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Core Network and Interoperability Testing (INT); Network Integration Testing between SIP and ISDN/PSTN network signalling protocols; Part 1: Test Suite Structure and Test Purposes (TSS&TP) for SIP-ISDN Reference
RTS/INT-00076-1

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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 1 of a multi-part deliverable covering Network Integration Testing between SIP and ISDN/PSTN network signalling protocols, as identified below:

- Part 1: "Test Suite Structure and Test Purposes (TSS&TP) for SIP-ISDN";
- Part 2: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) for SIP-SIP";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) for Network Integration Tests between ISDN-ISDN and ISDN-PSTN over SIP II NNI / SIP-I NNI".

Modal verbs terminology

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1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for Network Integration Testing (NIT) to verify the overall compatibility of SIP, ISDN and non-ISDN (PSTN) over the national or international ISDN networks. The TSS&TP specification covers the procedures described in Recommendation ITU-T Q.1912.5 [51] or ETSI EN 383 001 [49] or ETSI TS 129 163 [i.20] and ETSI EN 300 899-1 [23]. For SIP and SDP specific terminology, the references are ETSI TS 124 229 [55] and IETF RFC 3261 [28].

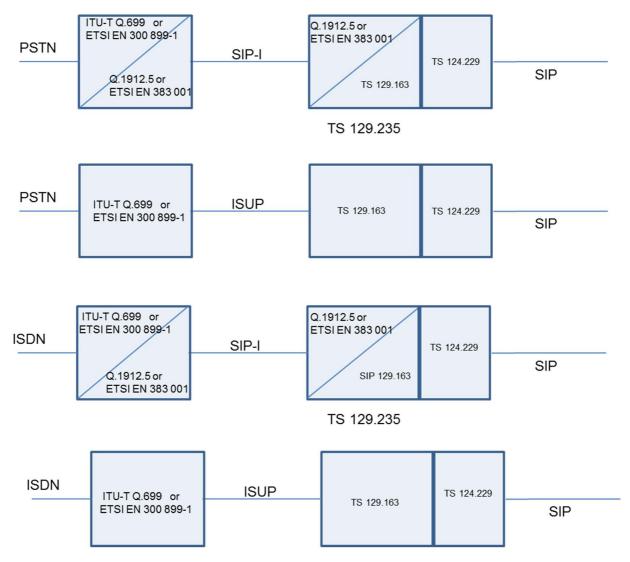


Figure 1: SIP-ISDN and SIP-PSTN inter-working testing architecture with SIP-I and ISUP

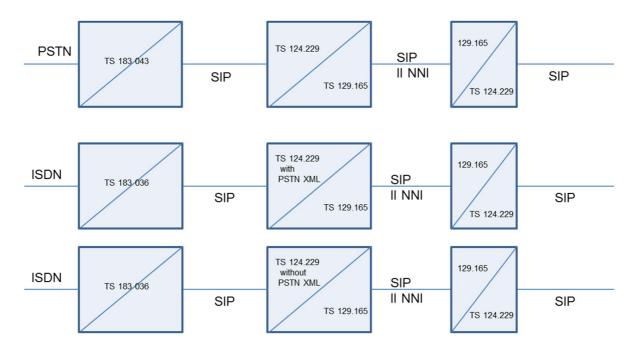


Figure 2: SIP-ISDN and SIP-PSTN inter-working testing architecture with SIP II NNI

2 References

2.1 Normative references

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

[1]	Void.
[2]	Recommendation ITU-T Q.1902.2 (2001): "Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: General functions of messages and parameters".
[3]	Void.
[4]	Void.
[5]	Void.
[6]	Void.
[7]	Void.
[8]	Void.
[9]	Void.
[10]	Void.
[11]	Void.

[12]	Void.
[13]	Void.
[14]	Recommendation ITU-T Q.734.1 (03-1993): "Stage 3 description for multiparty supplementary services using Signalling System No. 7: Conference calling".
[15]	Recommendation ITU-T Q.734.2 (07-1996): "Stage 3 description for multiparty supplementary services using Signalling System No. 7: Three-party service".
[16]	Void.
[17]	Void.
[18]	Void.
[19]	Void.
[20]	Void.
[21]	Void.
[22]	Recommendation ITU-T Q.850 (05-1998): "Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN User Part".
[23]	ETSI EN 300 899-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 1: Protocol specification [ITU-T Recommendation Q.699, modified]".
[24]	Void.
[25]	IETF RFC 4566 (2006): "SDP: Session Description Protocol".
[26]	IETF RFC 3966 (2004): "The tel URI for Telephone Numbers".
[27]	Void.
[28]	IETF RFC 3261 (2002): "SIP: Session Initiation Protocol".
[29]	Void.
[30]	IETF RFC 3264 (2002): "An Offer/Answer Model with Session Description Protocol (SDP)".
[31]	IETF RFC 3311 (2002): "The Session Initiation Protocol (SIP) UPDATE Method".
[32]	IETF RFC 3312 (2002): "Integration of Resource Management and Session Initiation Protocol (SIP)".
[33]	IETF RFC 3323 (2002): "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
[34]	IETF RFC 3325 (2002): "Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks".
[35]	Void.
[36]	Void.
[37]	Void.
[38]	Void.
[39]	Void.
[40]	Void.
[41]	Void.

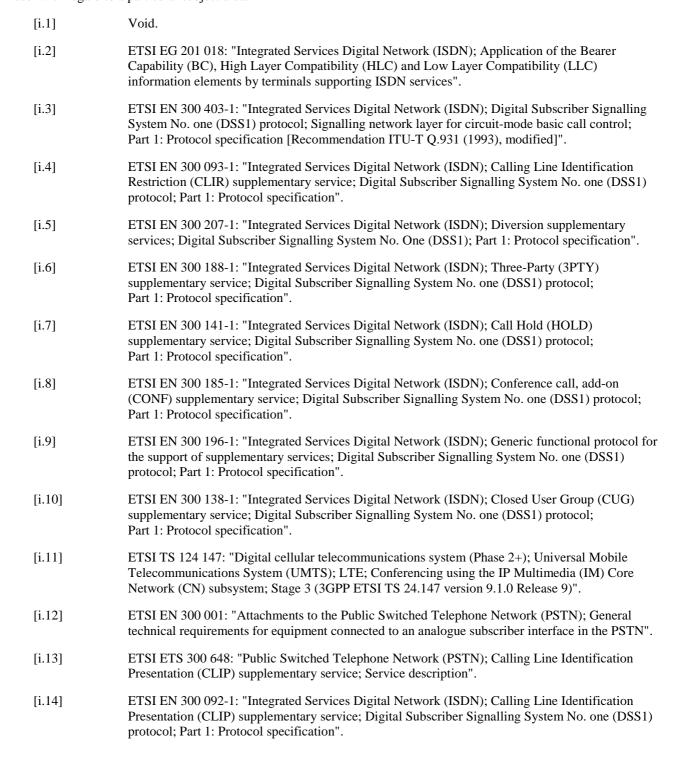
- [42] ETSI ES 283 003: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3 [3GPP TS 24.229 [Release 7], modified]".
- [43] ETSI TS 124 607 V10.1.0 (03-2014): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.607 version 10.1.0 Release 10".
- [44] ETSI TS 124 608 V10.1.0 (07-2013): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.608 version 10.1.0 Release 10)".
- [45] ETSI TS 124 604 V10.10.0 (07-2015): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Communication Diversion (CDIV) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.604 version 10.10.0 Release 10)".
- [46] ETSI TS 124 605 V10.1.0 (01-2013): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Conference (CONF) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.605 version 10.1.0 Release 10)".
- [47] Void.
- [48] Void.
- [49] ETSI EN 383 001: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control (BICC) Protocol or ISDN User Part (ISUP) [ITU-T Recommendation Q.1912.5, modified]".
- [50] Void.
- [51] Recommendation ITU-T Q.1912.5 (2004): "Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control Protocol or ISDN User Part".
- [52] Recommendation ITU-T Q.699 (09-1997): "Interworking between ISDN access and non-ISDN access over ISDN User Part of Signalling System No. 7".
- [53] Recommendation ITU-T Q.931 (05-1998): "ISDN user-network interface layer 3 specification for basic call control".
- [54] ETSI TS 134 229-1: "Universal Mobile Telecommunications System (UMTS); Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Part 1: Protocol conformance specification (3GPP ETSI TS 34.229-1 version 6.3.0 Release 6)".
- [55] 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 ETSI TS 24.229 Release 10)".
- [56] IETF RFC 2833: "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals".
- [57] ETSI TS 183 036: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); ISDN/SIP interworking; Protocol specification".
- [58] ETSI TS 183 043: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IMS-based PSTN/ISDN Emulation; Stage 3 specification".

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 reference 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.15]	ETSI EN 300 659: "Access and Terminals (AT); Analogue access to the Public Switched Telephone Network (PSTN); Subscriber line protocol over the local loop for display (and related) services".
[i.16]	ETSI TBR 008: "Integrated Services Digital Network (ISDN); Telephony 3,1 kHz teleservice; Attachment requirements for handset terminals".
[i.17]	Recommendation ITU-T Q.951: "Stage 3 description for number identification supplementary services using DSS 1".
[i.18]	Recommendation ITU-T Q.939: "Typical DSS 1 service indicator codings for ISDN telecommunications services".
[i.19]	ETSI TS 183 028: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Common Basic Communication procedures; Protocol specification".
[i.20]	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 ETSI TS 29.163 version 9.1.0 Release 9)".
[i.21]	ISO/IEC 9646 (1994): "Information technology - Open Systems Interconnection -Conformance testing methodology and framework".
[i.22]	ETSI TS 133 203: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; 3G security; Access security for IP-based services (3GPP TS 33.203 version 10.3.0 Release 10)".
[i.23]	ETSI TR 133 978: "Universal Mobile Telecommunications System (UMTS); Security aspects of early IP Multimedia Subsystem (IMS) (3GPP TR 33.978 version 7.0.0 Release 7)".
[i.24]	IETF RFC 2617: "HTTP Authentication: Basic and Digest Access Authentication".
[i.25]	IETF RFC 3761: "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)".
[i.26]	Void.
[i.27]	ETSI TR 123 981: "Universal Mobile Telecommunications System (UMTS); LTE; Interworking aspects and migration scenarios for IPv4-based IP Multimedia Subsystem (IMS) implementations (3GPP TR 23.981 version 10.0.0 Release 10)".
[i.28]	ETSI TS 186 011-2: "Core Network and Interoperability Testing (INT); IMS NNI Interoperability Test Specifications (3GPP Release 10); Part 2: Test descriptions for IMS NNI Interoperability".
[i.29]	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 version 10.20.0 Release 10)".

3 Definitions and abbreviations

3.1 Definitions

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

For BICC or ISUP specific terminology, the reference is Recommendation ITU-T Q.1902.2 [2]. For SIP and SDP specific terminology, the reference is ETSI TS 124 229 [55].

Basic Call Control (BCC): signalling protocol associated with the DSS1 - ISDN Basic Call control procedures of Recommendation ITU-T Q.931 [53] (ETSI EN 300 403-1 [i.3])

Incoming Interworking Unit (I-IWU): physical entity, (which can be combined with a BICC ISN or ISUPexchange) that terminates incoming calls using SIP and originates outgoing calls using the BICC or ISUP protocols

incoming or outgoing: direction of a call (not signalling information) with respect to a reference point

incoming SIP or BICC/ISUP (network): network, from which the incoming calls are received, that uses the SIP or BICC/ISUP protocol (without the term "network", it simply refers to the protocol)

inopportune: specifies a test purpose covering a signalling procedure where an inopportune message (type of message not expected in the IUT current state) is sent to the IUT

Outgoing Interworking Unit (O-IWU): physical entity, (which can be combined with a BICC ISN or ISUP exchange) that terminates incoming calls using BICC or ISUP protocols and originates outgoing calls using the SIP

outgoing SIP or BICC/ISUP (network): network, to which the outgoing calls are sent, that uses the SIP or BICC/ISDN protocol

NOTE: Without the term "network", it simply refers to the protocol.

SIP precondition: indicates the support of the SIP "precondition procedure" as defined in IETF RFC 3312 [32]

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

NOTE: TSIs test description can be used as the basis for a formal test specification (e.g. Abstract Test Suite in TTCN). See ISO/IEC 9646 [i.21].

valid: specifies a test purpose covering a signalling procedure where all the messages sent to or received from the IUT are valid (expected in the current status of the IUT) and correctly encoded

3.1.1 Conventions for representation of SIP/SDP information

1) All letters of SIP method names are capitalized.

EXAMPLE 1: INVITE. INFO.

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

EXAMPLE 2: To, From, Call-ID.

Where it is necessary to refer with finer granularity to components of a SIP message, the component concerned is identified by the ABNF rule name used to designate it in the defining RFC (generally 25/IETF RFC 3261 [28]), in plain text without surrounding angle brackets.

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

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

EXAMPLE 4: sip: URI, tel: URI.

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

EXAMPLE 5: 100 Trying, 484 Address Incomplete.

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

EXAMPLE 6: 200 OK INVITE, 200 OK PRACK.

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

EXAMPLE 7: m=line, a=line.

