



**Core Network and Interoperability Testing (INT);
Testing of the IBCF requirements;
(3GPP Release 12);
Part 2: Test Suite Structure and Test Purposes (TSS&TP)**

PREVIEW
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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 Testing of the IBCF requirements, as identified below:

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

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

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document specifies the test suite structure and test purposes of testing of the IBCF requirements. The focus is the Ic interface as the interconnection point between two network operators.

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 124 229: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229 Release 9)".
- [2] ETSI TS 129 165: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Inter-IMS Network to Network Interface (NNI) (3GPP TS 29.165 Release 9)".
- [3] ETSI TS 101 553-1: "Core Network and Interoperability Testing (INT); Testing of the IBCF requirements; (3GPP Release 9); Part 1: Protocol Implementation Conformance Statement (PICS)".
- [4] ETSI TS 124 407: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR); Protocol specification (3GPP TS 24.407 Release 8)".
- [5] ETSI TS 124 508: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; PSTN/ISDN simulation services Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR); Protocol specification (3GPP TS 24.508 Release 8)".
- [6] ETSI TS 124 505: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services: Conference (CONF); Protocol specification (3GPP TS 24.505 Release 8)".
- [7] ETSI TS 124 406: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services; Message Waiting Indication (MWD); Protocol specification (3GPP TS 24.406 Release 8)".
- [8] ETSI TS 124 410: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; NGN Signalling Control Protocol; Communication HOLD (HOLD) PSTN/ISDN simulation services; Protocol specification (3GPP TS 24.410 Release 8)".

- [9] ETSI TS 124 411: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services: Anonymous Communication Rejection (ACR) and Communication Barring (CB); Protocol specification (3GPP TS 24.411 Release 8)".
- [10] ETSI TS 124 516: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services; Malicious Communication Identification (MCID); Protocol specification (3GPP TS 24.516 Release 8)".
- [11] ETSI TS 124 529: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Protocol specification (3GPP TS 24.529 Release 8)".
- [12] ETSI TS 124 454: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; TISPAN; PSTN/ISDN simulation services; Protocol specification Closed User Group (CUG) (3GPP TS 24.454 Release 8)".
- [13] ETSI TS 123 002: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Network architecture (3GPP TS 23.002 Release 9)".
- [14] ETSI TS 123 228: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Stage 2 (3GPP TS 23.228 Release 9)".
- [15] IETF RFC 7044: "An Extension to the Session Initiation Protocol (SIP) for Request History Information".
- [16] IETF RFC 3325: "Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks".
- [17] ETSI TS 129 162: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Interworking between the IM CN subsystem and IP networks (3GPP TS 29.162)".
- [18] IETF RFC 2663: "IP Network Address Translator (NAT) Terminology and Considerations".
- [19] IETF RFC 3261: "SIP: Session Initiation Protocol".
- [20] IETF RFC 4028: "Session Timers in the Session Initiation Protocol (SIP)".
- [21] IETF RFC 4412: "Communications Resource Priority for the Session Initiation Protocol (SIP)".

2.2 Informative references

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

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

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] IEEE 802.11a-1999: "IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 11: Wireless Medium Access Control (MAC) and physical layer (PHY) specifications: High Speed Physical Layer in the 5 GHz band".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] to [19] apply.

NOTE: This may contain additional information.

3.2 Symbols

For the purposes of the present document, the symbols given in [1] to [19] apply.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in [1] to [19] apply.

4 Test Suite Structure (TSS)

The Test Suite Structure is in close alignment with clause 5.10, ETSI TS 124 229 [1].

