringing	←											

<b>TP number</b>	TP_408_003	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.1												
<b>TSS reference</b>	IMS-SS/CC/														
<b>Selection criteria</b>	PICS 6.3.2/24														
<b>Test Purpose name</b>	Mapping of CCBS possible indication in the REL														
<b>Test Purpose</b>	Ensure that on receipt of an REL message Cause #17 and a CCBS possible indicator in the Diagnostic field is set to 'CCBS possible' a 486 Busy here is sent. A Call-Info header is present, the URI is derived from the Called party number, the purpose parameter is set to 'call-completion', the m parameter is set to 'BS'.														
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Number digits <b>REL:</b> Cause indicator Cause = 17 Diagnostic CCBS possible														
<b>SIP Parameter values</b>	486: Call-Info: <sip:Called party number digits>;purpose=call-completion;m=BS														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: center;"><b>Mg</b></th> <th style="text-align: center;"><b>MGCF</b></th> <th style="text-align: center;"><b>ISUP</b></th> </tr> </thead> <tbody> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM ← REL ← RLC</td> </tr> <tr> <td>486 Busy here</td> <td>←</td> <td></td> </tr> <tr> <td>ACK</td> <td>→</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>			<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>	INVITE	→	→ IAM ← REL ← RLC	486 Busy here	←		ACK	→	
<b>Mg</b>	<b>MGCF</b>	<b>ISUP</b>													
INVITE	→	→ IAM ← REL ← RLC													
486 Busy here	←														
ACK	→														

<b>TP number</b>	TP_408_004	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.1
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Mapping of m parameter in the INVITE request URI into CCSS parameter in the IAM		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and a "m" parameter set to 'BS' or 'NR' an IAM is sent and the CCSS call indicator parameter is present and the value is set to 'CCSS call'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> CCSS call indicator CCSS call		
<b>SIP Parameter values</b>	<b>INVITE:</b> <Request URI>;m=NR or ;m=BS		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

<b>TP number</b>	TP_408_005	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.1
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Mapping of Call-Info header in the INVITE into CCSS parameter in the IAM		
<b>Test Purpose</b>	Ensure that on receipt of an INVITE request and a Call-Info header is present the purpose parameter is set to 'call-completion' and the m parameter set to 'BS' or 'NR' an IAM is sent and the CCSS call indicator parameter is present and the value is set to 'CCSS call'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> CCSS call indicator CCSS call		
<b>SIP Parameter values</b>	<b>INVITE:</b> <Request URI> Call-Info: <sip:Called party number digits>;purpose=call-completion; m=BS or NR		
<b>Comments</b>			
<b>Message flows</b>	Mg INVITE 100 Trying	MGCF → ← <b>Apply post test routine</b>	ISUP IAM

<b>TP number</b>	TP_408_006	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Invocation of CCBS in the I-MGCF m parameter in Start line		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE request the Request URI contains the m parameter set to 'BS' and Event header field contains the value 'call-completion', a SCCP UDT or XUDT is sent containing a TC-Begin REQUEST invoke Data field. The TC-Begin REQUEST invoke CalledPartyNumber is derived from the To header, the CallingPartyNumber is derived from the From header and the RetainSupported is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC Begin CCBS REQUEST invoke CalledPartyNumber derived from the <b>To</b> header CallingPartyNumber derived from the <b>P-Asserted-Identity</b> header RetainSupported TRUE		
<b>SIP Parameter values</b>	<b>SUBSCRIBE:</b> <Request URI>, m=BS Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF → ← <b>Apply post test routine</b>	SCCP (X)UDT (TC-Begin)

<b>TP number</b>	TP_408_007	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Invocation of CCBS in the I-MGCF m parameter in Call-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE and the Event header field contains the value 'call-completion' and a Call-Info header with purpose parameter set to call-completion and m parameter set to 'BS', a SCCP UDT or XUDT is sent containing a TC-Begin REQUEST invoke Data field. The TC-Begin REQUEST invoke CalledPartyNumber is derived from the To header, the CallingPartyNumber is derived from the From header and the RetainSupported is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC Begin CCBS REQUEST invoke CalledPartyNumber derived from the <b>To</b> header CallingPartyNumber derived from the <b>P-Asserted-Identity</b> header RetainSupported TRUE		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI> Event: call-completion Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=BS		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF → ← Apply post test routine	SCCP → (X)UDT (TC-Begin)

<b>TP number</b>	TP_408_008	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Invocation of CCNR in the I-MGCF m parameter in Start line		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE request the Request URI contains the m parameter set to 'NR' and Event header field contains the value 'call-completion', a SCCP UDT or XUDT is sent containing a TC-Begin REQUEST invoke Data field. The TC-Begin REQUEST invoke CalledPartyNumber is derived from the To header, the CallingPartyNumber is derived from the From header and the RetainSupported is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC Begin CCNR REQUEST invoke CalledPartyNumber derived from the <b>To</b> header CallingPartyNumber derived from the <b>P-Asserted-Identity</b> header RetainSupported TRUE		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF → ← Apply post test routine	SCCP → (X)UDT (TC-Begin)

<b>TP number</b>	TP_408_009	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Invocation of CCNR in the I-MGCF m parameter in Call-Info header		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE and the Event header field contains the value 'call-completion' and a Call-Info header with purpose parameter set to call-completion and m parameter set to 'NR', a SCCP UDT or XUDT is sent containing a TC-Begin REQUEST invoke Data field. The TC-Begin REQUEST invoke CalledPartyNumber is derived from the To header, the CallingPartyNumber is derived from the From header and the RetainSupported is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC Begin CCNR REQUEST invoke CalledPartyNumber derived from the <b>To</b> header CallingPartyNumber derived from the <b>P-Asserted-Identity</b> header RetainSupported TRUE		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI> Event: call-completion Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=NR		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF → ← Apply post test routine	SCCP → (X)UDT (TC-Begin)