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

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

3.2 Abbreviations

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

ACR Anonymous Call Rejection

AKA Authentication and Key Agreement

ANM Answer Message

APRI Address Presentation Restriction Indicator

AS Aplication Server
ATS Abstract Tests Suite
BC Bearer Capability
CC Call Control
CD Call Diversion

CD-ISS Call Diversion ISDN - SIP - SIP

CF Call Forwarding CFB Call Forwarding Busy

CFNL Communication Forwarding on No Logged-in

CFNR Call Forwarding No Reply
CFU Call Forwarding Unconditional

CLIP Calling Line Identification Presentation
CLIR Calling Line Identification Restriction

CN Core Network

COLP Connected Line Identification Presentation
COLR Called Line Identification Restriction

COMP Complete message
CON Connect message
CONF Conference
CONN Connect Massage
CR Call Reference
CS Circuit switched

CSCF Call Session Control Function

CUG Closed User Group
CV Call Variable
CV_SIP Call Variable for SIP
CW Call Waiting
DDI Direct Dialling In

DHCP Dynamic Host Configuration Protocol

DNS Domain Name System

DTMF Dual-tone multi-frequency signaling ENUM Telephone Number Mapping

ES European Standard
FAC Facility message
FCI Forward Call Indicator

GSM Global System for Mobile communications

GW GateWay

HLC High Layer Capability
HTTP Hypertext Transfer Protocol

I Inopportune
IA Incoming Allowed
ICB Incoming Call Baring
IE Information Element
IMS IP Multimedia Subsystem

IP Internet Protocol

IPSEC Internet Protocol Security
IPX Internetwork Packet Exchange

IS_UD ISDN SIP - Unrestricted Digital information

ISDN Integrated Services Digital Network

ISI ISDN- SIP- ISDN ISS ISDN - SIP - SIP ISUP ISDN User Part

IUT Implementation Under Test

IWUInterworking UnitLLCLow Layer CapabilityLPCLinear Predictive Coding

MGCF Media Gateway Control Funktion

MGW Media Gateway

NAPTR Naming Authority Pointer
NDC National Destination Code
NDUB Network Determined User Busy
NGN New Generation Network
NNI Network - Network - Interface

NS Name Server

OBCI Optional Backward Call Indicator
OIP Originating Identification Presentation

OIR Originating Identification presentation Restriction

PA Progress Indicator
PBX Private Branch Exchange
PCMA Puls-Code-Modulation- A law
PCMU Puls-Code-Modulation- U law
PER Packed Encoding Rules
PI Progress Indicator

PI_VA Progress Indicator Variable

PICS Protocol Implementation Conformance Statement
PIXIT Protocol Implementation eXtra Information for Testing

PRACK PRACK message
PROC Proceeding message

PSTN Public Switched Telephone Network

PT Posture Transport

QCELP Q-Code Excitation Linear Prediction

QoS Quality of Service REL Release Message

RLC Release Complete Message
S Syntactically invalid
SA Security Association
SC Sending Complete
SCN Switched Circuit Network
SDP Session Description Protocol

SII SIP ISDN ISDN

SIP Session Initiation Protocol

SIP-I Session Initiation Protocol - ISUP (SIP with encapsulated ISUP)

SIPS Session Initiation Protocol Security

SIS SIP ISDN SIP
SN Subscriber Number
SUS Suspend message
SUT System Under Test

TIR Terminating Identification Restriction

TP Test Purpose
TR Technical Report
TSS Test Suite Structure
UA User Agent

UAC User Agent Client

UDI Unrestricted Digital Information
UDUB User Determined User Busy
URI Uniform Resource Identifier

V Valid VA Variable

XML Extensible Markup Language

4 Test Suite Structure (TSS)

4.1 Test Suite Structure (TSS)

4.1.1 ISDN-SIP

C - Plane / U - Pla	ne		
Basic_Call	Successful	Voice	IS_XX_xx
		Codec	IS_CN_xx
		negotiation	
		Update Tests	IS_XX_UP_xx
		DTMF	IS_DTMF_xx
		UDI	IS_UD_xx
C - Plane	Unsuccessful		IS_XX_Uxx
Supplementary			
Services		CLIP	IS_XXSSCLIPxx
		CLIR	IS_XXSSCLIRxx
		COLP/COLR (TIP/TIR)	IS_XXSSCOLPxx
		CFU	ISI_XXSSCFUxx
			ISS_XXSSCFUxx
		CFB	ISI_XXSSCFBxx
			ISS_XXSSCFBxx
		CFNR	ISI_XXSSCFNRx
			ISS_XXSSCFNR:
		CFNL	ISS_XXSSCFNL>
		3PTY	ISI_XXSS3PTYxx
			ISS_XXSS3PTYx
		HOLD	ISI_XXSSHOLDx
		CONF	IS_XXSSCONFxX

4.1.2 SIP-ISDN

C - Plane / U - Plane		0.4 1.11=	OL ALL
Basic_Call	Successful	3,1 kHz audio	SI_AU_xx
		Codec	SI_XX_CN_xx
		negotiation	OL VV DT
		DTMF	SI_XX_DT_xx
		UDI	SI_UD_xx
C - Plane	Unsuccessful		SI_XX _Uxx
Supplementary		,	
Services		CLIP	SI_XXSSOIPxx
		CLIR	SI_XXSSOIRxx
		COLP/COLR	SI_XXSSCOLPxx
		(TIP/TIR)	
		CFU	SIS_XXSSCFUxx
			SII_XXSSCFUxx
		CFB	SIS_XXSSCFBxx
			SII_XXSSCFBxx
		CFNR	SIS_XXSSCFNRxx
			SII_XXSSCFNRxx
		3PTY	SII_XXSS3PTYXX
			SIS_XXSS3PTYXX
		TP	SI_XXSSTPxx
		CUG	SI_XXSSCUGxx
		HOLD	SI_XXSSHOLDxx
		CONF	SI_XXSSCONFxx
		CW	SI_XXSSCWxx
		ACR	SI_XXSSACRxx

4.1.3 PSTN-SIP

C - Plane	/ U - Plane		
Basic_Cal	l Successful		PS_AU_Xxx
C - Plane	Unsuccessful		PS_AU_Uxx
Suppleme	ntary		
Services	•	CLIP	PS_XXSSCLIPxx
		CLIR	PS_XXSSCLIRxx
		CFU	PSP_XXSSCFUxx
			PSS_XXSSCFUxx
		CFB	PSP_XXSSCFBxx
			PSS_XXSSCFBxx
		CFNR	PSP_XXSSCFNRxx
			PSS_XXSSCFNRxx
		CFNL	PSP_XXSSCFNLxx

4.1.4 SIP-PSTN

C - Plane / U - Plane			
Basic_Call	Successful	3,1 kHz audio	SP_AU_xx
	Unsuccessful		SP_XX_Uxx
Supplementary			
Services		CLIP	SP_XXSSCLIPxx
		CLIR	SP_XXSSCLIRxx
		CFU	SPS_XXSSCFUxx
			SPP_XXSSCFUxx
		CFB	SP_XXSSCFBxx
			SPP_XXSSCFBxx
		CFNR	SPS_XXSSCFNRxx
			SPP_XXSSCFNRxx

5 Numbering Scheme

5.1 General description

Pos 1: Network of the A-Subscriber.

Pos. 2: Network of the B-Subscriber.

Pos. 3: Network of the C-Subscriber.

Pos. 4: Network of the D-Subscriber.

Pos. 5: Network of the E-Subscriber.

The following Network Codes apply:

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

(underscore makes it easier to read the name)

P: PSTN

I: ISDN

S: SIP

(Extensions will be added when needed)

Pos. 6 and 7: Bearer- or Teleservice involved

XX: defined per PIXIT value

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

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

detrimental to Test Automation.

SP: Speech

AU: 3,1 kHz Audio

UD: UDI

UT: UDI/TA

CN: Codec negotiation

DT: DTMF

UP: UPDATE Method

Pos. 8 and 9:

_: No Supplementary Services Involved / Successful

_U: No Supplementary Services Involved / Unsuccessful

SS: Supplementary Services Involved

SI: Supplementary Services interaction

SN: Nonsymmetrical Supplementary Services Involved

ST: Supplementary Services transparent

5.2 Basic Call

	Speech	1	IS_XX_XX							
1	2	3	4	5	6	7	8	9	10	11
I	S	_	_	_	S	Р	_	_	Х	X

5.3 Supplementary Services

CLIP

											15
П	S		Х	Χ	S	S	С	L	Р	Х	Χ

IS_XXSSCLIP XX

6 Test purposes

The registration and application usage procedures in the ETSI TS shall be compliant to IETF RFC 3261 [28] and ETSI TS 124 229 [55]. The validation of the registration procedure is out of scope of the present document and is part of the Preamble used in the test cases.

The registration conformance tests based on ETSI TS 124 229 [55] described in ETSI TS 134 229-1 [54].

The preconditions mechanism shall be supported by the UE in case of supporting IMS.

The handling of preconditions at the originating or /and terminating UE (MGCF in case if interworking) is described in table 0.

Table 0

	PIXIT Values					
	UE (MGCF) originating case	UE (MGCF) terminating case				
VA	precondition" option-tag in the Supported header	local resource reservation is required at the terminating UE	local resource reservation is not required by the terminating UE and the terminating UE supports the precondition mechanism			
VA_1	"precondition" option-tag in the Supported header	the terminating UE shall make use of the precondition mechanism				
VA_2.1	"precondition" option-tag in the Supported header and required resources at the originating network are not reserved	the terminating UE shall make use of the precondition mechanism				
VA_2.2	"precondition" option-tag in the Supported header and required resources at the originating network are not reserved		the terminating UE shall use the precondition mechanism			
VA_3.1	"precondition" option-tag in the Supported header and required local resources at the originating network	the terminating UE shall make use of the precondition mechanism				
VA_3.2	"precondition" option-tag in the Supported header and required local resources at the originating network		the required local resources at the originating UE and the terminating UE are available, the terminating UE may use the precondition mechanism			
VA_4.1	INVITE request does not include the "precondition" option-tag in the Supported header	the terminating UE shall not make use of the precondition mechanism.				
VA_4.2	INVITE request does not include the "precondition" option-tag in the Supported header		the terminating UE shall not make use of the precondition mechanism.			

Dial string parameters options

	To header field- UE originated
VA_5.1	sip: dialled digits@homehostportion;user=dialstring
VA_5.2	sip: dialled digits@homehostportion;user=phone
VA_5.3	sip: dialled digits; phone-context=<"+"CC>@homehostportion;user=phone
VA_5.3	sip: dialled digits; phone-context=<"+"CC+NDC>@homehostportion;user=phone

	Request-URI
VA_6.1	E164 Address
	(format "+"CC+NDC+SN)
	(e.g. as User info in SIP URI with user= phone, or as tel URI)

6.1 Test Prerequisites

6.1.1 IP Version

These test specifications are based on the use of IPv4 for SIP message transport throughout all IMS nodes as specified in ETSI TR 123 981 [i.27] but do not exclude the use of IPv6 in the case that all involved IMS nodes support this version of the IP protocol.

6.1.2 Authentication and Security

The current test specification supports as default full IMS ETSI TS 133 203 [i.22] 3GPP security. Non-compliance with full IMS security features defined in ETSI TS 133 203 [i.22] is expected to be a problem mainly at the UE side, because of the potential lack of support of the USIM/ISIM interface (especially in 2G-only devices) and of the potential inability to support IPsec on some UE platforms. For those reasons, fallback to early IMS ETSI TR 133 978 [i.23] and SIP Digest authentication without key agreement and null authentication may be used to achieve satisfactory test results. Tests should however be executed with full IMS security if all required IMS nodes support it.

6.1.3 Registration and Subscription

6.1.3.1 SIP Call Flow

This clause describes the registration call flow under the authentication and security scope described in clause 4.2.2 in ETSI TS 186 011-2 [i.28].

6.1.3.1.1 Early IMS Registration and Subscription Call Flow [i.28]

Early IMS security does not allow SIP requests to be protected using an IPsec Security Association (SA) because it does not perform a key agreement procedure. IPsec security associations are not set up between UE and P-CSCF, as they are in the full IMS security solution. For early IMS security, the expected registration and subscription sequence is:

	Direc	tion]					
Step	UE	IMS	Message	Comment						
1				The UE establishes an IP bearer as required by its specific access network (optional).						
2	2 ←→			P-CSCF address discovery using DHCP procedures for IPv4 (optional).						
3	->	>	REGISTER	The UE sends initial registration for IMS services.	_					
4	← 200 OK		200 OK	The IMS responds with 200 OK.	Unprotectec					
5			SUBSCRIBE	The UE subscribes to its registration event package.	ğ					
6	+		200 OK or 202 Accepted	The IMS responds with 200 OK or 202 Accepted.	ec					
7	← NOTIFY			The IMS sends initial NOTIFY for registration event package, containing full registration state information for the registered public user identity in the XML body.	led					
8	-	>	200 OK	The UE responds with 200 OK.						

6.1.3.1.2 Full IMS Registration and Subscription Call Flow [i.28]

For full IMS security, the expected registration and subscription sequence is:

Cton	Step Direction Message Comment							
Step	UE	IMS	Message	Comment				
1				The UE establishes an IP bearer as required by its				
				specific access network (optional).				
2	+	\rightarrow		P-CSCF address discovery using DHCP procedures				
				for IPv4 (optional).				
3)	REGISTER	The UE sends initial registration for IMS services.				
4	+	-	401 Unauthorized	The IMS responds with a valid Digest AKA	Unprotected			
				authentication challenge and a list of integrity and	ᅙ			
				encryption algorithms supported by the network as	ect			
				defined in the IMS_AKA procedure of ETSI	.ed			
				TS 133 203 [i.22].				
5				Upon receipt of 401 Unauthorized, the UE selects the				
				first integrity and encryption algorithm combination on				
				the list received from the P-CSCF in 401				
				Unauthorized which is also supported by the UE. If				
				the P-CSCF did not include any confidentiality algorithm in 401 Unauthorized then the UE shall				
				select the NULL encryption algorithm. The UE then				
				proceeds to establish two new pairs of IPSEC				
				Security Associations (SA1 and SA2).				
6	\rightarrow		REGISTER	The UE sends another REGISTER with				
٥	• →		KEGIGTEK	authentication credentials over IPSEC security	by Pr			
				association SA1.	Ste			
7	7 ←				Protected by SA1			
	`		200 0.1	IPSEC security association SA1.	٥			
8	→ SUBSCRIBE The UE subscribes to its registration event package				_			
	over the IPSEC security association SA2.			lσ				
9	← 200 OK or 202 Accepted The IMS responds with 200 OK or 202 Accepted		The IMS responds with 200 OK or 202 Accepted over	te l				
	the IPSEC security association SA2.			tec				
10	+		NOTIFY	The IMS sends initial NOTIFY for registration event	9			
				package, containing full registration state information	S			
				for the registered public user identity in the XML	Protected by SA2			
				body, over the IPSEC security association SA2.] '~			
11 → 200 OK			200 OK	The UE responds with 200 OK over the IPSEC				
				security association SA2.				

6.1.3.1.3 SIP Digest Registration and Subscription Call Flow

For SIP Digest authentication without key agreement and null authentication, the expected registration and subscription sequence is:

Step	Direction	Message	Comment				
	UE IMS	9-					
1			The UE establishes an IP bearer as required by its specific access network (optional).				
2	$\leftarrow \rightarrow$		P-CSCF address discovery using DHCP procedures for IPv4 (optional).				
3	\rightarrow	REGISTER	The UE sends initial registration for IMS services.	_			
4	+	401 Unauthorized	The IMS responds with a valid HTTP Digest authentication challenge as defined in IETF RFC 2617 [i.24].				
5	→	REGISTER	The UE sends another REGISTER with authentication credentials.	Unprotected			
6	+	200 OK	The IMS responds with 200 OK.				
7	\rightarrow	SUBSCRIBE	The UE subscribes to its registration event package.				
8	+	200 OK or 202 Accepted	The IMS responds with 200 OK or 202 Accepted.				
9	+	NOTIFY	The IMS sends initial NOTIFY for registration event package, containing full registration state information for the registered public user identity in the XML body.				
10	\rightarrow	200 OK	The UE responds with 200 OK.				