Exit_Point			
reg	IBCF_101_xxx		
bcall	IBCF_102_xxx		
scr	bcall	IBCF_103_xxx	
	ss	oip-oir	IBCF_104_xxx
		ss/tip-tir	IBCF_105_xxx
		cdiv	IBCF_106_xxx
		other	IBCF_107_xxx
nch	reg	IBCF_108_xxx	
	bcall	IBCF_109_xxx	
alg	sip	IBCF_110_xxx	
	sdp	IBCF_111_xxx	

Entry_Point			
reg	IBCF_201_xxx		
bcall	IBCF_202_xxx		
scr	bcall	IBCF_203_xxx	
		oip-oir	IBCF_204_xxx
		tip-tir	IBCF_205_xxx
		cdiv	IBCF_206_xxx
		other	IBCF_207_xxx
nch	reg	IBCF_208_xxx	
	bcall	IBCF_209_xxx	
alg	sip	IBCF_210_xxx	
	sdp	IBCF_211_xxx	

5 Test Purposes (TP)

5.1 Naming convention and strategy

5.1.0 Introduction

For each requirement in ETSI TS 124 229 [1] a TP is defined.

5.1.1 TP naming convention

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

Table 5.1.1-1: TP identifier naming convention scheme

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

5.1.2 Test strategy

As the base standard ETSI TS 124 229 [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 101 553-1 [3]. The criteria applied include the following:

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

6 Test purposes IBCF test

6.1 IBCF as an exit point

6.1.1 Registration

TP number	IBCF_101_001	Reference	5.10.2.1 3) [1]												
TSS reference	Exit_Point/reg														
Selection criteria	PICS 7.2.1/1														
Test Purpose name	WWW-Authenticate header is passed unchanged														
Test Purpose	When an IBCF receives a REGISTER request from the visited network it shall forward this request to the other home network. If the IBCF receives the 401 Unauthorized final response from the other home network the WWW-Authenticate header is unchanged in the forwarded SIP response.														
SIP Parameter values	401 1: WWW-Authenticate 401 2: WWW-Authenticate														
Comments															
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> </tr> <tr> <td>401 Unauthorized 2</td> <td style="text-align: center;">←</td> <td>401 Unauthorized 1</td> </tr> <tr> <td colspan="3" style="text-align: center;">Apply post test routine</td> </tr> </table>			Mx	SUT	Ic	REGISTER	→	REGISTER	401 Unauthorized 2	←	401 Unauthorized 1	Apply post test routine		
Mx	SUT	Ic													
REGISTER	→	REGISTER													
401 Unauthorized 2	←	401 Unauthorized 1													
Apply post test routine															

TP number	IBCF_101_002	Reference	5.10.2.1 3) [1]									
TSS reference	Exit_Point/reg											
Selection criteria	PICS 7.2.1/1 AND PICS 7.1.1/2											
Test Purpose name	The Authorization header is passed unchanged											
Test Purpose	When an IBCF receives a REGISTER request from the visited network it shall forward this request to the other home network. The Authorization header remains unchanged in the forwarded SIP request.											
SIP Parameter values	REGISTER 1: Authorization Path Require: path P-Charging-Vector: icid; orig-ioi REGISTER 2: Authorization Path Require: path P-Charging-Vector: icid; orig-ioi											
Comments												
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER 1</td> <td style="text-align: center;">→</td> <td>REGISTER 2</td> </tr> <tr> <td>200 OK REGISTER</td> <td style="text-align: center;">←</td> <td>200 OK REGISTER</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	REGISTER 1	→	REGISTER 2	200 OK REGISTER	←	200 OK REGISTER
Mx	SUT	Ic										
REGISTER 1	→	REGISTER 2										
200 OK REGISTER	←	200 OK REGISTER										