<b>TP number</b>	TP_408_010	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	PUBLISH with m=BS parameter in the Request line and PIDF basic status "closed" is interworked into CCBS SUSPEND		
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and a "m" parameter is present in the Request line is set to 'BS' the Event header field contains the value 'presence', and a PIDF XML MIME body is present the presence status set to 'closed', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS SUSPEND Data field.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS SUSPEND		
<b>SIP Parameter values</b>	PUBLISH: <Request URI>; m=BS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>closed</basic>		
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.		
<b>Message flows</b>	Mg Invoke a successful CCBS request and remote user is now free PUBLISH 200 OK (PUBLISH)	MGCF → ← Apply post test routine	SCCP → (X)UDT (TC-Cont)

<b>TP number</b>	TP_408_011	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2																				
<b>TSS reference</b>	IMS-SS/CC/																						
<b>Selection criteria</b>	PICS 6.3.2/24																						
<b>Test Purpose name</b>	PUBLISH with m=BS parameter in Call-Info header and PIDF basic status "closed" is interworked into CCBS SUSPEND																						
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request the Event header field contains the value 'presence' and a Call-Info header with purpose parameter set to call-completion and m parameter set to 'BS' and a PIDF XML MIME body is present the presence status set to 'closed', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS SUSPEND Data field.																						
<b>TCAP Parameter values</b>	TC-Cont: CCBS SUSPEND																						
<b>SIP Parameter values</b>	PUBLISH: <Request URI> Event: presence Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=BS Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>closed</basic>																						
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.																						
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td></td> <td><b>Mg</b></td> <td><b>MGCF</b></td> <td><b>SCCP</b></td> </tr> <tr> <td colspan="4"><b>Invoke a successful CCBS request and remote user is now free</b></td></tr> <tr> <td>PUBLISH</td> <td>→</td> <td></td> <td>→ (X)UDT (TC-Cont)</td> </tr> <tr> <td>200 OK (PUBLISH)</td> <td>←</td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>Apply post test routine</b></td></tr> </table>				<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>	<b>Invoke a successful CCBS request and remote user is now free</b>				PUBLISH	→		→ (X)UDT (TC-Cont)	200 OK (PUBLISH)	←			<b>Apply post test routine</b>			
	<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>																				
<b>Invoke a successful CCBS request and remote user is now free</b>																							
PUBLISH	→		→ (X)UDT (TC-Cont)																				
200 OK (PUBLISH)	←																						
<b>Apply post test routine</b>																							

<b>TP number</b>	TP_408_012	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2																				
<b>TSS reference</b>	IMS-SS/CC/																						
<b>Selection criteria</b>	PICS 6.3.2/24																						
<b>Test Purpose name</b>	PUBLISH with m=BS parameter in the Request line and PIDF basic status "open" is interworked into CCBS RESUME																						
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and a "m" parameter is present in the Request line is set to 'BS' the Event header field contains the value 'presence' and a PIDF XML MIME body is present the presence status set to 'open', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS RESUME Data field.																						
<b>TCAP Parameter values</b>	TC-Cont: CCBS RESUME																						
<b>SIP Parameter values</b>	PUBLISH: <Request URI>; m=BS Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>open</basic>																						
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	<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>																				
<b>Successful CCBS request and remote user is free originating user suspended</b>																							
PUBLISH	→		→ (X)UDT (TC-Cont)																				
200 OK (PUBLISH)	←																						
<b>Apply post test routine</b>																							

<b>TP number</b>	TP_408_013	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2															
<b>TSS reference</b>	IMS-SS/CC/																	
<b>Selection criteria</b>	PICS 6.3.2/24																	
<b>Test Purpose name</b>	PUBLISH with m=BS parameter in Call-Info header and PIDF basic status "open" is interworked into CCBS RESUME																	
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and the Event header field contains the value 'presence', a Call-Info header with purpose parameter set to call-completion and m parameter set to 'BS' and a PIDF XML MIME body is present the presence status set to 'open', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS RESUME Data field.																	
<b>TCAP Parameter values</b>	TC-Cont: CCBS RESUME																	
<b>SIP Parameter values</b>	PUBLISH: <Request URI> Event: presence Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=BS Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>open</basic>																	
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<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td><b>Mg</b></td> <td><b>MGCF</b></td> <td><b>SCCP</b></td> </tr> <tr> <td colspan="3"><b>Successful CCBS request and remote user is free originating user suspended</b></td> </tr> <tr> <td>PUBLISH</td> <td>→</td> <td>→ (X)UDT (TC-Cont)</td> </tr> <tr> <td>200 OK (PUBLISH)</td> <td>←</td> <td></td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>			<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>	<b>Successful CCBS request and remote user is free originating user suspended</b>			PUBLISH	→	→ (X)UDT (TC-Cont)	200 OK (PUBLISH)	←		<b>Apply post test routine</b>		
<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>																
<b>Successful CCBS request and remote user is free originating user suspended</b>																		
PUBLISH	→	→ (X)UDT (TC-Cont)																
200 OK (PUBLISH)	←																	
<b>Apply post test routine</b>																		

<b>TP number</b>	TP_408_014	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2															
<b>TSS reference</b>	IMS-SS/CC/																	
<b>Selection criteria</b>	PICS 6.3.2/24																	
<b>Test Purpose name</b>	PUBLISH with m=NR parameter in the Request line and PIDF basic status "closed" is interworked into CCBS SUSPEND																	
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and a "m" parameter is present in the Request line is set to 'NR' the Event header field contains the value 'presence' and a PIDF XML MIME body is present the presence status set to 'closed', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS SUSPEND Data field.																	
<b>TCAP Parameter values</b>	TC-Cont: CCBS SUSPEND																	
<b>SIP Parameter values</b>	PUBLISH: <Request URI>; m=NR Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>closed</basic>																	
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<b>Mg</b>	<b>MGCF</b>	<b>SCCP</b>																
<b>Invoke a successful CCNR request and remote user is now free</b>																		
PUBLISH	→	→ (X)UDT (TC-Cont)																
200 OK (PUBLISH)	←																	
<b>Apply post test routine</b>																		