6.1.4 Supported Options

6.1.4.1 Security

Support for security agreement is optional in case of Full IMS Reg. It shall only be used in case all IMS nodes support it.

6.1.4.2 Signalling Compression

"No SigComp" is the default signalling configuration in all test descriptions. Tests may be executed with signalling compression if the required nodes support it.

6.1.5 Number Resolution

"ENUM (IETF RFC 3761 [i.25]) is a capability that transforms E.164 numbers into domain names and then uses the DNS (Domain Name System) to discover NAPTR records that specify the services available for a specific domain name."

The test infrastructure focuses on the use of Infrastructure ENUM to map a telephone number into a SIP URI that could identify a specific point of interconnection (PoI) to that communication provider's network that could enable the originating party to establish communication with the associated terminating party either directly or through an IPX.

The Infrastructure ENUM platform has a tiered structure and provides authoritative, service specific information to the quering party. A combination of Tier 0, Tier 1 and Tier 2 registries enables global discovery of ENUM data.

When returning the SIP URI of an PoI the ENUM solution acts a hosted T2 ENUM registry for the number range holder. When returning a NS record the ENUM solution acts as either a Tier 0 or Tier 1 registry.

6.2 ISDN - SIP

6.2.1 Basic Call

6.2.1.1 Test purposes for ISDN-SIP Basic call Successful - Speech or 3,1 kHz audio

Successful	
Speech or 3,1 kHz audio calls	

IS_XX_01	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI EN 300 899-1 [23], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2					
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice						
Selection criteria:	Basic_call						
Test purpose:	Ensure that the call establishment using en-bloc sending is performed correctly. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the calling user. At the call establishment the SDP parameters in table 1 can be used.						
ISDN Parameter values:	BC=PIXIT, no HLC						
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	on					

Comments:					
	ISDN		SUT		SIP
	Case a)				
	SETUP	→		→	INVITE
	CALL PROC	+			
	ALERTING	+		+	180 Ringing
	CONN	+		+	200 OK INVITE
				→	ACK
			Conversation		
	DISC	→		→	BYE
	REL	-		+	200 OK BYE
	Case b) IMS				
	with 100 rel				
	SETUP	→		→	INVITE
	CALL PROC	-			
	ALERTING	-		+	180 Ringing
	/ LEET (TITO	1		→	PRACK
				-	200 OK
	CONN	+		+	200 OK INVITE
	00/4/4	1		<u>`</u>	ACK
			Conversation		, non
	DISC	→		→	BYE
	REL	(+	200 OK BYE
	Case c) IMS	1			200 011212
	SETUP	→		→	INVITE
	CALL PROC	-			IIIVIIL
	CALLTROO	<u> </u>		+	183 Session Progress
				→	PRACK
				/	200 OK
				→	UPDATE
				/	200 OK
	ALERTING	+		-	180 Ringing
	ALLIVING			→	PRACK
				-	200 OK
	CONN	+		-	200 OK INVITE
	CONIN	_		→	ACK
			Conversation	7	AUN
	DISC		Conversation	→	BYE
	DISC	→		7	
	REL	~		7	200 OK BYE

ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ITU-T Q.1912.5 [51], clause 7.3.1 ETSI EN 300 899-1 [23], clause 2.1.1 ETSI EN 383 001 [49], clause 7.3.1 ETSI TS 129 163 [i.20], clause 7.2.3.2 ISDN-SIP/Basic_call/Successful/Voice	IS_XX_02	ISDN refe	rence to:			NGN	I reference to:	
ETSI EN 300 899-1 [23], clause 2.1.1 ETSI EN 383 001 [49], clause 7.2.3. TSS reference: ISDN-SIP/Basic_call/Successful/Voice Selection criteria: Basic_call, SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.20], clause 7.2.3. Test purpose: Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message with the progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: Dial string parameters options=PIXIT TYPE_SDP=PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case a) SETUP The call is released from the called user. SIDN SUT SIP SIP CALL PROC CALL PROC	10_XX_02							
TSS reference: ISDN-SIP/Basic_call/Successful/Voice Selection criteria: Basic_call, SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.2 Test purpose: Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message with the progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. BC=PIXIT, no HLC BC=PIXIT, no HLC SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition SIP SIP SIP SIP SIP CALL PROC EALL PRO								
Selection criteria: Basic_call, SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.2] Test purpose: Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message with th progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: BC=PIXIT, no HLC Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case b) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) SETUP								
Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message with the progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition Comments: SIP Case a) SETUP CALL PROC ALERTING PI #1 CONN CONN CONVERSATION CONVERSATION CONVERSATION CONVERSATION CONVERSATION PI #1 CONN CONVERSATION CASE CONVERSATION PI #2 CALL PROC CONVERSATION CASE CONVERSATION PI #3 CONVERSATION CONVERSATION PI #4 CONVERSATION CASE CONVERSATION PI #4 CONVERSATION CASE CONVERSATION CASE CONVERSATION PI #4 CASE CONVERSATION CONVERSATION	TSS reference:							
Ensure that the ISDN user in the state U3 receives an ALERTING message with th progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: BC=PIXIT, no HLC values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) SETUP	Selection criteria:	Basic_call, SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.20]						
progress indicator information element "call is not end-to-end ISDN (#1)" when the user answers with 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) SETUP	Test purpose:							
user answers with 180 Ringing message. Ensure that in the active call state (M10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. BC=PIXIT, no HLC BC=PIXIT, no HLC BC=PIXIT, no HLC Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN								
Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) SETUP					all is not e	nd-to-en	d ISDN (#1)" when the SIP	
B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user. ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case b) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) SETUP → INVITE CALL PROC ← 180 Ringing PI #1 CONN ← 200 OK INVITE CALL PROC ← 180 Ringing DISC ← 200 OK INVITE CALL PROC ← 400 OK BYE Case c) SETUP → INVITE CALL PROC ← 400 OK BYE Case c) SETUP → INVITE CALL PROC ← 400 OK BYE Case c) SETUP → INVITE CALL PROC ← 400 OK BYE CASE CONVERSATION FORCES								
The call is released from the called user.								
ISDN Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN		B-channels is perfor	mea corre from the c	ctly (e.g. te	sting QoS	parame	ters).	
values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN SUT SIP Case a) INVITE CALL PROC ISON INVITE ALERTING ISON INVITE CONN ISON INVITE CONN ISON INVITE CONN ISON INVITE CONVERSATION INVITE Case c) INVITE Case c) INVITE CALL PROC INVITE Case c) INVITE CALL PROC INVITE Case c) INVITE CALL PROC INVITE CALL PROC INVITE CALL PROC INVITE INVITE INVITE CALL PROC INVITE INVITE INVITE INVITE INVITE INVITE INVITE INVITE INVITE <td>ISDN Parameter</td> <td></td> <td>iioiii iile c</td> <td>alleu user.</td> <td></td> <td></td> <td></td>	ISDN Parameter		iioiii iile c	alleu user.				
Dial string parameters options=PIXIT		DO-ITATT, NOTICE						
TYPE_SDP= PIXIT; PIXIT for supported header:		Dial string paramete	rs ontions	=PIXIT				
PIXIT for supported header:	on ranamotor values.	Diai ouring paramoto	io optiono					
PIXIT for supported header:		TYPE_SDP= PIXIT;						
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN		,						
Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition Comments: ISDN			header:					
Case c) Supported: 100 rel and precondition Comments: ISDN								
SDN				1				
SDN	0	Case c) Supported:	100 rel an	d precondit	ion			
Case a) → INVITE CALL PROC ← 180 Ringing ALERTING ← 200 OK INVITE PI #1 → ACK CONN ← BYE REL → 200 OK BYE Case c) → INVITE CALL PROC ← 183 Session Progress → PRACK ← 200 OK → PRACK ← 200 OK → UPDATE	Comments:	ICDN		CI	IT		CID	
SETUP → INVITE CALL PROC ← ALERTING ← 180 Ringing PI #1 CONN ← 200 OK INVITE → ACK Conversation DISC ← BYE REL → 200 OK BYE Case c) SETUP → INVITE CALL PROC ← 183 Session Progres → PRACK ← 200 OK → UPDATE				30) [SIP	
CALL PROC ← ALERTING ← PI #1 ← CONN ← ← 200 OK INVITE ACK ← BYE REL → 200 OK BYE Case c) → INVITE CALL PROC ← 183 Session Progress → PRACK ← 200 OK → UPDATE							INIVITE	
ALERTING PI #1 CONN ←						7	INVIIL	
PI #1 CONN ← 200 OK INVITE → ACK → ACK DISC ← BYE REL → 200 OK BYE Case c) → INVITE CALL PROC ← 183 Session Progress → PRACK ← 200 OK → UPDATE						4	180 Ringing	
CONN ←							100 Kinging	
DISC ← BYE REL → 200 OK BYE Case c)			+			+	200 OK INVITE	
Conversation								
REL → 200 OK BYE Case c) SETUP → INVITE CALL PROC ← 183 Session Progres PRACK PRACK UPDATE				Conver	sation			
REL → 200 OK BYE Case c) SETUP → INVITE CALL PROC ← 183 Session Progres PRACK PRACK UPDATE		DISC	+			+	BYE	
SETUP → INVITE CALL PROC ← 183 Session Progres		REL	→			→	200 OK BYE	
SETUP → INVITE CALL PROC ← 183 Session Progres PRACK 200 OK UPDATE								
CALL PROC								
← 183 Session Progres → PRACK ← 200 OK → UPDATE						→	INVITE	
→ PRACK ← 200 OK → UPDATE		CALL PROC	←					
→ PRACK ← 200 OK → UPDATE							100 0 : 5	
← 200 OK → UPDATE								
→ UPDATE								
ALERTING PI #1 ← 180 Ringing		ALERTING DI #1	4					
ALERTING PI#I ← 180 Ringing → PRACK		ALEKTING PI#I						
→ PRACK ← 200 OK			++					
CONN ← 200 OK INVITE		CONN	-					
→ ACK		001414	+++					
Conversation				Conver	sation	 -	,	
DISC		DISC	+	2011101		+	BYE	
REL → 200 OK BYE								

IS_XX_02A	ISDN refe	rence to:		N	GN	reference to:	
10_7/7_02/1	ETSI EN 300 403-1		se 5.1.5.1			2.5 [51], clause 7.3.1	
	ETSI EN 300 899-1					001 [49], clause 7.3.1	
			ETSI TS 129 163 [i.20], clause 7.2.3.2.5				
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice						
Selection criteria:	Basic_call, ETSI TS 129 163 [i.20]						
Test purpose:	Ensure that call esta	blishment	using en-b	loc sending is	per	formed correctly.	
	P-Early-Media heade	er not sup	pported, 18	3 is not interwo	rke	d sending complete	
	indication received.						
					/e a	Progress message when	
	the SIP user answers Ensure that in the ac				ror	the media and	
	B-channels is perforr						
	The call is released f			sting QOO parai	HOU	013).	
ISDN Parameter	BC=PIXIT, no HLC						
values:	20						
SIP Parameter values:	Dial string parameter	s options:	=PIXIT				
	TYPE_SDP= PIXIT;						
	PIXIT for supported I	neader:					
	Case a) no 100 rel						
	Case b) Supported:	100 rel					
	Case c) Supported: 1	100 rel an	d preconditi	on			
Comments:							
	ISDN		SU	Т		SIP	
	Case a)						
	SETUP	→		•	}	INVITE	
	CALL PROC	+				100.0	
	ALEDTINO	+			<u>←</u> ←	183 Session Progress	
	ALERTING PI #1	7		'	_	180 Ringing	
	CONN	+			-	200 OK INVITE	
	OOM	+			<u>`</u>	ACK	
			Conver			AON	
	DISC	+	0011101		-	BYE	
	REL	→			<u>`</u>	200 OK BYE	
		-					
	Case c)						
	SETUP	→		-	}	INVITE	
	CALL PROC	+					
				•	(183 Session Progress	
					}	PRACK	
					(200 OK	
		\perp			}	UPDATE	
	ALEDENIA :: ::	1.			<u> </u>	200 OK	
	ALERTING PI #1	+			(180 Ringing	
)	PRACK	
	CONINI				(200 OK INVITE	
	CONN	+			/	200 OK INVITE	
			Canvar)	ACK	
	DISC	+	Conver		-	BYE	
	REL	→ ·			<u>~</u> →	200 OK BYE	
	IIVEE	7				1200 OK DTE	

IS_XX_02B	ISDN refe	rence to	:	NGN reference to:				
	ETSI EN 300 403-1	TSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI TS 129 163 [i.20], clau						
	ETSI EN 300 899-1							
TSS reference:	ISDN-SIP/Basic_call/							
Selection criteria:	Basic_call, ETSI TS the network	129 163 [i.20]; <i>P-Early</i>	-Media header su	pported and inserted by			
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. P-Early-Media header supported. Ensure that the ISDN user in the state U2 receive a Call Proceeding message who SIP user answers with 183 Session Progress and P-Early-Media header supports.							
	SIP user answers with 183 Session Progress and P-Early-Media header support and inserted by the network. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user.							
ISDN Parameter values:	BC=PIXIT, no HLC	0 0.0	<u> </u>					
SIP Parameter values:	Dial string parameter TYPE_SDP= PIXIT;	Dial string parameters options=PIXIT TYPE_SDP= PIXIT;						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition							
Comments:								
	ISDN		SUT		SIP			
	Case a)							
	SETUP	→		→	INVITE			
	CALL PROC PI #8	+		+	183 Session Progress			
	ALERTING	+		+	180 Ringing			
	CONN	+		+	200 OK INVITE			
				→	ACK			
			Conversa					
	DISC	+		-	BYE			
	REL	→		→	200 OK BYE			

IS_XX_02C	ISDN refere ETSI EN 300 403-1 [i. ETSI EN 300 899-1 [2	3], clause 5.1.5.1 23], clause 2.1.1	ITU-T Q.191 ETSI EN 383	reference to: 2.5 [51], clause 7.3.1 001 [49], clause 7.3.1 33 [i.20], clause 7.2.3.2.5			
TSS reference:	ISDN-SIP/Basic_call/S						
Selection criteria:	the network		•	upported and inserted by			
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly. P-Early-Media header supported and inserted by the network. Ensure that the ISDN user in the state U3 receives a Progress message when the SIP user answers with 183 Session Progress. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). The call is released from the called user.						
ISDN Parameter values:	BC=PIXIT, no HLC						
SIP Parameter values: Comments:	Dial string parameters TYPE_SDP= PIXIT; PIXIT for supported he Case a) no 100 rel Case b) Supported: 10 Case c) Supported: 10	eader: 10 rel	tion				
Comments.	ISDN	T 01	JT	SIP			
	Case a)	30	J1	SIF			
	SETUP	→	→	INVITE			
	CALL PROC	-		INVITE			
	PROGRESS ← 183 Session Progress PI#8						
	ALERTING ← 180 Ringing						
	CONN	←	+	200 OK INVITE			
			→	ACK			
			rsation				
	DISC	(+	BYE			
	REL	→	→	200 OK BYE			