TP number	IBCF_101_003	Reference	5.10.2.1 3) [1]									
TSS reference	Exit_Point/reg											
Selection criteria	PICS 7.2.1/1 AND PICS 7.1.1/2											
Test Purpose name	The P-Associated-URI, Path, Service-Route and P-Charging-Vector headers are passed unchanged											
Test Purpose	When an IBCF receives a 200 OK REGISTER request from the other (home) network it shall forward this request to the own (visited) network. The P-Associated-URI, Path, Service-Route, P-Charging-Vector headers remain unchanged in the forwarded SIP response.											
SIP Parameter values	200 OK 1: P-Associated-URI Path Service-Route P-Charging-Vector: term-ioi Contact 200 OK 2: P-Associated-URI Path Service-Route P-Charging-Vector: term-ioi Contact											
Comments												
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER 1</td> <td style="text-align: center;">→</td> <td>REGISTER 2</td> </tr> <tr> <td>200 OK REGISTER</td> <td style="text-align: center;">←</td> <td>200 OK REGISTER</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	REGISTER 1	→	REGISTER 2	200 OK REGISTER	←	200 OK REGISTER
Mx	SUT	Ic										
REGISTER 1	→	REGISTER 2										
200 OK REGISTER	←	200 OK REGISTER										

TP number	IBCF_101_004	Reference	5.10.2.1 3) [1]															
TSS reference	Exit_Point/reg																	
Selection criteria	PICS 7.2.1/1																	
Test Purpose name	The Event and Expires header are passed unchanged																	
Test Purpose	When an IBCF receives a SUBSCRIBE request from the visited network it shall forward this request to the other home network. The Event header and the Expires header remain unchanged in the request.																	
SIP Parameter values	SUBSCRIBE 1: Event: reg P-Charging-Vector: icid Expires: 600 000 SUBSCRIBE 2: Event: reg P-Charging-Vector: icid Expires: 600 000																	
Comments																		
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td colspan="3" style="text-align: center;">The registration procedure was successful</td> </tr> <tr> <td style="text-align: center;">SUBSCRIBE 1</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ SUBSCRIBE 2</td> </tr> <tr> <td style="text-align: center;">200 OK SUBSCRIBE</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK SUBSCRIBE</td> </tr> <tr> <td colspan="3" style="text-align: center;">Apply post test routine</td> </tr> </table>			Mx	SUT	Ic	The registration procedure was successful			SUBSCRIBE 1	→	→ SUBSCRIBE 2	200 OK SUBSCRIBE	←	← 200 OK SUBSCRIBE	Apply post test routine		
Mx	SUT	Ic																
The registration procedure was successful																		
SUBSCRIBE 1	→	→ SUBSCRIBE 2																
200 OK SUBSCRIBE	←	← 200 OK SUBSCRIBE																
Apply post test routine																		

TP number	IBCF_101_005	Reference	5.10.2.1 3) [1]															
TSS reference	Exit_Point/reg																	
Selection criteria	PICS 7.2.1/1																	
Test Purpose name	The 'reginfo' body is passed unchanged																	
Test Purpose	When an IBCF receives a NOTIFY request from the visited network it shall forward this request to the other home network. The Event header and the XML body remain unchanged in the request.																	
SIP Parameter values	NOTIFY 1: Event: reg Content-Type: application/reginfo+xml <pre> <?xml version="1.0"?> <reginfo xmlns="urn:ietf:params:xml:ns:reginfo" version="1" state="partial"> <registration aor="sip:[any value]" id="[any value]" state="active"> <contact id="[any value]" state="active" event="registered" duration-registered="0"> <uri>sip:[any value]</uri> </contact> </registration> </reginfo> </pre> NOTIFY 2: Event: reg Content-Type: application/reginfo+xml <pre> <?xml version="1.0"?> <reginfo xmlns="urn:ietf:params:xml:ns:reginfo" version="1" state="partial"> <registration aor="sip:[any value]" id="[any value]" state="active"> <contact id="[any value]" state="active" event="registered" duration-registered="0"> <uri>sip:[any value]</uri> </contact> </registration> </reginfo> </pre>																	
Comments																		
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td colspan="3" style="text-align: center;">The registration procedure was successful</td> </tr> <tr> <td style="text-align: center;">NOTIFY 1</td> <td style="text-align: center;">→</td> <td style="text-align: center;">→ NOTIFY 2</td> </tr> <tr> <td style="text-align: center;">200 OK NOTIFY</td> <td style="text-align: center;">←</td> <td style="text-align: center;">← 200 OK NOTIFY</td> </tr> <tr> <td colspan="3" style="text-align: center;">Apply post test routine</td> </tr> </table>			Mx	SUT	Ic	The registration procedure was successful			NOTIFY 1	→	→ NOTIFY 2	200 OK NOTIFY	←	← 200 OK NOTIFY	Apply post test routine		
Mx	SUT	Ic																
The registration procedure was successful																		
NOTIFY 1	→	→ NOTIFY 2																
200 OK NOTIFY	←	← 200 OK NOTIFY																
Apply post test routine																		