<b>TP number</b>	TP_408_015	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2												
<b>TSS reference</b>	IMS-SS/CC/														
<b>Selection criteria</b>	PICS 6.3.2/24														
<b>Test Purpose name</b>	PUBLISH with m=NR parameter in Call-Info header and PIDF basic status "closed" is interworked into CCBS SUSPEND														
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request the Event header field contains the value 'presence', a Call-Info header with purpose parameter set to call-completion and m parameter set to 'NR' and a PIDF XML MIME body is present the presence status set to 'closed', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS SUSPEND Data field.														
<b>TCAP Parameter values</b>	TC-Cont: CCBS SUSPEND														
<b>SIP Parameter values</b>	PUBLISH: <Request URI> Event: presence Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=NR Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>closed</basic>														
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Mg	MGCF	SCCP													
<b>Invoke a successful CCNR request and remote user is now free</b>															
PUBLISH	→	(X)UDT (TC-Cont)													
200 OK (PUBLISH)	←	Apply post test routine													

<b>TP number</b>	TP_408_016	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2												
<b>TSS reference</b>	IMS-SS/CC/														
<b>Selection criteria</b>	PICS 6.3.2/24														
<b>Test Purpose name</b>	PUBLISH with m=NR parameter in the Request line and PIDF basic status "open" is interworked into CCBS RESUME														
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and a "m" parameter is present in the Request line is set to 'NR' the Event header field contains the value 'presence' and a PIDF XML MIME body is present the presence status set to 'open', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS RESUME Data field.														
<b>TCAP Parameter values</b>	TC-Cont: CCBS RESUME														
<b>SIP Parameter values</b>	PUBLISH: <Request URI>; m=NR Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>open</basic>														
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.														
<b>Message flows</b>	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Mg</td> <td style="text-align: center;">MGCF</td> <td style="text-align: center;">SCCP</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Successful CCNR request and remote user is free originating user suspended</b></td> </tr> <tr> <td>PUBLISH</td> <td style="text-align: center;">→</td> <td style="text-align: center;">(X)UDT (TC-Cont)</td> </tr> <tr> <td>200 OK (PUBLISH)</td> <td style="text-align: center;">←</td> <td style="text-align: center;">Apply post test routine</td> </tr> </table>			Mg	MGCF	SCCP	<b>Successful CCNR request and remote user is free originating user suspended</b>			PUBLISH	→	(X)UDT (TC-Cont)	200 OK (PUBLISH)	←	Apply post test routine
Mg	MGCF	SCCP													
<b>Successful CCNR request and remote user is free originating user suspended</b>															
PUBLISH	→	(X)UDT (TC-Cont)													
200 OK (PUBLISH)	←	Apply post test routine													

<b>TP number</b>	TP_408_017	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	PUBLISH with m=NR parameter in Call-Info header and PIDF basic status "open" is interworked into CCBS RESUME		
<b>Test Purpose</b>	Ensure that on receipt of a PUBLISH request and Event header field contains the value 'presence' a Call-Info header with purpose parameter set to call-completion and m parameter set to 'NR' and a PIDF XML MIME body is present the presence status set to 'open', a SCCP UDT or XUDT is sent containing a TC-Cont CCBS RESUME Data field.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS RESUME		
<b>SIP Parameter values</b>	PUBLISH: <Request URI> Event: presence Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=NR Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>open</basic>		
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.		
<b>Message flows</b>	<b>Mg</b> <b>MGCF</b> <b>SCCP</b> <b>Successful CCNR request and remote user is free originating user suspended</b> PUBLISH                   →                   (X)UDT (TC-Cont) 200 OK (PUBLISH)        ←                   Apply post test routine		

<b>TP number</b>	TP_408_018	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	SUBSCRIBE with m=BS and Expires header set to '0' is interworked into CCBS CANCEL		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE request and a "m" parameter is present in the Request line is set to 'BS' <b>or</b> a Call-Info header with purpose parameter set to call-completion and m parameter set to 'BS' and Event header field contains the value 'call-completion' and an Expires header set to '0', a SCCP UDT or XUDT is sent containing a TC-End CCBS CANCEL Data field.		
<b>TCAP Parameter values</b>	TC-End: CCBS CANCEL		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>; m=BS Event:call-completion Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=BS Expires: 0		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> <b>MGCF</b> <b>SCCP</b> <b>A CCBS is successfully invoked</b> SUBSCRIBE                   →                   (X)UDT (TC-End) 202 Accepted              ←                   Apply post test routine		

<b>TP number</b>	TP_408_019	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	SUBSCRIBE with m=NR and Expires header set to '0' is interworked into CCBS CANCEL		
<b>Test Purpose</b>	Ensure that on receipt of a SUBSCRIBE request and a "m" parameter is present in the Request line is set to 'NR' <b>or</b> a Call-Info header with purpose parameter set to call-completion and m parameter set to 'BS' and Event header field contains the value 'call-completion' and an Expires header set to '0', a SCCP UDT or XUDT is sent containing a TC-End CCBS CANCEL Data field.		
<b>TCAP Parameter values</b>	TC-End: CCBS CANCEL		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>; m=NR Event:call-completion Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=NR Expires: 0		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF A CCNR is successfully invoked → ←	SCCP (X)UDT (TC-End)  Apply post test routine

<b>TP number</b>	TP_408_020	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-Cont CCBS REQUEST (return result) is interworked into NOTIFY cc-service-retention present		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-Cont CCBS REQUEST (return result) Data field and the RetainSupported element is set to TRUE, a NOTIFY request is sent and the cc-state body is set to 'queued' the cc-service-retention body is set to 'true'.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS REQUEST (return result) RetainSupported=TRUE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true		
<b>Comments</b>			
<b>Message flows</b>	Mg SUBSCRIBE 202 Accepted	MGCF → ←	SCCP (X)UDT (TC-Begin)
	NOTIFY 200 OK (NOTIFY)	← →	← (X)UDT (TC-Cont)
		<b>Apply post test routine</b>	