IS_XX_03	ISDN reference to:			NGN reference to:					
	ETSI EN 300 403-1	ETSI EN 300 403-1 [i.3], clause 5.1.5.1			12.5 [51], clause 7.3				
	ETSI EN 300 899-								
TSS reference:		ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; ITU-T Q.19	Basic_call; ITU-T Q.1912.5 [51] Profile B with PI							
Test purpose:	Ensure that call establi								
	Ensure that the ISDN u	Ensure that the ISDN user in the state U3 receives an ALERTING message with t							
	progress indicator infor								
	Interworking point" whe								
					e media and B-channels				
	is performed correctly (NOTE: According to	e.g. testing	QOS paramete	ers).	the ISDN access may				
			cator informatio		the ISDN access may				
ISDN Parameter	BC=PIXIT , no HLC	ogress mur	cator iriioririatio	ii elements.					
values:	PI_VA (PIXIT)								
SIP Parameter	Dial string parameters	ontions-PI	XIT						
values:	Diai string parameters	options=i i	ZI I						
	TYPE_SDP= PIXIT;								
	=_051 = 1 1/411,								
	PIXIT for supported he	ader:							
	Case a) no 100 rel								
	Case b) Supported: 10	0 rel							
	Case c) Supported: 10	0 rel and pr	recondition						
Comments:									
	ISDN		SUT		SIP				
	Case a)								
	SETUP	→		→	INVITE				
	CALL PROC	+							
	ALERTING	-		+	180 Ringing				
	PI	_							
	CONN	+		+	200 OK INVITE				
				→	ACK				
	7100		Conversati						
	DISC	→		→	BYE				
	REL	+		-	200 OK BYE				
	Case c)				INIV/ITE				
	SETUP	→		→	INVITE				
	CALL PROC				102 Coopies Drassa				
				<u> </u>	183 Session Progress PRACK				
				→					
				+	200 OK UPDATE				
		+		+	200 OK				
	ALERTING PI# VA	+		+	180 Ringing				
	ALENTING FI# VA			→ -	PRACK				
				+	200 OK				
	CONN	+		 	200 OK INVITE				
	COININ			→	ACK				
			Converse		AUN				
	DISC	→	Conversati	ion 🗦	BYE				
	REL	+		+	200 OK BYE				
	IVET	~		7	ZUU UN DIE				

IS_XX_03A	ISDN refe		NGN reference to:						
		ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI TS 129 163 [i.20], clause 7.							
	ETSI EN 300 899-1								
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:	Basic_call; ETSI TS 129 163 [i.20] P-Early-Media header not supported								
Test purpose:		Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message including a							
	progress indicator I.E.								
		k beyond In	iterworking	point" when	the SIP	user answers with 180			
	Ringing message.	ve sell state	(NI40) the			and Dahamala			
					er on the	e media and B-channels			
	is performed correctly NOTE: According to	(e.g. testing	3 QUS para	meters).	cont to	the ISDN access may			
				nation eleme		the ISDN access may			
ISDN Parameter	BC=PIXIT , no HLC	rogress mu	cator irriorr	nation eleme	51113.				
values:	PI_VA (PIXIT)								
SIP Parameter	Dial string parameters	ontions=PI	XIT						
values:	Blai string paramotors		7.11						
	TYPE_SDP= PIXIT;								
	PIXIT for supported he	eader:							
	Case a) no 100 rel								
	Case b) Supported: 10								
	Case c) Supported: 10	00 rel and p	recondition						
Comments:					1				
	ISDN		S	UT		SIP			
	Case a)								
	SETUP	→			→	INVITE			
	CALL PROC	-				1,00 5:			
	ALERTING	←			+	180 Ringing			
	PI CONN					200 OK INIVITE			
	CONN	+			←	200 OK INVITE ACK			
			Convo	rsation	7	ACK			
	DISC	→	Conve	isalion	→	BYE			
	REL	-			+	200 OK BYE			
	KEL				7	200 OK BTE			
	Case c)				+				
	SETUP	→			→	INVITE			
	CALL PROC	-			+ -	11 4 V I I L			
	3/122 / 1100								
					+	183 Session Progress			
					→	PRACK			
					+	200 OK			
					→	UPDATE			
					+	200 OK			
	ALERTING PI# 1	+			+	180 Ringing			
					→	PRACK			
					+	200 OK			
	CONN	+			+	200 OK INVITE			
					→	ACK			
			Conve	rsation					
	DISC	→			→	BYE			
	REL	+	<u> </u>	·	+	200 OK BYE			

IS_XX_03B	ISDN refe	rence to	NGN reference to:						
10_112000		ETSI EN 300 403-1 [i.3], clause 5.1.5.1			ITU-T Q.1912.5 [51], clause 7.3				
	ETSI EN 300 899-1				2 2				
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:		Basic_call; ETSI TS 129 163 [i.20] P-Early-Media header supported							
Test purpose:	Ensure that call establis								
		Ensure that the ISDN user in the state U3 receives an ALERTING message including							
	PI#8 when the SIP user	answer	s with 180 Ringing	message.					
					e media and B-channels				
	is performed correctly (e	e.g. testi	ng QoS parameters	s).					
					the ISDN access may				
		gress in	dicator information	elements.					
ISDN Parameter	BC=PIXIT, no HLC								
values:	PI_VA (PIXIT)								
SIP Parameter	Dial string parameters of	ptions=l	PIXIT						
values:									
	TYPE_SDP= PIXIT;								
	PIXIT for supported hea	der:							
	Case a) no 100 rel								
	Case b) Supported: 100		1141						
2	Case c) Supported: 100	rei and	precondition						
Comments:	IODN	1	OUT		T OID				
	ISDN		SUT		SIP				
	Case a)	_			15 15 47 75				
	SETUP	→		→	INVITE				
	CALL PROC	(100 51				
	ALERTING	-		+	180 Ringing				
	PI#8	-			222 01/10/10/10/10				
	CONN	+		(200 OK INVITE				
		1		→	ACK				
	7100	_	Conversation		2) (2				
	DISC	→		→	BYE				
	REL	(+	200 OK BYE				
		1							
	Case c)								
	SETUP	→		→	INVITE				
	CALL PROC	+							
		1							
		1		-	183 Session Progress				
		1		→	PRACK				
		1		(200 OK				
		1		→	UPDATE				
		ļ <u>. </u>		+	200 OK				
	ALERTING PI# 1, PI#8	+		+	180 Ringing				
		ļ		→	PRACK				
		<u> </u>		+	200 OK				
	CONN	+		←	200 OK INVITE				
		<u> </u>		→	ACK				
		1	Conversation						
	DISC	→		→	BYE				
	REL	(+	200 OK BYE				

IS_XX_04	ISDN reference to:			NGN reference to:					
	ETSI EN 300 403-1 [i.3], clause 5.1.5.1			ITU-T Q.1912.5 [51], clause 7.3.1					
		899-1 [23], clause 2.		ETSI EN 3	83 001 [49], clause 7.1.1				
TSS reference:		_call/Successful/Voic							
Selection criteria:	Basic_call; ITU-	Basic_call; ITU-T Q.1912.5 [51] Profile B without PI							
Test purpose:		Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message without the							
				s not end-to-en	d ISDN (#1)" when the SIP				
		th 180 Ringing mess		voice transfer o	on the media and B-channels				
		rectly (e.g. testing Q			on the media and b-charmers				
ISDN Parameter	BC=PIXIT, no H		oo para	meters).					
values:	B0=1 1X11, 110 11	LO							
SIP Parameter values:	Dial string paran	neters options=PIXIT							
	31								
	TYPE_SDP= PIX	XIT;							
	PIXIT for suppor								
	Case a) no 100								
	Case b) Support		100						
Commonto	Case c) Support	ed: 100 rel and prece	ondition						
Comments:	ISDN		SUT		SIP				
	Case a)		301		SIF				
	SETUP	→		→	INVITE				
	CALL PROC	-			INVIIL				
	ALERTING	(+	180 Ringing				
	ALLIVIIIVO				100 Kinging				
	CONN	((200 OK INVITE				
				<u>→</u>	ACK				
		Cor	nversati	on					
	DISC	→		→	BYE				
	REL	+		(200 OK BYE				
	Case c)								
	SETUP	→		→	INVITE				
	CALL PROC	+							
				(183 Session Progress				
				→	PRACK				
				(200 OK				
				→	UPDATE				
	ALEDTING			+	200 OK				
	ALERTING	-		+	180 Ringing				
				→	PRACK				
					200 OK				
	CONN	+		-	200 OK INVITE				
	COININ			→	ACK				
		Cor	nversati		7.01				
	DISC	→	ivoisali	→	BYE				
	REL				200 OK BYE				
	1	1- 1			200 010 012				

IS_XX_05	ISDN reference to:			NGN reference to:					
	ETSI EN 300 403-1 [i.3], clause 5.1.5.1			ITU-T Q.1912.5 [51], clause 7.3					
			3], clause 2.1.1	ETSI EN 3	83 001 [49], clause 7.3				
TSS reference:		ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.20]								
Test purpose:	Ensure that the call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives a CONNECT message including a								
					o-end ISDN (#1)" location wers with a 200 OK				
	message.	u iiilei woi	king point when the	e oir usei aiis	wers with a 200 OR				
		ne active o	call state (N10) the v	oice transfer o	n the media and B-				
			rectly (e.g. testing (
ISDN Parameter	BC=PIXIT, no F		(-7:				
values:	·								
SIP Parameter values:	Dial string parar	neters opt	tions=PIXIT						
	TYPE_SDP= PI	XIT;							
	PIXIT for suppo	rted heade	er:						
	Case a) no 100								
	Case b) Suppor	ted: 100 re	el						
	Case c) Suppor	ted: 100 re	el and precondition						
Comments:		1		•					
	ISDN		SUT		SIP				
	Case a)				IN N //TE				
	SETUP CALL PROC	→ ←		→	INVITE				
	CONN PI# 1	-		+	200 OK INVITE				
	CONN FI# I			→	ACK				
			Conversation	-	ACK				
	DISC	→	Conversation	→	BYE				
	REL	-		-	200 OK BYE				
	1122				200 GRETE				
	Case c)								
	SETUP	→		→	INVITE				
	CALL PROC	(
				(183 Session Progress				
				→	PRACK				
				(200 OK				
				→	UPDATE				
				←	200 OK				
	CONN PI# 2	+		+	200 OK INVITE				
				→	ACK				
			Conversation						
	DISC	→		→	BYE				
	REL	+		←	200 OK BYE				

IS_XX_06	ISDN reference to:			NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.1.5.1			ITU-T Q.1912.5 [51], clause 7.3			
	ETSI EN 300 899-1 [23]						
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice						
Selection criteria:	Basic_call; ITU-T Q.1912.5 [51] Profile B with PI						
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly.						
	Ensure that the ISDN user in						
	progress indicator information						
	Interworking point" when the						
	Ensure that in the active cal				e media and B-channels		
	is performed correctly (e.g. to NOTE: According to ITU)	testing	QoS paramete	ers).	the ICDN access may		
	contain 2 Progres				the ISDN access may		
ISDN Parameter	BC=PIXIT , no HLC	ss maic	ator iniornatio	ni elements.			
values:	PI_VA (PIXIT)						
SIP Parameter	Dial string parameters optio	nc_DIV	/IT				
values:	Diai stillig parameters optio	115=Γ1	XI I				
values.	TYPE_SDP= PIXIT;						
	111 L_001 = 11X11,						
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel	and pre	econdition				
Comments:	, i						
	ISDN		SUT		SIP		
	Case a)						
	SETUP	→		→	INVITE		
	CALL PROC	+					
	CONN PI# VA	+		+	200 OK INVITE		
				→	ACK		
			Conversation	on			
	DISC	→		→	BYE		
	REL	+		+	200 OK BYE		
	Case c) Supported: 100 rel						
	and precondition						
	SETUP	→		→	INVITE		
	CALL PROC	+					
				←	183 Session		
					Progress		
		1		→	PRACK		
				+	200 OK		
		1		→	UPDATE		
		<u> </u>		(200 OK		
	CONN PI# VA	+		+	200 OK INVITE		
				→	ACK		
		<u> </u>	Conversation				
	DISC	→		→	BYE		
	REL	←		(200 OK BYE		

IS_XX_07	ISDN re	ference to:		NGN reference to:					
	ETSI EN 300 403 ETSI EN 300 899	-1 [i.3], clau	se 5.1.5.1	ITU-T Q.1912.5 [51], clause 7.3. ETSI EN 383 001 [49], clause 7.3					
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:		Basic_call; ITU-T Q.1912.5 [51] without PI							
Test purpose:	Ensure that the ISDI progress indicator I. "Network beyond Int message.	Ensure that the call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives a CONNECT message without a progress indicator I.E. with the descriptions "call is not end-to-end ISDN (#1)" location "Network beyond Interworking point" when the SIP user answers with a 200 OK message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels							
ISDN Parameter	BC=PIXIT, no HLC	iy (e.g. testii	ig Qoo paran	ictors).					
values:	BO-I IXIT, NOTILO								
SIP Parameter values:	Dial string paramete	rs options=F	PIXIT						
	TYPE_SDP= PIXIT; PIXIT for supported Case a) no 100 rel Case b) Supported: Case c) Supported:	header: 100 rel	precondition						
Comments:									
	ISDN		SI	JT		SIP			
	Case a)								
	SETUP	→			→	INVITE			
	CALL PROC	+							
	CONN	←			←	200 OK INVITE			
					→	ACK			
			Conve	rsation					
	DISC	→			→	BYE			
	REL	+			+	200 OK BYE			
	Case c)								
	SETUP	→			→	INVITE			
	CALL PROC	+							
					←	183 Session Progress			
					→	PRACK			
					+	200 OK			
					→	UPDATE			
					+	200 OK			
	CONN	+			+	200 OK INVITE			
					→	ACK			
			Conve	rsation					
	DISC	→			→	BYE			
	REL	-			+	200 OK BYE			