TP number	IBCF_101_006	Reference	5.10.2.1 3) [1]																
TSS reference	Exit_Point/reg																		
Selection criteria	PICS 7.2.1/1 AND PICS 7.2.1/4																		
Test Purpose name	The IBCF selects an alternative entry point to the other network if a 3xx was received																		
Test Purpose	When an IBCF receives a SIP 3xx (Redirection) response from another (home) network entry point to a previously forwarded SIP REGISTER request, it shall resend the Register request to another entry point to which it has not previously forwarded the same request.																		
SIP Parameter values																			
Comments	IUT configured with two entry points to home network																		
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic 1</td> <td style="text-align: center;">Ic 2</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 3xx</td> <td></td> </tr> <tr> <td>200 OK REGISTER</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">→ REGISTER ← 200 OK REGISTER</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic 1	Ic 2	REGISTER	→	REGISTER				← 3xx		200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER
Mx	SUT	Ic 1	Ic 2																
REGISTER	→	REGISTER																	
		← 3xx																	
200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER																

TP number	IBCF_101_007	Reference	5.10.2.1 3) [1]																
TSS reference	Exit_Point/reg																		
Selection criteria	PICS 7.2.1/1 AND PICS 7.2.1/4																		
Test Purpose name	The IBCF selects an alternative entry point to the other network if a 480 was received																		
Test Purpose	When an IBCF receives SIP 480 (Temporarily Unavailable) response from a home network entry point to a previously forwarded SIP REGISTER request, it shall forward the Register request to another home network entry point to which it has not previously forwarded the same request.																		
SIP Parameter values																			
Comments	IUT configured with two entry points to home network																		
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic 1</td> <td style="text-align: center;">Ic 2</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">← 480 Temporarily Unavailable</td> <td></td> </tr> <tr> <td>200 OK REGISTER</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">→ REGISTER ← 200 OK REGISTER</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic 1	Ic 2	REGISTER	→	REGISTER				← 480 Temporarily Unavailable		200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER
Mx	SUT	Ic 1	Ic 2																
REGISTER	→	REGISTER																	
		← 480 Temporarily Unavailable																	
200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER																

TP number	IBCF_101_008	Reference	5.10.2.1 3) [1]																
TSS reference	Exit_Point/reg																		
Selection criteria	PICS 7.2.1/1 AND PICS 7.2.1/4																		
Test Purpose name	The IBCF selects an alternative entry point to the other network if no response was received																		
Test Purpose	When an IBCF receives no response from a home network entry point to a previously forwarded SIP REGISTER request, it shall forward the Register request to another home network entry point to which it has not previously forwarded the same request.																		
SIP Parameter values																			
Comments	IUT configured with two entry points to home network																		
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic 1</td> <td style="text-align: center;">Ic 2</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">No response</td> <td></td> </tr> <tr> <td>200 OK REGISTER</td> <td style="text-align: center;">←</td> <td></td> <td style="text-align: center;">→ REGISTER ← 200 OK REGISTER</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic 1	Ic 2	REGISTER	→	REGISTER				No response		200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER
Mx	SUT	Ic 1	Ic 2																
REGISTER	→	REGISTER																	
		No response																	
200 OK REGISTER	←		→ REGISTER ← 200 OK REGISTER																