<b>TP number</b>	TP_408_021	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-Cont CCBS REQUEST (return result) is interworked into NOTIFY cc-service-retention not present		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-Cont CCBS REQUEST (return result) Data field and the RetainSupported element is set to FALSE, a NOTIFY request is sent and the cc-state body is set to 'queued' a cc-service-retention body is not present.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS REQUEST (return result) RetainSupported=FALSE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> SUBSCRIBE → 202 Accepted ←	<b>MGCF</b> → (X)UDT (TC-Begin)	
	NOTIFY ← 200 OK (NOTIFY) →		← (X)UDT (TC-Cont)
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_022	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCBS Return error TC-End ShortTermDenial received, 480 Temporarily Unavailable response to SUBSCRIBE		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-End CCBS REQUEST (Return error) component in the Data field set to 'ShortTermDenial', a 480 Temporarily Unavailable final response to the SUBSCRIBE CCBS request is sent.		
<b>TCAP Parameter values</b>	TC Begin CCBS REQUEST invoke TC-End CCBS REQUEST (Return error) ShortTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=BS Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> SUBSCRIBE → 480 Temporarily Unavailable ←	<b>MGCF</b> → (X)UDT (TC-Begin) ← (X)UDT (TC-End)	
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_023	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCBS Return error TC-End LongTermDenial received, 403 Forbidden unavailable response to SUBSCRIBE		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-End CCBS REQUEST (Return error) component in the Data field set to 'LongTermDenial', a 403 Forbidden final response to the SUBSCRIBE CCBS request is sent.		
<b>TCAP Parameter values</b>	TC Begin CCBS REQUEST invoke TC-End CCBS REQUEST (Return error) LongTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=BS Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> SUBSCRIBE 403 Forbidden	<b>MGCF</b> → ←	<b>SCCP</b> → (X)UDT (TC-Begin) ← (X)UDT (TC-End)
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_024	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCNR Return error TC-End ShortTermDenial received, 480 Temporarily Unavailable response to SUBSCRIBE		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-End CCNR REQUEST (Return error) component in the Data field set to 'ShortTermDenial', a 480 Temporarily Unavailable final response to the SUBSCRIBE CCNR request is sent.		
<b>TCAP Parameter values</b>	TC Begin CCNR REQUEST invoke TC-End CCNR REQUEST (Return error) ShortTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> SUBSCRIBE 480 Temporarily Unavailable	<b>MGCF</b> → ←	<b>SCCP</b> → (X)UDT (TC-Begin) ← (X)UDT (TC-End)
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_025	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCNR Return error TC-End LongTermDenial received, 403 Forbidden unavailable response to SUBSCRIBE		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-End CCNR REQUEST (Return error) component in the Data field set to 'LongTermDenial', a 403 Forbidden final response to the SUBSCRIBE CCNR request is sent.		
<b>TCAP Parameter values</b>	TC Begin CCNR REQUEST invoke TC-End CCNR REQUEST (Return error) LongTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>Mg</b> SUBSCRIBE 403 Forbidden	<b>MGCF</b> → ←	<b>SCCP</b> → (X)UDT (TC-Begin) ← (X)UDT (TC-End)
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_026	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-End CCBS CANCEL received after CCBS was successfully invoked		
<b>Test Purpose</b>	Ensure that on receipt of an SCCP UDT or XUDT containing a TC-End CCBS CANCEL or TC-Abort after a CCBS was successfully invoked, a NOTIFY request is sent containing a "m" parameter set to 'BS' in the Request line and a Subscription-State header set to 'terminated' and the subexp-params <b>reason</b> set to 'noresource'.		
<b>TCAP Parameter values</b>	TC-End CCBS CANCEL or TC-Abort		
<b>SIP Parameter values</b>	NOTIFY : <Request URI> Event:call-completion Subscription-State: terminated; reason=noresource		
<b>Comments</b>			
<b>Message flows</b>	Mg	MGCF	SCCP
	CCBS request successfully invoked		
	NOTIFY	← →	(X)UDT (TC-End/ TC-Abort)
	200 OK NOTIFY	Apply post test routine	

<b>TP number</b>	TP_408_027	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-End CCBS CANCEL received after CCNR was successfully invoked		
<b>Test Purpose</b>	Ensure that on receipt of an SCCP UDT or XUDT containing a TC-End CCBS CANCEL or TC-Abort after a CCNR was successfully invoked, a NOTIFY request is sent containing a "m" parameter set to 'NR' in the Request line and a Subscription-State header set to 'terminated' and the subexp-params <b>reason</b> set to 'noresource'.		
<b>TCAP Parameter values</b>	TC-End CCBS CANCEL or TC-Abort		
<b>SIP Parameter values</b>	NOTIFY : <Request URI> Event:call-completion Subscription-State: terminated; reason=noresource		
<b>Comments</b>			
<b>Message flows</b>	Mg	MGCF	SCCP
	CCNR request successfully invoked		
	NOTIFY	← →	(X)UDT (TC-End/ TC-Abort)
	200 OK NOTIFY	Apply post test routine	

<b>TP number</b>	TP_408_028	<b>Reference</b>	7.5.11.1, Table 7.5.11.1.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Interworking of Remote user free indication at the I-MGCF		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-Cont REMOTE USER FREE invoke component in the Data field, a NOTIFY request is sent and a cc-state body is present set to 'ready'.		
<b>TCAP Parameter values</b>	TC-Cont CCBS REMOTE USER FREE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: ready		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>Mg</b>                   <b>MGCF</b>                   <b>SCCP</b></p> <p style="text-align: center;"><b>CCNR request successfully invoked</b></p> <p style="text-align: center;">NOTIFY                    ←                    ← (X)UDT (TC-Cont)            200 OK (NOTIFY)      →                    →</p> <p style="text-align: center;">Apply post test routine</p>		

<b>TP number</b>	TP_408_029	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.1
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Mapping of CCNR possible indication in a 180 into the CCNR possible indicator in the ACM		
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing provisional response and a Call-Info header is present set to the URI of the terminating user and a purpose parameter set to 'call-completion' and m parameter set to 'NR', an ACM is sent and a CCNR possible indicator Parameter is present set to 'CCNR possible'.		
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Number digits <b>ACM:</b> Called party status Subscriber free CCNR possible indicator CCNR possible		
<b>SIP Parameter values</b>	180: Call-Info: <sip:Called party number digits>;purpose=call-completion		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"><b>ISUP</b>                   <b>MGCF</b>                   <b>Mg</b></p> <p style="text-align: center;">IAM                    →                    → INVITE            ACM                    ←                    ← 180 Ringing</p> <p style="text-align: center;">Apply post test routine</p>		