IS_SP_08	ISDN rof	erence to:		N	IGN rofe	erence to:			
13_3F_00	ETSI EN 300 403-1	5152							
	ETSI EN 300 899-	21.3.2	ITU-T Q.1912.5 [51], clause 7.3 ETSI EN 383 001 [49], clause 7.3 ETSI TS 129 163 [i.20], clause 7.2.3.5.1						
	L 101 L 14 300 033	2.1.1							
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:				1 [49] Profile F	3 or FTS	SLTS 129 163 [i 20]			
Test purpose:	Basic_call; SIP Profile A or ETSI EN 383 001 [49] Profile B or ETSI TS 129 163 [i.20] Ensure that call establishment using overlap sending is performed correctly.								
Tool pulpodo.	Ensure that the ISDI								
	progress indicators "								
	Interworking point" v								
						media and B-channels			
	is performed correct								
ISDN Parameter	BC=speech, no HLC		•	,					
values:	·								
SIP Parameter values:	Dial string paramete	rs options=PIX	(IT						
	TYPE_SDP= PIXIT;								
	PIXIT for supported	header:							
	Case a) no 100 rel								
	Case b) Supported:		1						
	Case c) Supported:	100 rel and pre	econditio	n					
Comments:	IODN			OUT		T OID			
	ISDN			SUT		SIP			
	Case a)								
	SETUP	→							
	SETUP ACK	+				INIV/ITE			
	INFO	→			→	INVITE			
	ALERTING				+	180 Ringing			
	PI #1 CONN	+			+	200 OK INVITE			
	COMM				→ -	ACK			
			Co	nyaraatian	7	ACK			
	DISC		Co	nversation		BYE			
	REL	→			→ ←	200 OK BYE			
	KEL	7				200 OK BYE			
	Cooo o								
	Case c) SETUP	→							
	SETUP ACK	+							
	INFO	→				INVITE			
	INFO	7			→ ←	183 Session			
					_	Progress			
					→	PRACK			
					-	200 OK			
					→	UPDATE			
		1			-	200 OK			
	ALERTING	+			-	180 Ringing			
	PI #1					100 Kinging			
	1 1 # 1				→	PRACK			
					-	200 OK			
	CONN	+			-	200 OK INVITE			
	COININ	— `			→	ACK			
			Co	nversation		/ NOIX			
	DISC	→		iiveisalloii	→	BYE			
	REL	-			-	200 OK BYE			
	IIVEE	_				200 ON DTE			

IS SP 08A	ISDN re	ISDN reference to: NGN reference to:							
	ETSI EN 300 403-	1 [i.3], clause	S 129 163 [i.20], clause 7.2.3.5.1						
	ETSI EN 300 899								
TSS reference:		SIP-ISDN/Basic_call/Successful/3,1 kHz audio							
Selection criteria:		Basic_call; ETSI TS 129 163 [i.20] overlap receiving supported; In-Dialog Method							
	SIP PBX								
Test purpose:	Ensure that call esta								
	Ensure that the ISDI				ERTING	message when the			
	SIP user answers wi								
					on the	media and B-channels			
ICDN Davamatav	is performed correct BC=speech, no HLC		QoS parar	neters).					
ISDN Parameter values:	BC=speecn, no HLC	,							
SIP Parameter values:	Dial string paramete	ro ontions_DI	VIT						
SIP Parameter values.	Diai String paramete	is opiioris=Fi	^ 11						
	TYPE_SDP= PIXIT;								
	PIXIT for supported	header							
	Case a) no 100 rel	ricader.							
	Case b) Supported:	100 rel							
	Case c) Supported: 100 rel and precondition								
Comments:		•							
	ISDN			SUT		SIP			
	Case a)								
	SETUP	→							
	SETUP ACK	+							
	INFO	→			→	INVITE cseg1			
					+	183 Session			
	INIEO					Progress cseg1			
	INFO	→			→	INFO cseg2			
					+	200 OK cseg2			
	Call proceeding	+			+	102 2024			
	Call proceeding					183 cseg1			
	ALERTING	+			+	180 Ringing			
	CONN	(+	200 OK INVITE			
					→	ACK			
			Conv	ersation					
	DISC	→		200	→	BYE			
	REL	+			+	200 OK BYE			
L	L					_			

IS_SP_08B	ISDN refer		NGN reference to:						
	ETSI EN 300 403-1 [i.3], clause 5.1.5.2 ETSI TS 129 163 [i.20], clause 7 ETSI EN 300 899-1 [23], clause 2.1.1								
TSS reference:		ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; ETSI TS 1			rted; mu	Itiple INVITE				
	Overlap Dialling Proc								
Test purpose:	Ensure that call estab								
	Ensure that the ISDN			RTING r	nessage when the				
	SIP user answers wit	h a 180 Ringing m	essage.						
	Ensure that in the act				iedia and B-				
ICDN Devementes	channels is performed	a correctly (e.g. tes	sting QoS paramete	rs).					
ISDN Parameter values:	BC=speech, no HLC								
SIP Parameter values:	Dial string parameters	o ontions_DIVIT							
SIP Parameter values.	Diai string parameters	s options=PIATI							
	TYPE_SDP= PIXIT;	TYPE_SDP= PIXIT;							
	PIXIT for supported header:								
	Case a) no 100 rel								
	Case b) Supported: 100 rel								
	Case c) Supported: 1		lition						
Comments:	, , ,	•							
	ISDN		SUT		SIP				
	Case a)								
	SETUP	→		→	INVITE				
	SETUP ACK	(←	484				
				→	ACK				
	INFO	→		→	INVITE				
				←	484				
				→	ACK				
	Call proceeding	←		(183 Session				
					Progress				
	ALERTING	←		+	180 Ringing				
	CONN	-		+	200 OK INVITE				
	COININ			→	ACK				
			Conversation	7	AUN				
	DISC	→	Conversation	→	BYE				
	REL	+		-	200 OK BYE				
	INEL				ZUU UN DIE				

IS_SP_08C	ETSI EN 300 899-1 [23], clause 2.1.1					ference to: i.20], clause 7.2.3.5.1		
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; ETSI TS Dialling Procedures;			ceiving supp	orted; m	ultiple INVITE Overlap		
Test purpose:	Ensure that the ISDN SIP user answers wi Ensure that in the ac	Ensure that call establishment using overlap sending is performed correctly. Ensure that the ISDN user in the state U2 receives an ALERTING message when the SIP user answers with a 180 Ringing message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).						
ISDN Parameter values:	BC=speech, no HLC							
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition							
Comments:	у сансти, саррина	<u> </u>						
	ISDN Case a)		;	SUT		SIP		
	SETUP SETUP ACK	→			→	INVITE csq 1		
	INFO	→			→ ← →	INVITE csq 2 484 csq 1 ACK		
	Call proceeding	+			←	183 Session csq 2 Progress		
	ALERTING CONN	+			← ← →	180 Ringing csq2 200 OK INVITE ACK		
	DISC	→	Conv	ersation	→	BYE		
	REL	-			-	200 OK BYE		

IS_XX_09	ISDN reference to:			NGN reference to:					
	ETSI EN 300 899-1 [23], clause 2.1.1			ITU-T Q.1912.5 [51], clause 7.3 ETSI EN 383 001 [49], clause 7.3					
TSS reference:		ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call;ITU-T Q.1912.5 [51] Profile B with PI								
Test purpose:		blishment using overla							
		User in the state U2 re							
				eyon	d Interworking point" when				
		s with a 180 Ringing me		for on	the media and B-channels				
		y (e.g. testing QoS par		iei on	the media and b-channels				
	NOTE: According	to ITU-T Q 699 [52] ev	verv messan	e sen	t to the ISDN access may				
		Progress indicator info							
ISDN Parameter	BC=PIXIT, no HLC								
values:	PI_VA (PIXIT)								
SIP Parameter values:	Dial string parameter	rs options=PIXIT							
	TYPE_SDP= PIXIT;	•							
		d - m							
	PIXIT for supported I Case a) no 100 rel	reader:							
	Case b) Supported:	100 ral							
		100 rel 100 rel and preconditio	n						
Comments:	Case of Supported.	100 for and procondition							
Commonto.	ISDN		SUT		SIP				
	Case a)								
	SETUP	→							
	SETUP ACK	+							
	INFO	→		→	INVITE				
	ALERTING PI #VA	←		+	180 Ringing				
	11111111			→	INVITE				
	CONN	(+	200 OK INVITE				
	001111	-		<u>→</u>	ACK				
			Conversa	_					
			tion						
	DISC	→		→	BYE				
	REL	+		(200 OK BYE				
	Case c)								
	SETUP	→							
	SETUP ACK	+							
	INFO	→		→	INVITE				
				+	183 Session Progress				
				→	PRACK				
				+	200 OK				
				→	UPDATE				
				+	200 OK				
	ALERTING PI #VA	←		+	180 Ringing				
				^	PRACK				
				+	200 OK				
	CONN	+		+	200 OK INVITE				
				→	ACK				
			Conversa						
			tion						
	DISC	→		→	BYE				
	REL	←		+	200 OK BYE				

IS_XX_10	ISD	N reference	ce to:	NGN reference to:				
			, clause 5.1.5.1		912.5 [51], clause 7.3.1			
					83 001 [49], clause 7.1.1			
TSS reference:		ISDN-SIP/Basic_call/Successful/Voice						
Selection criteria:		Basic_call; ITU-T Q.1912.5 [51] Profile B without PI						
Test purpose:		Ensure that call establishment using overlap sending is performed correctly.						
					RTING message without the			
				s not end-to-en	d ISDN (#1)" when the SIP			
	user answers w							
					on the media and B-channels			
IODN D			. testing QoS para	meters).				
ISDN Parameter	BC=PIXIT, no F	ILC						
values:								
SIP Parameter values:	Dial string para	meters opti	ions=PIXII					
	TYPE ODD D	IVIT.						
	TYPE_SDP= PI	XII;						
	DIVIT for ourse	rtad baada	Ar.					
	PIXIT for suppo Case a) no 100		7I.					
	Case b) Suppor		اد					
			el and precondition					
Comments:	Case c) Suppor	ica. 100 ic	and precondition					
Comments.	ISDN		SUT		SIP			
	Case a)		001		011			
	SETUP	→						
	SETUP ACK	′						
	INFO	<u>`</u>		→	INVITE			
	ALERTING	-		/	180 Ringing			
	ALLINING	`			100 Kinging			
	CONN	+		+	200 OK INVITE			
	001111			→	ACK			
			Conversation		7.610			
	DISC	→	Convoidan	→	BYE			
	REL	+		-	200 OK BYE			
	1122			-	200 011 212			
	Case c)							
	SETUP	→						
	SETUP ACK	+						
	INFO	→		→	INVITE			
				(183 Session Progress			
			1	→	PRACK			
			1	-	200 OK			
			1	→	UPDATE			
			1	-	200 OK			
	ALERTING	+	1	-	180 Ringing			
		-						
				→	PRACK			
				+	200 OK			
	CONN	+		(200 OK INVITE			
	2			→	ACK			
			Conversation					
	DISC	→	23117013411	→	BYE			
	REL	′	1	-	200 OK BYE			
	J. V.C.L.				LOO ON DIE			

IS_XX_11	ISDN reference to:			NGN reference to:					
	ETSI EN 300 403	3-1 [i.3], clause 5 9-1 [23], clause 2	ITU-T Q.1912 ETSI EN 383 0	ITU-T Q.1912.5 [51], clause 7.3 ETSI EN 383 001 [49], clause 7.3 Il TS 129 163 [i.20], clause 7.2.3.5.1					
TSS reference:	ISDN-SIP/Basic_c	ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; SIP Pr	ofile A or ETSI EN	N 383 001	[49] Profile B or E	TSI TS 129 163 [i.20];				
Test purpose:	Ensure that the IS progress indicator Interworking point	Ensure that call establishment using overlap sending is performed correctly. Ensure that the ISDN user in the state U2 receives a CONNECT message with a progress indicators "call is not end-to-end ISDN (#1)" location "Network beyond Interworking point" when the SIP user answers with a 200 OK message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels							
ISDN Parameter	BC=PIXIT, no HL		goo para	1101010).					
values:	DO-1 IXIT, NOTIES	•							
SIP Parameter values:	TYPE_SDP= PIXI PIXIT for supporte Case a) no 100 re	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel							
Comments:									
	ISDN		SL	JT	SIP				
	Case a)								
	SETUP	→							
	SETUP ACK	(
	INFO	→		→	INVITE				
	CONN PI #1	-		(200 OK INVITE				
	0011111111			→	ACK				
			Conver		, tort				
	DISC	→	CONVCI	<u>→</u>	BYE				
	REL	-		/	200 OK BYE				
	IXLL				200 OK BTE				
	Case c)								
	SETUP	→		→	INVITE				
	CALL PROC	-			INVITE				
				+	183 Session Progress				
				→	PRACK				
				+	200 OK				
				→	UPDATE				
				(200 OK				
	CONN PI #1	((200 OK INVITE				
	2 2			→	ACK				
			Conver						
	DISC	→	3311701	→	BYE				
	REL	(-	200 OK BYE				
	11.755		1	1.	LOO ON DIL				

IS_XX_12	ISDN ref	erence to:		NGN reference to:				
	ETSI EN 300 403-1 ETSI EN 300 899-		2.5 [51], clause 7.3 001 [49], clause 7.3					
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; ITU-T Q.1912.5 [51] Profile B with PI							
Test purpose:	Ensure that call estab							
	Ensure that the ISDN							
				k beyond Interv	vorking point" when the			
	SIP user answers wit							
					e media and B-channels			
100110	is performed correctly	y (e.g. testing	QoS paramete	rs).				
ISDN Parameter	BC= PIXIT, no HLC							
values:	PI_VA (PIXIT)	(; DIV	1 -					
SIP Parameter values:	Dial string parameter	s options=PIX	.11					
	TYPE_SDP= PIXIT;							
	PIXIT for supported h	neader:						
	Case a) no 100 rel							
	Case b) Supported: 1							
	Case c) Supported: 1	Case c) Supported: 100 rel and precondition						
Comments:	10011	1	0.17	1	0.15			
	ISDN		SUT		SIP			
	Case a)	1						
	SETUP	→						
	SETUP ACK	+			IND OTE			
	INFO	→		→	INVITE			
	CONN PI #VA	+		+	200 OK INVITE			
			Camuranatia	→	ACK			
	DISC	→	Conversatio	<u>n</u> →	BYE			
	REL			 	200 OK BYE			
	Case c) Supported:				200 OK B1E			
	100 rel and							
	precondition							
	SETUP	→						
	SETUP ACK	-						
	ozioi mon							
	INFO			→	INVITE			
				+	183 Session			
					Progress			
				→	PRÄCK			
				+	200 OK			
				→	UPDATE			
				+	200 OK			
	CONN PI #VA	(+	200 OK INVITE			
				→	ACK			
			Conversatio	n				
	DISC	→		→	BYE			
	REL	+		+	200 OK BYE			

	Values for test purposes IS_XX_12						
VA	PI information element						
VA_1	# 1 (call is not end-to-end ISDN)						
VA_2	# 2 (destination address is non-ISDN)						
VA_3	PI # 1 and PI # 2						