TP number	IBCF_101_009	Reference	5.10.2.1 3) [1]												
TSS reference	Exit_Point/reg														
Selection criteria	PICS 7.2.1/1														
Test Purpose name	The IBCF sends a 504 if a 3xx to a REGISTER request was received														
Test Purpose	If an IBCF receives a SIP 3xx (Redirection) response to a SIP REGISTER request from all entry points in the registering user s home network, it shall send a SIP 504 (Server Time-Out) response to the P-CSCF.														
SIP Parameter values															
Comments	IUT configured with one entry points to home network														
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">←</td> </tr> <tr> <td>504 Server Time-Out</td> <td style="text-align: center;">←</td> <td>3xx</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	REGISTER	→	REGISTER			←	504 Server Time-Out	←	3xx
Mx	SUT	Ic													
REGISTER	→	REGISTER													
		←													
504 Server Time-Out	←	3xx													

TP number	IBCF_101_010	Reference	5.10.2.1 3) [1]												
TSS reference	Exit_Point/reg														
Selection criteria	PICS 7.2.1/1														
Test Purpose name	The IBCF sends a 504 if a 480 to a REGISTER request was received														
Test Purpose	If an IBCF receives a SIP 480 (Temporarily Unavailable) response to a SIP REGISTER request from all entry points in the registering user s home network, it shall send a SIP 504 (Server Time-Out) response to the P-CSCF.														
SIP Parameter values															
Comments	IUT configured with one entry points to home network														
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">←</td> </tr> <tr> <td>504 Server Time-Out</td> <td style="text-align: center;">←</td> <td>480 Temporarily Unavailable</td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	REGISTER	→	REGISTER			←	504 Server Time-Out	←	480 Temporarily Unavailable
Mx	SUT	Ic													
REGISTER	→	REGISTER													
		←													
504 Server Time-Out	←	480 Temporarily Unavailable													

TP number	IBCF_101_011	Reference	5.10.2.1 3) [1]												
TSS reference	Exit_Point/reg														
Selection criteria	PICS 7.2.1/1														
Test Purpose name	The IBCF sends a 504 if no response to a REGISTER request was received														
Test Purpose	If an IBCF receives no response to a SIP REGISTER request from all entry points in the registering user s home network, it shall send a SIP 504 Server Time-Out response to the P-CSCF.														
SIP Parameter values															
Comments	IUT configured with one entry points to home network														
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>REGISTER</td> <td style="text-align: center;">→</td> <td>REGISTER</td> </tr> <tr> <td></td> <td style="text-align: center;">No response</td> <td></td> </tr> <tr> <td>504 Server Time-Out</td> <td style="text-align: center;">←</td> <td></td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	REGISTER	→	REGISTER		No response		504 Server Time-Out	←	
Mx	SUT	Ic													
REGISTER	→	REGISTER													
	No response														
504 Server Time-Out	←														

6.1.2 Basic call

TP number	IBCF_102_001	Reference	5.10.2.2 1) [1]									
TSS reference	Exit_Point/bcall											
Selection criteria												
Test Purpose name	The SUT responds with a 100 Trying after an INVITE was received											
Test Purpose	When the IBCF receives an INVITE request, the SUT responds with a 100 Trying											
SIP Parameter values												
Comments												
Message flows	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Mx</td> <td style="text-align: center;">SUT</td> <td style="text-align: center;">Ic</td> </tr> <tr> <td>INVITE</td> <td style="text-align: center;">→</td> <td>INVITE</td> </tr> <tr> <td>100 Trying</td> <td style="text-align: center;">←</td> <td></td> </tr> </table> <p style="text-align: center;">Apply post test routine</p>			Mx	SUT	Ic	INVITE	→	INVITE	100 Trying	←	
Mx	SUT	Ic										
INVITE	→	INVITE										
100 Trying	←											