<b>TP number</b>	TP_408_030	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.1															
<b>TSS reference</b>	IMS-SS/CC/																	
<b>Selection criteria</b>	PICS 6.3.2/24																	
<b>Test Purpose name</b>	Mapping of CCNR possible indication in a 180 into the CCNR possible indicator in the CPG																	
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing provisional response and a Call-Info header is present set to the URI of the terminating user and a purpose parameter set to 'call-completion' and m parameter set to 'NR', a CPG is sent if an ACM was sent before and a CCNR possible indicator Parameter is present set to 'CCNR possible'.																	
<b>ISUP Parameter values</b>	<b>IAM:</b> Called party number Number digits <b>ACM:</b> Called party status No indication <b>CPG:</b> Event indication Alerting CCNR possible indicator CCNR possible																	
<b>SIP Parameter values</b>	180: Call-Info: <sip:Called party number digits>;purpose=call-completion																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→ Start Ti/w2</td> <td></td> </tr> <tr> <td>ACM(no indication)</td> <td>← Timeout Ti/w2</td> <td>→ INVITE</td> </tr> <tr> <td>CPG(Alerting)</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><b>Apply post test routine</b></td> </tr> </tbody> </table>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→ Start Ti/w2		ACM(no indication)	← Timeout Ti/w2	→ INVITE	CPG(Alerting)	←	← 180 Ringing		<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→ Start Ti/w2																	
ACM(no indication)	← Timeout Ti/w2	→ INVITE																
CPG(Alerting)	←	← 180 Ringing																
	<b>Apply post test routine</b>																	

<b>TP number</b>	TP_408_031	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.1															
<b>TSS reference</b>	IMS-SS/CC/																	
<b>Selection criteria</b>	PICS 6.3.2/24																	
<b>Test Purpose name</b>	486 with Call-Info header is mapped into REL cause 17 and CCBS possible																	
<b>Test Purpose</b>	Ensure that on receipt of a 486 Busy Here and a Call-Info header is present set to the URI of the terminating user and a purpose parameter set to 'call-completion' and m parameter set to 'BS', a REL message is sent and the Cause value is set to 17 or 34 the Diagnostics is set to 'CCBS possible'.																	
<b>ISUP Parameter values</b>	<b>REL:</b> Cause indicator Cause = 17 or 34 Diagnostics = CCBS possible																	
<b>SIP Parameter values</b>	486: Call-Info: <sip:Called party number digits>;purpose=call-completion																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>REL</td> <td>←</td> <td>← 486 Busy Here</td> </tr> <tr> <td>RLC</td> <td>→</td> <td>→ ACK</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;"><b>Apply post test routine</b></td> </tr> </tbody> </table>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	REL	←	← 486 Busy Here	RLC	→	→ ACK		<b>Apply post test routine</b>	
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																
REL	←	← 486 Busy Here																
RLC	→	→ ACK																
	<b>Apply post test routine</b>																	

<b>TP number</b>	TP_408_032	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.1
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCSS call indicator in IAM is mapped into the m parameter in the Request line in the sent INVITE		
<b>Test Purpose</b>	Ensure that on receipt of an IAM and a CCSS call indicator parameter is present set to 'CCSS call', an INVITE request is sent and the Request line contains a "m" parameter set to 'NR' or 'BS'.		
<b>ISUP Parameter values</b>	IAM: CCSS call indicator CCSS call		
<b>SIP Parameter values</b>	INVITE: <Request URI>;m=NR <b>or</b> ;m=BS Call-Info: <sip:Called party number digits>;purpose=call-completion; m=BS <b>or</b> NR		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>ISUP</b>                    <b>MGCF</b>                    <b>Mg</b>          IAM                         →                         → INVITE                                    ←                         ← 100 Trying  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_408_033	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-Begin CCBS REQUEST (invoke) is mapped into SUBSCRIBE request invokes CCBS		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-Begin CCBS REQUEST (invoke) component, a SUBSCRIBE request is sent and the From and the P-Asserted-Identity header are derived from the CCBS REQUEST CallingPartyNumber the To header is derived from the CCBS REQUEST CalledPartyNumber the Event header field is set to 'call-completion' the Request line contains the m parameter set to 'BS'.		
<b>TCAP Parameter values</b>	TC-Begin CCBS REQUEST invoke CalledPartyNumber CallingPartyNumber retainSupported TRUE		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=BS <b>From:</b> <derived from the CCBS REQUEST CallingPartyNumber > <b>To:</b> <derived from the CCBS REQUEST CalledPartyNumber > <b>P-Asserted-Identity:</b> <derived from the CCBS REQUEST CallingPartyNumber > Event: call-completion Expires: <any value>		
<b>Comments</b>			
<b>Message flows</b>	<p style="text-align: center;"> <b>SCCP</b>                    <b>MGCF</b>                    <b>Mg</b>          (X)UDT(TC-Begin)         →                         → SUBSCRIBE                                    ←                         ← 202 Accepted  <b>Apply post test routine</b> </p>		

<b>TP number</b>	TP_408_034	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-Begin CCNR REQUEST (invoke) is mapped into SUBSCRIBE request invokes CCNR		
<b>Test Purpose</b>	Ensure that on receipt of a SCCP UDT or XUDT containing a TC-Begin CCNR REQUEST (invoke) component, a SUBSCRIBE request is sent and the From and the P-Asserted-Identity header are derived from the CCNR REQUEST CallingPartyNumber the To header is derived from the CCNR REQUEST CalledPartyNumber the Event header field is set to 'call-completion' the Request line contains the m parameter set to 'NR'.		
<b>TCAP Parameter values</b>	TC-Begin CCNR REQUEST invoke CalledPartyNumber CallingPartyNumber retainSupported TRUE		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR <b>From:</b> <derived from the CCNR REQUEST CallingPartyNumber> <b>To:</b> <derived from the CCNR REQUEST CalledPartyNumber> <b>P-Asserted-Identity:</b> <derived from the CCBS REQUEST CallingPartyNumber> Event: call-completion      Expires: <any value>		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT(TC-Begin)	MGCF	Mg → SUBSCRIBE ← 202 Accepted <b>Apply post test routine</b>