IS_XX_13	ISDN reference to:			NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.1.5.2 ETSI EN 300 899-1 [23], clause 2.1.1			ITU-T Q.1912.5 [51], clause 7.3 ETSI EN 383 001 [49], clause 7.3 ETSI TS 129 163 [i.20], clause 7.2.3.5.1			
TSS reference:		_call/Successful/Vo					
Selection criteria:	Basic_call; ITU-	T Q.1912.5 [51] Pro	file B with	out PI			
Test purpose:		establishment using					
					NG message without a		
		tors "call is not end-t					
		int" when the SIP us					
					ne media and B-channels		
ISDN Parameter	BC=PIXIT, no F	rrectly (e.g. testing (205 parai	neters).			
values:	DC=FIXIT, IIO F	ill					
SIP Parameter values:	Dial string parar	meters options=PIXI	Т				
on rarameter values.	Biai string parai	notors options=1 17ti	•				
	TYPE_SDP= PI	IXIT;					
	_	,					
	PIXIT for suppo						
	Case a) no 100						
	Case b) Suppor						
	Case c) Suppor	ted: 100 rel and pred	condition				
Comments:	IODAI		OUT	<u> </u>	OID		
	ISDN		SUT		SIP		
	Case a)	→					
	SETUP	7					
	SETUP ACK	→		→	INIVITE		
	INFO ALERTING	7		 	INVITE		
	CONN	-		-	180 Ringing 200 OK INVITE		
	COININ			→	ACK		
			Conversa		AOR		
	DISC	→	CONVENSE	→	BYE		
	REL	((200 OK BYE		
		_			200 011 212		
	Case c)						
	SETUP	→					
	SETUP ACK	+					
	INFO	→		→	INVITE		
				+	183 Session		
					Progress		
				→	PRACK		
				←	200 OK		
				→	UPDATE		
				(200 OK		
	ALERTING	+		+	180 Ringing		
				→	PRACK		
	CONINI			+	200 OK INIVITE		
	CONN	←		+	200 OK INVITE		
			Cantian	→	ACK		
	DICC		Conversa		DVE		
	DISC ISDN	→		→ ←	BYE 200 OK BYE		
	אוטטון	~		14	ZUU UN DIE		

IS_XX_14	ETSI EN 300 40 ETSI EN 300 89	eference to: 13-1 [i.3], clause 5.3.3 19-1 [23], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.7 ETSI EN 383 001 [49], clause 7.7 ETSI TS 129 163 [i.20], clause 7.2.3.2.13				
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice/						
Selection criteria:	Basic_call						
Test purpose:	when the calling the Cause value The called user: According to ETS shall be included	call establishment and to user clears after answiff 16 "normal call clear ishall receive a BYE me SI TS 129 163 [i.20] and with Cause Value #16 e Call Delivered call state	vering with a DIS ing". ssage. d ETSI EN 383 (CONNECT	message indicating Reason Header field		
	the B- channel is	performed correctly.					
ISDN Parameter values:	BC=PIXIT, no H						
SIP Parameter values:	Dial string param	neters options=PIXIT					
	PIXIT for suppor Case a) no 100	TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel					
Comments:							
	ISDN		SUT		SIP		
	Case a)						
	SETUP	→		→	INVITE		
	CALL PROC	+					
	ALERTING	((180 Ringing		
	CONN	(-	200 OK INVITE		
				→	ACK		
			Conversation				
	DISC	→		→	BYE		
	REL	-		-	200 OK BYE		
	Case c)						
	SETUP	→		→	INVITE		
	CALL PROC	←					
				+	183 Session Progress		
				→	PRACK		
				(200 OK		
				→	UPDATE		
				+	200 OK		
	ALERTING	((180 Ringing		
				→	PRACK		
		1_		(200 OK		
	CONN	+		+	200 OK INVITE		
				→	ACK		
	7100	1	Conversation	1	2) (7		
	DISC	→		→	BYE		
	ISDN	(+	200 OK BYE		

IS_XX_15	ISDN reference	e to:	NGN reference to:					
10_707_10	ETSI EN 300 403-1 [i.3],	ITU-T Q.1912.5 [51], clause 7.7						
	ETSI EN 300 899-1 [23],	ETSI EN 383 001 [49], clause 7.7						
					, clause 7.2.3.2.13			
TSS reference:	ISDN-SIP/Basic_call/Suc	cessful/Voice/						
Selection criteria:	Basic_call							
Test purpose:	Ensure that the call clear	ing procedure	is performed correct	ly wher	n the called user			
	clears after answering wi							
	The calling user shall rec	eive a DISCON	NNECT message wi	th the C	Cause value # 16			
	"normal call clearing".							
	Ensure that in the Call De							
ICDN Devementes	transfer of tone or annou BC=PIXIT, no HLC	ncement on the	e B- channel is perio	ormea c	correctly.			
ISDN Parameter values:	BC=PIXII, NO HLC							
SIP Parameter values:	Dial string parameters op	tions-DIYIT						
on rarameter values.	Diai stillig palatileters op	11/11						
	TYPE_SDP= PIXIT;							
	,							
	PIXIT for supported head	ler:						
	Case a) no 100 rel							
	Case b) Supported: 100							
	Case c) Supported: 100 rel and precondition							
Comments:	1001		OUT	1	OID			
	ISDN		SUT		SIP			
	Case a)	_		→	INIVITE			
	SETUP CALL PROC	→		7	INVITE			
	ALERTING	+		+	180 Ringing			
	CONN	(+	200 OK INVITE			
	COMM			→	ACK			
			Conversation		7.010			
	DISC	(+	BYE			
	REL	→		→	200 OK BYE			
	Case c) Supported: 100							
	rel and precondition							
	SETUP	→		→	INVITE			
	CALL PROC	←						
				(183 Session			
					Progress			
				→	PRACK			
				-	200 OK			
				→	UPDATE 200 OK			
	ALERTING	(-	180 Ringing			
	ALENTING			→ →	PRACK			
		+ +			200 OK			
	CONN	(`	200 OK INVITE			
	33111	†		→	ACK			
			Conversation	<u> </u>				
	DISC	(30	+	BYE			
	REL	→		→	200 OK BYE			
	•							

IS_SP_16	ISDN reference	ce to:	NGN reference to:				
10_01 _10	ETSI EN 300 403-1 [i.3]	ITU-T Q.1912.5 [51], clause 7.3					
	ETSI EN 300 899-1 [23	ETSI EN 383 001 [49], clause 7.3					
	ETSI TBR 008 [i.16],	ETSI TS 129 163 [i.20], clause 7.2.3.2.2.2					
	ETSI EG 201 018 [i.2]		21011012010	<u>-</u>	,, oladoo / .z.o.z.z.z		
TSS reference:	ISDN-SIP/Basic_call/Suc						
Selection criteria:	Basic_call;	cessiui/ voice					
	Ensure that call establish	mont ounporting	the telephony 2.1	kH= +0	locariios is performed		
Test purpose:		iment supporting	the telephony 3, i	KHZ le	ieservice is periornied		
	correctly. Ensure that in the active	call state (NI10) th	o voice transfer o	n tha n	nodia and B channels		
	is performed correctly (e.			ii uie i	nedia and b-chainleis		
ISDN Parameter	BC=speech, HLC=teleph		irameters).				
values:	BC=speech, HLC=teleph	orty					
	Diel string parameters an	tions DIVIT					
SIP Parameter values:	Dial string parameters op	NIONS=PIXII					
	TYPE_SDP= PIXIT;						
	THE_SDI = FIXIT,						
	PIXIT for supported head	ler·					
	Case a) no 100 rel	101.					
	Case b) Supported: 100	rel					
	Case c) Supported: 100 i		on				
Comments:	ease of eapported. Tee I	ioi ana procenani	011				
- Commonwell	ISDN		SUT		SIP		
	Case a)						
	SETUP	→		→	INVITE		
	CALL PROC	-		+-	IIIVII L		
	ALERTING	(+	180 Ringing		
	CONN	`		+	200 OK INVITE		
	COMM			→	ACK		
			Conversation	7	ACK		
	DICC		Conversation		DVE		
	DISC	-		←	BYE		
	REL	→		7	200 OK BYE		
	Case c) Supported: 100						
	rel and precondition			_	IN IV (ITE		
	SETUP	→		→	INVITE		
	CALL PROC	+					
					100.0		
				+	183 Session		
					Progress		
				→	PRACK		
				+	200 OK		
				→	UPDATE		
		1		+	200 OK		
	ALERTING	-		+	180 Ringing		
				→	PRACK		
				+	200 OK		
	CONN	(+	200 OK INVITE		
				→	ACK		
			Conversation				
	DISC	+		+	BYE		
	REL	→		→	200 OK BYE		

Table 1: PIXIT Values for test purposes IS_XX_01 to IS_XX_16

Variable		m= line b= line		b= line	a= line
	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>:<bandwidth-value></bandwidth-value></modifier>	rtpmap: <dynamic-pt> <encoding name="">/<clock rate=""> [/encoding parameters></clock></encoding></dynamic-pt>
VA_01	audio	RTP/AVP	0 (and possibly 8)	AS:64	rtpmap:0 PCMU/8000 (and possibly rtpmap:8 PCMA/8000)
VA_02	audio	RTP/AVP	Dynamic PT (and possibly a second Dynamic PT)	AS:64	rtpmap: <dynamic-pt> PCMU/8000 (and possibly rtpmap:<dynamic-pt> PCMA/8000)</dynamic-pt></dynamic-pt>
VA_03	audio	RTP/AVP	8	AS:64	rtpmap:8 PCMA/8000
VA_04	audio	RTP/AVP	Dynamic PT	AS:64	rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>
VA_05	audio	RTP/AVP	0 and/or 8	AS:64	rtpmap:0 PCMU/8000 and/or rtpmap:8 PCMA/8000
VA_06	audio	RTP/AVP	0 (and possibly 8)	AS:64	rtpmap:0 PCMU/8000 (and possibly rtpmap:8 PCMA/8000)
VA_07	audio	RTP/AVP	8	AS:64	rtpmap:8 PCMA/8000

IS_AU_17	ISDN re	eference to:	NGN reference to:					
	ETSI EN 300 403 ETSI EN 300 899			ITU-T Q.1912.5 [51], clause 7.1				
TSS reference:	ISDN-SIP/Basic_call/							
Selection criteria:	Basic_call; Telefax G3 terminals; Telefax G3 terminals with T.38							
Test purpose:	Support of Telefax G							
Tool pulpood.			I10) the Fax tra	insfer on the m	nedia and B-channels			
	is performed correctly		iro, iro i ax iro		iodia dila B orialinolo			
ISDN Parameter	BC=3,1 kHz audio, H	LC = Facsimile	G2/G3					
values:	20 0,1 111 12 444.0,11		02/00					
SIP Parameter values:	Dial string parameter	s options=PIXIT	-					
	TYPE_SDP= PIXIT;							
	PIXIT for supported h	neader:						
	Case a) no 100 rel							
	Case b) Supported: 1		1141					
	Case c) Supported: 1	00 rel and prec	ondition					
	a = line Based on T.3	38.						
	b = line AS: 64							
_	m = line: udptl; T38							
Comments:								
	ISDN		SU	T	SIP			
	Case a)							
	SETUP	→						
				→	INVITE			
	ALERTING	(←	180 Ringing			
	CONN	((200 OK INVITE			
				→	ACK			
	7.00		Convers					
	DISC	((BYE			
	REL	→		→	200 OK BYE			
	Case c)							
	SETUP	→						
	SETUP ACK	←						
	INICO				INIVITE			
	INFO			→	INVITE 183 Session			
				_				
				→	Progress PRACK			
		+			200 OK			
				→	UPDATE			
					200 OK			
	ALERTING	+		(180 Ringing			
	ALLINING			→	PRACK			
					200 OK			
	CONN	+		(200 OK INVITE			
	COININ			→	ACK			
			Convers		7.01			
	DISC	+	Convers	←	BYE			
	REL	→		→	200 OK BYE			
	IIVEE				200 OR DIL			

IS_AU_18 TSS reference:	ISDN reference ETSI EN 300 403-1 [i.3] ETSI EN 300 899-1 [23] ISDN-SIP/Basic_call/Succ	, clause 4.5.17], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1 ETSI EN 383 001 [49], clause 7.1 ETSI TS 129 163 [i.20], clause 7.2.3.2			
Selection criteria:	Basic_call; Telefax G3 ter					
Test purpose:	Support of Telefax G3.	minais-inbanu				
rest purpose.	Ensure that in the active of performed correctly and the in the gateway takes place	he echo canceller e.	s in the GW are			
ISDN Parameter values:	BC=3,1 kHz audio, HLC =	= Facsimile G2/G3	3			
SIP Parameter	Dial string parameters op	tions=PIXIT				
values:	TYPE_SDP= PIXIT; PIXIT for supported head	er:				
	Case a) no 100 rel Case b) Supported: 100 r Case c) Supported: 100 r a = line RTP/AVP b = line 64 kbit/s m = line: 8		n			
Comments:						
	ISDN		SUT		SIP	
	Case a)					
	SETUP	→				
				→	INVITE	
	ALERTING	+		+	180 Ringing	
	CONN	`		`	200 OK INVITE	
	COMM	\		→	ACK	
			Conversation	7	ACK	
	DICC		Conversation	-	DVE	
	DISC	+		<u>+</u>	BYE	
	REL	→		→	200 OK BYE	
	Case c)					
	SETUP	→				
	SETUP ACK	+				
	INFO			→	INVITE	
				+	183 Session	
					Progress	
				→	PRACK	
				+	200 OK	
				<u>→</u>	UPDATE	
				′	200 OK	
	ALERTING	(`	180 Ringing	
	ALLITING	•		→	PRACK	
				7		
	CONINI	+			200 OK INVITE	
	CONN	+		+	200 OK INVITE	
				→	ACK	
			Conversation	<u> </u>		
	DISC	+		+	BYE	
		→	<u> </u>	→	200 OK BYE	

IS_AU_19	ISDN reference		NGN reference to:					
	ETSI EN 300 403-1 [i.3]					[51], clause 7.1		
	ETSI EN 300 899-1 [23], clause 2.1.1 ETSI TS 129 163 [i.20], clause							
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; Bearer service 3,1 kHz audio							
Test purpose:	Ensure that the ISDN SE							
	capability 3,1 kHz audio,				chronous	s/ asynchronous mode		
	is set to MODE is mapped				41	adia and Dahamada		
	Ensure that in the active of is performed correctly (e.g.	call state (IN	10) the	e data transfer (on the m	edia and B-channels		
	are not activated.	y. lesting Q	oo pai	ameters) and t	ne ecno	cancellers in the GVV		
ISDN Parameter	BC= 3,1 kHz audio, voice	band data	via mo	dem				
values:	synchronous/ asynchr							
	user rate: USER_RAT							
SIP Parameter values:	Dial string parameters op		1					
	TYPE_SDP= PIXIT;							
	PIXIT for supported head	er:						
	Case a) no 100 rel	ما						
	Case b) Supported: 100 r Case c) Supported: 100 r	el el and prece	anditio	n				
	Case c) Supported. 100 h	ei and prece	Jilullio	"				
	a = line (PIXIT)							
	b = line (PIXIT)							
	m = line (PIXIT)							
Comments:								
	ISDN			SUT		SIP		
	Case a)							
	SETUP	→						
		ļ <u>.</u>			→	INVITE		
	ALERTING	(+	180 Ringing		
	CONN	+			←	200 OK INVITE		
			Co	nversation	7	ACK		
	DISC	+	CC	niversalion	+	BYE		
	REL	→			→	200 OK BYE		
	KLL					200 ON BTL		
	Case c)							
	SETUP	→						
					→	INVITE		
					+	183 Session		
						Progress		
					→	PRACK		
					+	200 OK		
					→	UPDATE		
					+	200 OK		
	ALERTING	+			-	180 Ringing		
					→	PRACK		
	CONN				+	200 OK		
	CONN	+			+	200 OK INVITE		
					→	ACK		
	DISC	_	Co	nversation	+	BYE		
	DISC REL	←			→	200 OK BYE		
	INEL	7			7	ZUU UN DIE		

IS_AU_20	ISDN reference to: NGN reference to:								
13_A0_20	ETSI EN 300 403-1 [_	5 [51], clause 7.1				
	ETSI EN 300 899-1		ETSI EN 383 001 [49], clause 7.1 ETSI TS 129 163 [i.20], clause 7.2.3.2						
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:	Basic_call; Bearer ser								
Test purpose:	Ensure that the ISDN	SETUP with the BC	parameter valu	ie inform	nation transfer				
					I kHz audio, voice band				
	data via modem, sync			t to MOI	DE, user rate set to				
	USER_RATE is mapp								
					media and B-channels				
	are not activated.	(e.g. testing QoS pa	arameters) and	the ech	cancellers in the GW				
ISDN Parameter	BC = 3,1 kHz audio,								
values:	LLC = 3,1 kHz audio,	voice hand data via	modem						
varaco.		nchronous mode: M							
	user rate: USER_F								
SIP Parameter values:	Dial string parameters								
		•							
	TYPE_SDP= PIXIT;								
	PIXIT for supported he	eader:							
	Case a) no 100 rel								
	Case b) Supported: 10								
	Case c) Supported: 100 rel and precondition								
	a = line (PIXIT)								
	b = line (PIXIT)								
	m = line (PIXIT)								
Comments:									
	ISDN		SUT		SIP				
	Case a)								
	SETUP	→			INIV/ITE				
	ALEDTING			→	INVITE				
	ALERTING CONN	-		+	180 Ringing 200 OK INVITE				
	COMM			→	ACK				
			Conversation		AOR				
	DISC	(Sonversation	+	BYE				
	REL	→		→	200 OK BYE				
		-							
	Case c)								
	SETUP	→							
				→	INVITE				
				+	183 Session				
					Progress				
				→	PRACK				
				+	200 OK				
				→	UPDATE				
	ALEDTING			+	200 OK				
	ALERTING	+		+	180 Ringing				
				→	PRACK				
	CONN	←		+	200 OK 200 OK INVITE				
	CONIN			→	ACK				
			Conversation	7	AUN				
	DISC	(JUNEISAUUN	+	BYE				
Ì	2.00	→		→	200 OK BYE				

ETSI EN 300 403-1 [i.3], clause 4.5.18 ITU-T Q.1912.5 [51], clause 7.1 ITSI EN 300 309-1 [23], clause 2.1.1 ITU-T Q.1912.5 [51], clause 7.2.2 ITSI EN 303 300 1[49], clause 7.2.3.2 ITSI P.30 163 [i.20], clause 7.2.3.2 ISSI P.30 163 [i.20], clause 7.3.2 ISSI P.30 163	IS_AU_21	ISDN refere	nce to:			NGN re	ference to:			
Basic_call_Bearer service 3,1 kHz audio	10_A0_21	ETSI EN 300 403-1 [i	.3], clause	ITU-T ETSI EI	ETSI EN 383 001 [49], clause 7.1					
SIP selection criteria: Test purpose: Sir p	TSS reference:									
Ensure that the ISDN SETUP with the BC parameter value information transfer capability 3,1 kHz audio voice band data via modem, synchronous mode is set to MODE, user rate set to USER RATE and the LLC ISDN Parameter values: 3,1 kHz audio, voice band data via modem, synchronous / asynchronous mode is set to MODE, user rate set to USER_RATE is mapped to the SIP INVITE. In the active call state (N10) ensure that the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters) and the echo cancellers in the GW are not activated. ISDN Parameter values: ISDN Parameter values: BC=LLC=3,1 kHz audio, voice band data via modem, synchronous asynchronous mode: MODE user rate: USER_RATE (table 2) Data string parameter soptions=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) The line (PIXIT) Comments: ISDN SUT SIP ALERTING • IND INVITE ALERTING • IND INVITE ALERTING • IND INVITE ALERTING • INVITE Case c) SETUP ALERTING • INVITE Case c) SETUP ALERTING • INVITE AL	Selection criteria:	Basic_call; Bearer service	e 3,1 kHz	audio						
3,1 kHz audio voice band data via modem, synchronous/ asynchronous mode is set to MODE, user rate set to USER_RATE and the LLC ISDN Parameter values: 3,1 kHz audio, voice band data via modem, synchronous/ asynchronous mode is set to MODE, user rate set to USER_RATE is mapped to the SIP INVITE. In the active call state (N10) ensure that the data transfer on the media and B-channels is performed correctity (e.g. testing QoS parameters) and the echo cancellers in the GW are not activated. ISDN Parameter values: ISDN Parameter values: Dial string parameters options=PIXIT TYPE_SDP=PIXIT; PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) ALERTING ← 180 Ringing CONN ← 180 Ringing FREL → 200 OK BYE REL → 200 OK BYE REL → 200 OK BYE REL → 200 OK BYE ALERTING ← 183 Session Progress PRACK POPARCK ALERTING ← 180 Ringing COND ← 180 Ringing COND ← 180 Ringing PRACK PRACK PRACK PRACK PRACK PRACK PRACK PRACK PRACK CONN ← 200 OK INVITE ALERTING ← 180 Ringing PRACK	SIP selection criteria:	Audio								
SDN Parameter values: SIP Parameter values: SIP Parameter values: SIP Parameter values: Dial string parameters options=PIXIT	rest purpose:	3,1 kHz audio voice band data via modem, synchronous/ asynchronous mode is set to MODE, user rate set to USER_RATE and the LLC ISDN Parameter values: 3,1 kHz audio, voice band data via modem, synchronous/ asynchronous mode is set to MODE, user rate set to USER_RATE is mapped to the SIP INVITE. In the active call state (N10) ensure that the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters) and the echo cancellers in the GW are								
values: synchronous/ asynchronous mode: MODE user rate: USER_RATE (table 2) SIP Parameter values: Dial string parameters options=PIXIT TYPE_SDP= PIXIT; TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) supported: 100 rel and precondition A = line (PIXIT) supported: 100 rel and precondition A = line (PIXIT) supported: 100 rel and precondition BETUP supported: 100 rel and precondition ALERTING supported: 100 rel and precondition ALERTING supported: 100 rel and precondition BISDN SUT SIP ALERTING supported: 100 rel and precondition supported: 100 rel and precondition ALERTING supported: 100 rel and precondition supported: 100 rel and precondition BISDN supported: 100 rel and precondition supported: 100 rel and precondition BISDN supported: 100 rel and precondition supported: 100 rel and precondition BISDN supported: 100 rel and precondition supported: 100 rel and pre	ISDN Parameter		voice bar	nd data via r	modem.					
TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN	values:	synchronous/ asynchuser rate: USER_RA	nronous m TE (table	ode: MODE 2)						
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN	SIP Parameter values:	TYPE_SDP= PIXIT;		ΚÍΤ						
b = line (PIXIT) m = line (PIXIT)		Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition								
SDN SUT SIP		b = line (PIXIT)								
Case a) SETUP → INVITE ALERTING ← 180 Ringing CONN ← ← 200 OK INVITE → ACK Conversation DISC ← BYE REL → → 200 OK BYE Case c) → INVITE SETUP → INVITE ← 183 Session Progress Progress → PRACK ← 200 OK ALERTING ← 180 Ringing → → PRACK ← 200 OK CONN ← 200 OK CONN ← 200 OK INVITE → ACK	Comments:									
SETUP →		ISDN		;	SUT		SIP			
ALERTING		Case a)								
ALERTING ←		SETUP	→							
CONN ← 200 OK INVITE ACK Conversation BYE REL → 200 OK BYE Case c) SETUP → INVITE 183 Session Progress PRACK ← 200 OK UPDATE 4 180 Ringing PRACK ← 200 OK ALERTING ← 180 Ringing PRACK ← 200 OK CONN ← 200 OK CONN ← 200 OK CONVERSATION CONVERSATION DISC ← BYE						→	INVITE			
CONN ← 200 OK INVITE ACK Conversation BYE REL → 200 OK BYE Case c) SETUP → INVITE 183 Session Progress PRACK ← 200 OK UPDATE 4 180 Ringing PRACK ← 200 OK ALERTING ← 180 Ringing PRACK ← 200 OK CONN ← 200 OK CONN ← 200 OK CONVERSATION CONVERSATION DISC ← BYE		ALERTING	+			+				
→ ACK						+				
Conversation										
DISC ← BYE REL → 200 OK BYE Case c) → SETUP → INVITE 183 Session Progress PRACK ← 200 OK → UPDATE ← 200 OK ALERTING ← 180 Ringing → PRACK ← 200 OK CONN ← 200 OK INVITE → ACK Conversation E BYE				Conv	ersation					
REL → 200 OK BYE Case c) SETUP → INVITE		DISC	-	0011	roroation	-	RYF			
Case c) SETUP → INVITE ← 183 Session Progress PRACK ← 200 OK ← 200 OK UPDATE ← 180 Ringing PRACK ← 200 OK ALERTING ← ← 180 Ringing PRACK ← 200 OK CONN ← ← 200 OK CONN ← ← 800 OK CONN ← ← 900 OK CONN ← ← 900 OK INVITE ACK Conversation DISC ← BYE										
SETUP			+			+-	LOO OILDIL			
→ INVITE										
## ## ## ## ## ## ## ## ## ##		SETOP	7				INIVITE			
Progress PRACK										
→ PRACK ← 200 OK → UPDATE ← 200 OK ALERTING ← 180 Ringing → PRACK ← 200 OK CONN ← 200 OK INVITE → ACK DISC ← BYE						7				
← 200 OK → UPDATE ← 200 OK ALERTING ← 180 Ringing → PRACK ← 200 OK CONN ← 200 OK INVITE → ACK DISC ← BYE			+			-				
→ UPDATE ← 200 OK ALERTING ← 180 Ringing → PRACK ← 200 OK CONN ← 200 OK INVITE → ACK DISC ← BYE										
★ 200 OK ALERTING ★ 180 Ringing → PRACK ← 200 OK CONN ★ 200 OK INVITE → ACK DISC ★ BYE										
ALERTING ←			1							
→ PRACK ← 200 OK CONN ← 200 OK INVITE → ACK Conversation BYE			4							
CONN ← 200 OK CONN ← 200 OK INVITE → ACK Conversation BYE		ALERTING	+							
CONN ← 200 OK INVITE → ACK Conversation BYE										
→ ACK Conversation DISC ← BYE										
→ ACK Conversation DISC ← BYE		CONN	(+	200 OK INVITE			
Conversation DISC ← BYE						→	ACK			
DISC ← BYE				Conv	/ersation					
		DISC	+			+	BYE			
INCL 17 1 17 INCLUMENTE		REL	→			→	200 OK BYE			

Table 2: Values for test purposes IS_AU_19 to IS_AU_21

VA_01	MODE: synchronous
	USER_RATE: 1,2 kbit/s
VA_02	MODE: synchronous
	USER_RATE: 2,4 kbit/s
VA_03	MODE: synchronous
	USER_RATE: 3,6 kbit/s
VA_04	MODE: synchronous
	USER_RATE: 4,8 kbit/s
VA_05	MODE: synchronous
	USER_RATE: 7,2 kbit/s
VA_06	MODE: synchronous
	USER_RATE: 8 kbit/s
VA_07	MODE: synchronous
	USER_RATE: 9,6 kbit/s
VA_08	MODE: synchronous
	USER_RATE: 14,4 kbit/s
VA_09	MODE: synchronous
	USER_RATE: 16 kbit/s
VA_10	MODE: synchronous
	USER_RATE: 19,2 kbit/s
VA_11	MODE: synchronous
_	USER_RATE: 32 kbit/s
VA_12	MODE: synchronous
	USER_RATE: 48 kbit/s
VA_13	MODE: synchronous
	USER_RATE: 56,0 kbit/s
VA_14	MODE: synchronous
·/·_··	USER_RATE: 64 kbit/s
VA_15	MODE: asynchronous
	USER_RATE: 1,2 kbit/s
VA_16	MODE: asynchronous
	USER_RATE: 2,4 kbit/s
VA_17	MODE: asynchronous
	USER_RATE: 3,6 kbit/s
VA_18	MODE: asynchronous
_	USER_RATE: 4,8 kbit/s
VA_19	MODE: asynchronous
	USER_RATE: 7,2 kbit/s
VA_20	MODE: asynchronous
_	USER_RATE: 8 kbit/s
VA_21	MODE: asynchronous
_	USER_RATE: 9,6 kbit/s
VA_22	MODE: asynchronous
_	USER_RATE: 14,4 kbit/s
VA 23	MODE: synchronous
	USER_RATE: 16 kbit/s
VA_24	MODE: asynchronous
···· <u>-</u> ·	USER_RATE: 19,2 kbit/s
VA_25	MODE: asynchronous
	USER_RATE: 32 kbit/s
VA_26	MODE: asynchronous
·.·	USER_RATE: 48 kbit/s
VA_27	MODE: asynchronous
V/\/	USER_RATE: 56 kbit/s
VA_28	MODE: asynchronous
V/_20	USER_RATE: 64 kbit/s
<u> </u>	OULN_NATE, UT KUIVO

Table 3: PIXIT Values for the test purpose IS_AU_19 to IS_AU_21

		m= line		b= line	a= line
VA	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>:<bandwidth-value> (see note)</bandwidth-value></modifier>	rtpmap: <pre><pre>rtpmap: <pre><pre><encoding name="">/</encoding></pre></pre></pre></pre>
VA_01	Audio	RTP/AVP	0	N/A or up to 64 kbit/s	N/A
VA_02	Audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMU/8000</dynamic-pt>
VA_03	Audio	RTP/AVP	8	N/A or up to 64 kbit/s	N/A
VA_04	Audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>
VA_05	Image	Udptl	t38	N/A or up to 64 kbit/s	Based on T.38
VA_06	Image	Tcptl	t38	N/A or up to 64 kbit/s	Based on T.38
NOTE: <	bandwidth v	value> for <mo< td=""><td>odifier> of AS is</td><td>s evaluated to be B kbit/s.</td><td></td></mo<>	odifier> of AS is	s evaluated to be B kbit/s.	