<b>TP number</b>	TP_408_035	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.2
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	TC-Cont CCBS SUSPEND is interworked into PUBLISH with m=BS and PIDF basic status "closed"		
<b>Test Purpose</b>	CCBS or CCNR is invoked and the remote user is free. Ensure that on receipt of a TC-Cont CCBS SUSPEND invoke component, a PUBLISH request is sent containing the m parameter in the Request URI set to 'BS' or 'NR' the Event header set to 'presence' and a PIDF XML MIME body is present the presence status set to 'closed'.		
<b>TCAP Parameter values</b>	TC-Cont CCBS SUSPEND		
<b>SIP Parameter values</b>	PUBLISH: <Request URI>; m=BS <b>or</b> ; m=NR Event: presence Content-Type: application/pidaf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>closed</basic>		
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.		
<b>Message flows</b>	SCCP (X)UDT(TC-Cont)	MGCF	Mg → PUBLISH ← 200 OK (PUBLISH) <b>Apply post test routine</b>

<b>TP number</b>	TP_408_036	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.2												
<b>TSS reference</b>	IMS-SS/CC/														
<b>Selection criteria</b>	PICS 6.3.2/24														
<b>Test Purpose name</b>	TC-Cont CCBS RESUME is interworked into PUBLISH with m=NR and PIDF basic status "open"														
<b>Test Purpose</b>	CCBS or CCNR is invoked and the remote user is free the originating user is suspended. Ensure that on receipt of a TC-Cont CCBS SUSPEND invoke component, a PUBLISH request is sent containing the m parameter in the Request URI set to 'BS' or 'NR' the Event header set to 'presence' and a PIDF XML MIME body is present the presence status set to 'open'.														
<b>TCAP Parameter values</b>	TC-Cont CCBS RESUME														
<b>SIP Parameter values</b>	PUBLISH: <Request URI>;m='BS' <b>or</b> ;m=NR Event: presence Content-Type: application/pidf+xml <?xml version="1.0" encoding="UTF-8"?> <presence <status> <basic>open</basic>														
<b>Comments</b>	Note the XML semantic is schematically the alias is not considered.														
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">SCCP</td> <td style="width: 33%;">MGCF</td> <td style="width: 33%;">Mg</td> </tr> <tr> <td colspan="3"><b>Successful CCBS/CCNR request and originating user suspended</b></td> </tr> <tr> <td>(X)UDT(TC-Cont)</td> <td>→</td> <td>→ PUBLISH ← 200 OK (PUBLISH)</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>			SCCP	MGCF	Mg	<b>Successful CCBS/CCNR request and originating user suspended</b>			(X)UDT(TC-Cont)	→	→ PUBLISH ← 200 OK (PUBLISH)	<b>Apply post test routine</b>		
SCCP	MGCF	Mg													
<b>Successful CCBS/CCNR request and originating user suspended</b>															
(X)UDT(TC-Cont)	→	→ PUBLISH ← 200 OK (PUBLISH)													
<b>Apply post test routine</b>															

<b>TP number</b>	TP_408_037	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.2												
<b>TSS reference</b>	IMS-SS/CC/														
<b>Selection criteria</b>	PICS 6.3.2/24														
<b>Test Purpose name</b>	TC-End CCBS CANCEL is interworked into SUBSCRIBE with m=BS or NR and Expires header set to '0'														
<b>Test Purpose</b>	A CCBS or CCNR is successfully invoked. Ensure that on receipt of a SCCP UDT or XUDT containing a TC-End CCBS CANCEL or TC-Abort Data field, a SUBSCRIBE request is sent and a "m" parameter is present in the Request URI set to 'BS' or 'NR' the Event header field is set to 'call-completion' and the Expires header is set to '0'.														
<b>TCAP Parameter values</b>	TC-End: CCBS CANCEL or TC-Abort														
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>; m=BS or ;m='NR' Event:call-completion Call-Info: <sip:Calling party number digits>;purpose=call-completion; m=BS or m=NR Expires: 0														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">SCCP</td> <td style="width: 33%;">MGCF</td> <td style="width: 33%;">Mg</td> </tr> <tr> <td colspan="3"><b>A CCBS or CCNR is successfully invoked</b></td> </tr> <tr> <td>(X)UDT (TC-End/ TC-Abort)</td> <td>→</td> <td>→ SUBSCRIBE ← 202 Accepted</td> </tr> <tr> <td colspan="3"><b>Apply post test routine</b></td> </tr> </table>			SCCP	MGCF	Mg	<b>A CCBS or CCNR is successfully invoked</b>			(X)UDT (TC-End/ TC-Abort)	→	→ SUBSCRIBE ← 202 Accepted	<b>Apply post test routine</b>		
SCCP	MGCF	Mg													
<b>A CCBS or CCNR is successfully invoked</b>															
(X)UDT (TC-End/ TC-Abort)	→	→ SUBSCRIBE ← 202 Accepted													
<b>Apply post test routine</b>															

<b>TP number</b>	TP_408_038	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	A NOTIFY cc-state 'queued' and cc-service-retention 'true' is mapped into a TC-Cont CCBS REQUEST (return result) retain supported		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Event header field is set to 'call-completion' the cc-state body is set to 'queued' and the cc-service-retention body is set to 'true', a SCCP UDT or XUDT TC-Cont is sent and the CCBS REQUEST (return result) component is present the RetainSupported element is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS REQUEST (return result) RetainSupported = TRUE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Cont)	MGCF CCBS request already invoked ← NOTIFY → 200 OK (NOTIFY) Apply post test routine	Mg

<b>TP number</b>	TP_408_039	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	A NOTIFY cc-state 'queued' and no cc-service-retention body present is mapped into a TC-Cont CCBS REQUEST (return result) retain not supported		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Event header field is set to 'call-completion' the cc-state body is set to 'queued' and the cc-service-retention body is not present, a SCCP UDT or XUDT TC-Cont is sent and the CCBS REQUEST (return result) component is present the RetainSupported element is set to 'FALSE'.		
<b>TCAP Parameter values</b>	TC-Cont: CCBS REQUEST (return result) RetainSupported = FALSE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Cont)	MGCF CCBS request already invoked ← NOTIFY → 200 OK (NOTIFY) Apply post test routine	Mg

<b>TP number</b>	TP_408_040	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	A NOTIFY cc-state 'queued' and cc-service-retention 'true' is mapped into a TC-Cont CCNR REQUEST (return result) retain supported		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Event header field is set to 'call-completion' the cc-state body is set to 'queued' and the cc-service-retention body is set to 'true', a SCCP UDT or XUDT TC-Cont is sent and the CCNR REQUEST (return result) component is present the RetainSupported element is set to 'TRUE'.		
<b>TCAP Parameter values</b>	TC-Cont: CCNR REQUEST (return result) RetainSupported = TRUE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued cc-service-retention: true		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Cont)	MGCF CCNR request already invoked ← NOTIFY → 200 OK (NOTIFY) Apply post test routine	Mg

<b>TP number</b>	TP_408_041	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	A NOTIFY cc-state 'queued' and cc-service-retention 'true' is mapped into a TC-Cont CCNR REQUEST (return result) retain not supported		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Event header field is set to 'call-completion' the cc-state body is set to 'queued' and the cc-service-retention body is not present, a SCCP UDT or XUDT TC-Cont is sent and the CCNR REQUEST (return result) component is present the RetainSupported element is set to 'FALSE'.		
<b>TCAP Parameter values</b>	TC-Cont: CCNR REQUEST (return result) RetainSupported = FALSE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: queued		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Cont)	MGCF CCNR request already invoked ← NOTIFY → 200 OK (NOTIFY) Apply post test routine	Mg

<b>TP number</b>	TP_408_042	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCBS request unsuccessful 480 Temporarily Unavailable is received		
<b>Test Purpose</b>	Ensure that on receipt of a 480 Temporarily Unavailable final response upon CCBS was requested, a SCCP UDT or XUDT TC-End CCBS REQUEST (Return error) component containing the ShortTermDenial Element is sent.		
<b>TCAP Parameter values</b>	TC-End CCBS REQUEST (Return error) ShortTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=BS Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Begin)	MGCF → SUBSCRIBE (X)UDT (TC-End) ← 480 Temporarily Unavailable Apply post test routine	Mg

<b>TP number</b>	TP_408_043	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCNR request unsuccessful 480 Temporarily Unavailable is received		
<b>Test Purpose</b>	Ensure that on receipt of a 480 Temporarily Unavailable final response upon CCNR was requested, a SCCP UDT or XUDT TC-End CCNR REQUEST (Return error) component containing the ShortTermDenial Element is sent.		
<b>TCAP Parameter values</b>	TC-End CCNR REQUEST (Return error) ShortTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>SCCP</b> (X)UDT (TC-Begin) → (X)UDT (TC-End) ←	<b>MGCF</b>	<b>Mg</b> → SUBSCRIBE ← 480 Temporarily Unavailable
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_044	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCBS request unsuccessful 403 Forbidden is received		
<b>Test Purpose</b>	Ensure that on receipt of a 403 Forbidden final response upon CCBS was requested, a SCCP UDT or XUDT TC-End CCBS REQUEST (Return error) component containing the LongTermDenial Element is sent.		
<b>TCAP Parameter values</b>	TC-End CCBS REQUEST (Return error) LongTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=BS Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>SCCP</b> (X)UDT (TC-Begin) → (X)UDT (TC-End) ←	<b>MGCF</b>	<b>Mg</b> → SUBSCRIBE ← 403 Forbidden
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_045	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCNR request unsuccessful 403 Forbidden is sent		
<b>Test Purpose</b>	Ensure that on receipt of a 403 Forbidden final response upon CCNR was requested, a SCCP UDT or XUDT TC-End CCNR REQUEST (Return error) component containing the LongTermDenial Element is sent.		
<b>TCAP Parameter values</b>	TC-End CCNR REQUEST (Return error) LongTermDenial		
<b>SIP Parameter values</b>	SUBSCRIBE: <Request URI>, m=NR Event: call-completion		
<b>Comments</b>			
<b>Message flows</b>	<b>SCCP</b> (X)UDT (TC-Begin) → (X)UDT (TC-End) ←	<b>MGCF</b>	<b>Mg</b> → SUBSCRIBE ← 403 Forbidden
	<b>Apply post test routine</b>		

<b>TP number</b>	TP_408_046	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCBS invoked. NOTIFY with State header field set to "terminated" received TC-End is sent		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Subscription-State header is set to 'terminated' and the subexp-params <b>reason</b> set to 'noresource' upon CCBS was successfully invoked, a SCCP UDT or XUDT TC-End message is sent containing the CCBS CANCEL component.		
<b>TCAP Parameter values</b>	TC-End CCBS CANCEL		
<b>SIP Parameter values</b>	NOTIFY: <Request URI> Event:call-completion Subscription-State: terminated; reason=noresource		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-End)	MGCF CCBS request successfully invoked ← Apply post test routine	Mg NOTIFY → 200 OK NOTIFY

<b>TP number</b>	TP_408_047	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	CCNR invoked at the O-MGCF NOTIFY with State header field set to "terminated" received TC-End is sent		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the Subscription-State header is set to 'terminated' and the subexp-params <b>reason</b> set to 'noresource' upon CCNR was successfully invoked, a SCCP UDT or XUDT TC-End message is sent containing the CCBS CANCEL component.		
<b>TCAP Parameter values</b>	TC-End CCBS CANCEL		
<b>SIP Parameter values</b>	NOTIFY: <Request URI> Event:call-completion Subscription-State: terminated; reason=noresource		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-End)	MGCF CCNR request successfully invoked ← Apply post test routine	Mg NOTIFY → 200 OK NOTIFY

<b>TP number</b>	TP_408_048	<b>Reference</b>	7.5.11.2, Table 7.5.11.2.3
<b>TSS reference</b>	IMS-SS/CC/		
<b>Selection criteria</b>	PICS 6.3.2/24		
<b>Test Purpose name</b>	Interworking of Remote user free indication at the O-MGCF		
<b>Test Purpose</b>	Ensure that on receipt of a NOTIFY request the cc-state body is set to 'ready' upon Call completion was successfully invoked, a SCCP UDT or XUDT TC-Cont message is sent containing the CCBS REMOTE USER FREE component.		
<b>TCAP Parameter values</b>	TC-Cont CCBS REMOTE USER FREE		
<b>SIP Parameter values</b>	NOTIFY: Event: call-completion Content-Type: application/call-completion cc-state: ready		
<b>Comments</b>			
<b>Message flows</b>	SCCP (X)UDT (TC-Cont)	MGCF CCBS or CCNR request successfully invoked ← Apply post test routine	Mg NOTIFY → 200 OK (NOTIFY)

### 6.3.9 Communication Waiting (CW)

<b>TP number</b>	TP_409_001	<b>Reference</b>	7.5.12									
<b>TSS reference</b>	IMS-SS/CW/											
<b>Selection criteria</b>	PICS 6.3.2/8											
<b>Test Purpose name</b>	Mapping of Generic notification 'call waiting' in an ACM into Alert-Info header											
<b>Test Purpose</b>	Ensure that on receipt of an ACM the Called party status indicator is set to 'subscriber free' and a Generic notification indicator parameter is present set to "Call is a waiting call", a 180 Ringing is sent. An Alert-Info header is present and the urn is set to 'urn:alert:service:call-waiting'.											
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status indicator Subscriber free Generic notification Call is a waiting call											
<b>SIP Parameter values</b>	180: Alert-Info urn:alert:service:call-waiting											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>ACM</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	IAM	180 Ringing	←	ACM		
Mg	MGCF	ISUP										
INVITE	→	IAM										
180 Ringing	←	ACM										

<b>TP number</b>	TP_409_002	<b>Reference</b>	7.5.12									
<b>TSS reference</b>	IMS-SS/CW/											
<b>Selection criteria</b>	PICS 6.3.2/8											
<b>Test Purpose name</b>	Mapping of Generic notification 'call waiting' in a CPG into Alert-Info header											
<b>Test Purpose</b>	Ensure that on receipt of a CPG the Event indicator is set to 'Alerting' and a Generic notification indicator parameter is present set to "Call is a waiting call", a 180 Ringing is sent. An Alert-Info header is present and the urn is set to 'urn:alert:service:call-waiting'.											
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator Alerting Generic notification Call is a waiting call											
<b>SIP Parameter values</b>	180: Alert-Info urn:alert:service:call-waiting											
<b>Comments</b>												
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <tr> <th>Mg</th> <th>MGCF</th> <th>ISUP</th> </tr> <tr> <td>INVITE</td> <td>→</td> <td>→ IAM</td> </tr> <tr> <td>180 Ringing</td> <td>←</td> <td>← ACM ← CPG</td> </tr> </table> <p style="text-align: center;"><b>Apply post test routine</b></p>	Mg	MGCF	ISUP	INVITE	→	→ IAM	180 Ringing	←	← ACM ← CPG		
Mg	MGCF	ISUP										
INVITE	→	→ IAM										
180 Ringing	←	← ACM ← CPG										

<b>TP number</b>	TP_409_003	<b>Reference</b>	7.5.12												
<b>TSS reference</b>	IMS-SS/CW/														
<b>Selection criteria</b>	PICS 6.3.2/8														
<b>Test Purpose name</b>	Interworking of the Alert-Info header in a 180 into Generic notification 'Call waiting' in an ACM														
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing and an Alert Info header is present the value is set to 'urn:alert:service:call-waiting', an ACM is sent containing a Generic notification indication parameter set to 'Call is a waiting call'.														
<b>ISUP Parameter values</b>	<b>ACM:</b> Backward call indicator Called party status indicator Subscriber free Generic notification Call is a waiting call														
<b>SIP Parameter values</b>	180: Alert-Info urn:alert:service:call-waiting														
<b>Comments</b>															
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td></td> <td></td> <td>← 180 Ringing</td> </tr> </tbody> </table> <b>Apply post test routine</b>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying			← 180 Ringing
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>													
IAM	→	→ INVITE													
ACM	←	← 100 Trying													
		← 180 Ringing													

<b>TP number</b>	TP_409_004	<b>Reference</b>	7.5.12															
<b>TSS reference</b>	IMS-SS/CW/																	
<b>Selection criteria</b>	PICS 6.3.2/8																	
<b>Test Purpose name</b>	Interworking of the Alert-Info header in a 180 into Generic notification 'Call waiting' in a CPG																	
<b>Test Purpose</b>	Ensure that on receipt of a 180 Ringing and an Alert Info header is present the value is set to 'urn:alert:service:call-waiting', a CPG is sent containing a Generic notification indication parameter set to 'Call is a waiting call'. The Event indicator is set to 'Alerting'.																	
<b>ISUP Parameter values</b>	<b>CPG:</b> Event indicator Alerting Generic notification Call is a waiting call																	
<b>SIP Parameter values</b>	180: Alert-Info urn:alert:service:call-waiting																	
<b>Comments</b>																		
<b>Message flows</b>	<table style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33.33%;"><b>ISUP</b></th> <th style="width: 33.33%;"><b>MGCF</b></th> <th style="width: 33.33%;"><b>Mg</b></th> </tr> </thead> <tbody> <tr> <td>IAM</td> <td>→</td> <td>→ INVITE</td> </tr> <tr> <td>ACM</td> <td>←</td> <td>← 100 Trying</td> </tr> <tr> <td>CPG</td> <td>←</td> <td>← 180 Ringing</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <b>T i/w2 expired</b> <b>Apply post test routine</b>			<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>	IAM	→	→ INVITE	ACM	←	← 100 Trying	CPG	←	← 180 Ringing			
<b>ISUP</b>	<b>MGCF</b>	<b>Mg</b>																
IAM	→	→ INVITE																
ACM	←	← 100 Trying																
CPG	←	← 180 Ringing																

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## Annex A (informative): Bibliography

Recommendation ITU-T Q.764 (12/1999): "Signalling system No. 7 - ISDN User Part signalling procedures".

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## History

<b>Document history</b>		
V3.1.1	May 2011	Publication
V3.2.1	July 2012	Publication
V3.3.1	August 2013	Publication
V5.1.1	February 2013	Publication
V5.2.1	February 2016	Publication