IS_XX_22	ISDN reference to:	NGN reference to:				
	ETSI EN 300 403-1 [i.3], clause 4.5.18	ETSI TS 129 163 [i.20] clause A.1.4				
	ETSI EN 300 899-1 [23], clause 2.1.1					
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice					
Selection criteria:	Basic_call;					
	announcement towards a PSTN/ISDN					
	Providing announcements to a user during	the establishment of a communication session				
SIP selection criteria:	Audio					
Test purpose:	Ensure that an announcement towards a F					
		network provides an announcement e.g. "The				
		is not reachable". The announcement should be				
	received after the CALL PROCEEDING me	essage with PI#8.				
ISDN Parameter	BC= PIXIT					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition	on				
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						

IS_AU_23	ISDN reference	o to:		NC	2N rofor	ence to:		
15_AU_23		4 5 47						
	ETSI EN 300 403-1 [i.3], clause 4.5.17			110-1 Q.	1912.5	51], clause 7.1		
	ETSI EN 300 899-1 [23]	2.1.1	ETSI EN 383 001 [49], clause 7.1					
	ETSI TS 129 163 [i.20], clause 7.2.							
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice							
Selection criteria:	Basic_call; Telefax G3 te	erminals-i	nband					
Test purpose:	Support of Telefax G3.							
	Ensure that in the active	call state	(N10) t	he Fax transfer o	n the me	edia and B-channels is		
	performed correctly and							
	call state the callee send	ds a re-IN	IVITE w	ith the T38.				
ISDN Parameter	BC=3,1 kHz audio, HLC	= Facsim	ile G2/0	3				
values:								
SIP Parameter values:	Dial string parameters or	ntions=PI	XIT					
on randinator values.	Dial of high parameters of	J.10110-1 12						
	a = line RTP/AVP							
	b = line 64 kbit/s							
	m = line: 8							
	iii = iiiie. o							
	re-INVITE							
	a = line Based on T.38.							
	b = line AS: 64							
	m = line: udptl; T38							
Comments:	iii = liiie. uupti, 136							
Comments.	ISDN			CLIT		CID		
				SUT		SIP		
	Case a)					10.00		
	SETUP	→			→	INVITE		
	ALERTING	+			+	180 Ringing		
	CONN	+			←	200 OK INVITE		
					→	ACK		
			(Conversation				
					+	INVITE		
					→	200 OK INVITE		
					+	ACK		
	DISC	+			+	BYE		
	REL	→			→	200 OK BYE		
	Case c) Supported: 100	+-			+-	200 011 212		
	rel and precondition							
	SETUP	→			-			
	SETUP ACK	-						
	SETUP ACK							
	INICO					INIV/ITE		
	INFO		+		→	INVITE		
					7	183 Session		
			+		+	Progress		
			+		→	PRACK		
			1		+	200 OK		
					→	UPDATE		
					+	200 OK		
	ALERTING	+			(180 Ringing		
					→	PRACK		
					+	200 OK		
	CONN	+			+	200 OK INVITE		
					→	ACK		
			1		+	INVITE		
			1		→	200 OK INVITE		
			1		-	ACK		
	DISC	+	+		+	BYE		
	REL	→	+		→	200 OK BYE		
	INEL	7			7	1200 ON BTE		

6.2.1.2 Codec negotiation

IS_CN_01	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI EN 300 899-1 [23], clause 2.1.1			NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3264 [30]			
TSS reference:	ISDN-SIP/Basic_call/C	odec nego	tiation				
Selection criteria:	Basic_call						
Test purpose:	Ensure that in the activ is performed correctly (the SDP of e call state	ffer is con e (N10) th	tained in the e voice trans	y. 183 Session Progress message fer on the media and B-channels		
ISDN Parameter values:	BC=speech, no HLC						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	IODAI	IODAL OUT OUD					
	a) SDP pre-condition not requested						
	SETUP	ot request	ea	→	INIVITE offers		
	CALL PROC			 	INVITE offer1		
	ALERTING	+			183 Session Progress answer 1		
					180 Ringing 200 OK INVITE		
	CONNECT	-		(
	DIOC	→		→	ACK		
	DISC	←		<u>+</u>	BYE		
	REL			→	200 OK BYE		
	b) pre-condition and 10				In 12 17 17 17 17 17 17 17 17 17 17 17 17 17		
	SETUP	→		→	INVITE offer 1		
	CALL PROC	+					
				-	183 Session Progress answer 1		
				→	PRACK		
				-	200 OK PRACK		
				→	UPDATE		
				(200 OK		
	ALERTING	+		(180 Ringing		
				→	PRACK		
				←	200 OK PRACK		
	CONNECT	+		←	200 OK INVITE		
	DISC	→		→	ACK		
	REL	+		←	BYE		
		→		→	200 OK BYE		

IS_CN_02	ISDN refe ETSI EN 300 403-1 ETSI EN 300 899-1	[i.3], clause		NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3264 [30]				
TSS reference:	ISDN-SIP/Basic_call/	Codec nego	otiation					
Selection criteria:	Basic_call							
Test purpose:	Ensure that the call e The answer related to Ensure that in the act is performed correctly	the SDP o ive call state	ffer is cont e (N10) the	tained in the 180 e voice transfer o	Ringing message n the media and B-channels			
ISDN Parameter values:	BC=speech, no HLC							
SIP Parameter values:	Dial string parameters	s options=P	IXIT					
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:								
	a) SDP pre-condition not requested							
	ISDN 1 UE 1							
	SETUP	→		→	INVITE offer1			
	CALL PROC	+						
	ALERTING	+		+	180 Ringing answer 1			
	CONNECT	(+	200 OK INVITE			
		→		→	ACK			
I	DISC	(+	BYE			
	REL	→		→	200 OK BYE			
	b) pre-condition and 100 rel							
	SETUP	→		→	INVITE offer1			
	CALL PROC	+						
				+	183 Session Progress			
		→		→	PRACK			
		+		(200 OK PRACK			
	ALERTING	-		(180 Ringing Answer 1			
		→		→	PRACK			
		-		-	200 OK PRACK			
	CONNECT	`		(200 OK INVITE			
	DISC	→		→	ACK			
	REL	′		/	BYE			
	200 OK BYE	→		<u>`</u>	200 OK BYE			

IS_CN_03	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI EN 300 899-1 [23], clause 2.1.1			NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3264 [30]		
TSS reference:	ISDN-SIP/Basic_call/Codeo	c negot	iation			
Selection criteria:	Basic_call					
Test purpose:	is performed correctly (e.g.	SDP off III state	er is conta (N10) the	ined in the voice trans		
ISDN Parameter	BC=speech, no HLC					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	ISDN		SUT		SIP	
	a) SDP pre-condition not re	queste	ed			
	SETUP	→		→	INVITE offer1	
	CALL PROC	+				
	ALERTING	+		+	180 Ringing	
	CONNECT	+		←	200 OK INVITE answer 1	
		→		→	ACK	
	DISC	+		+	BYE	
	REL	→		→	200 OK BYE	
	b) pre-condition and 100 re	_		-	200 OK BTE	
	SETUP	<u>'</u> →		→	INVITE offer 1	
	CALL PROC	′			INVITE Offer 1	
	CALL FROC			+	183 Session Progress	
		+ +		→	PRACK	
		+		-	200 OK PRACK	
	ALERTING	+		-	180 Ringing	
	ALEKTING	+		→	PRACK	
		+ +		-	200 OK PRACK	
	CONNECT	L				
	CONNECT	((200 OK INVITE answer 1	
	DISC	→		→	ACK	
	REL	+		<u>+</u>	BYE	
		→		→	200 OK BYE	

IS_CN_04	ISDN reference ETSI EN 300 403-1 [i.3]	, clau	ıse 5.1.5.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1					
	ETSI EN 300 899-1 [23	ј, сіа	ETSI TS 1	TSI TS 129 163 [i.20], clause 7.1.1 IETF RFC 3264 [30]					
TSS reference:	ISDN-SIP/Basic_call/Codec negotiation								
Selection criteria:	Basic_call								
Test purpose:	Ensure that the call estab	olishn	nent is perfor	med correc	tly.				
	Ensure that answer relate	ed to	the SDP offe	er is contain	ed in the 183 Session Progress				
	message. A new offer (co	odec)	is sent in the	e 180 Ringir	ng.				
					sfer on the media and B-				
	channels is performed co	rrect	ly (e.g. testin	g QoS para	meters).				
ISDN Parameter values:	BC=speech, no HLC								
SIP Parameter values:	Dial string parameters op	otions	=PIXIT						
	DIVIT (
	PIXIT for supported head	der:							
	Case a) no 100 rel	ral							
	Case b) Supported: 100 Case c) Supported: 100		d proceeditie	n					
	Case c) Supported. 100	rei an	a preconant	וזכ					
	a = line (PIXIT)								
	b = line (PIXIT)								
	m = line (PIXIT)								
Comments:									
	ISDN	SUT			SIP				
	a) SDP pre-condition not			ı					
	SETUP	→		→	INVITE Offer 1				
	CALL PROC	(
				+	183 Session Progress				
					Answer 1				
	ALERTING	←		+	180 Ringing offer 2				
	CONNECT	(←	200 OK INVITE				
				→	ACK answer 2				
	DISC	←		+	BYE				
	REL	→		→	200 OK BYE				
	b) pre-condition and 100	rel							
	Option a)								
	SETUP	→		→	INVITE Offer 1				
	CALL PROC	←							
				-	183 Session Progress				
					Answer 1				
				→	PRACK				
				-	200 OK PRACK				
	ALERTING	+		(180 Ringing offer 2				
				→	PRACK				
	CONNECT			-	200 OK PRACK				
	CONNECT	←		←	200 OK INVITE				
	DISC	→		→	ACK answer 2 BYE				
	DISC REL	←		←	200 OK BYE				
		7		 	ZOU ON DIE				
	Option c) SETUP	→		→	INVITE Offer 1				
	CALL PROC	7 ←		 	INVITE OHER I				
	OALL I NOU	_		+	183 Session Progress				
					Answer 1				
				→	PRACK				
				/	200 OK PRACK				
	ALERTING	+		`	180 Ringing offer 2				
		 		<u>`</u>	PRACK				
				→ ·	UPDATE answer 2				
				/	200 OK				
				+	200 OK PRACK				
	CONNECT	←		+	200 OK INVITE				
		<u>`</u>		<u>`</u>	ACK				
	DISC	-		+	BYE				
	REL	→		→	200 OK BYE				
	i e	1	1	-	=				

IS_CN_05	ISDN reference ETSI EN 300 403-1 [i.3], ETSI EN 300 899-1 [23]	claus , claus	se 2.1.1	ETSI E	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3264 [30]				
TSS reference:	ISDN-SIP/Basic_call/Codec negotiation								
Selection criteria:		Basic_call; RE-INVITE							
Test purpose:	During the session, the called user decides to change the characteristics of the media session. This is accomplished by sending a re-INVITE containing a new media description. This re-INVITE references the existing dialog so that the other party knows that it is to modify an existing session instead of establishing a new session. The other party sends a 200 (OK) to accept the change. The requestor responds to the 200 (OK) with an ACK.								
ISDN Parameter values:	BC=speech, no HLC								
SIP Parameter values:	Dial string parameters opti	ons=F	PIXIT						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)								
Comments:	m = line (PIXIT)								
	ISDN		SU	Γ	SIP				
	a) SDP pre-condition not re	ednes		•	J				
	SETUP	→	I	→	INVITE Offer 1				
	CALL PROC	-			IIIII OIIOI I				
	CALLTROO	+		+	183 Session Progress				
	AL EDTING	+		+	180 Ringing				
	ALERTING								
	CONNECT	+		(200 OK INVITE				
				→	ACK				
				-	RE-INVITE offer 2				
				→	200 OK answer 2				
				←	ACK				
	DISC	←		←	BYE				
	REL	→		→	200 OK BYE				
	b) ETSI TS 124 229 [55] /	ETSI I	ES 283 003	3 [42] (pre-co	ondition and 100 rel)				
	SETUP	→		→	INVITE				
	CALL PROC	+							
				+	183 Session Progress				
		1	Ì	→	PRACK				
		1		-	200 OK PRACK				
		+		→	UPDATE				
		+		/	200 OK				
	ALERTING	+		`	180 Ringing				
	ALLINING	+		→	PRACK				
			1	-	200 OK PRACK				
	CONNECT	-							
	CONNECT		1	<u>←</u>	200 OK INVITE				
		→		→	ACK				
				(RE-INVITE offer 2				
			<u> </u>	→	200 OK answer 2				
				←	ACK				
	DISC	+		(BYE				
	REL	→		→	200 OK BYE				

6.2.1.3 Test purposes for ISDN-SIP Basic call Successful - UPDATE

IS_XX_UP_01				NGN reference to: ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3311 [31], clause 5.1					
TSS reference:		ISDN -SIP/Basic_call/Successful							
Selection criteria:				fter INVITE trans					
Test purpose:	transaction.		can send UP	DATE after comp	letion of the initial INVITE				
ISDN Parameter values:	BC=PIXIT, no H	ILC							
SIP Parameter values:	PIXIT for suppo Case a) no 100 Case b) Suppor	b = line (PIXIT)							
Comments:					0.0				
	ISDN		٤	SUT	SIP				
	SETUP	→		7	INVITE Offer 1				
	CALL PROC	+							
				•	The state of the s				
				7					
	AL EDTING			•					
	ALERTING	((3 3				
	CONNECT	_							
			0	-	ACK ACK				
			Conversati		LIDDATE -#-				
				+	0. 27.1.2 0.10.				
			0		200 OK UPDATE				
	DICC		Conversati		DVE				
	DISC	→	1)					
	REL	7			200 OK BYE				

IS XX UP 02	NGN reference to:
10_331_01_02	ETSI EN 383 001 [49], clause 7.1.1
	ETSI TS 129 163 [i.20], clause 7.2.3.2.1
	IETF RFC 3311 [31], clause 7.2.5.2.1
TOO	
TSS reference:	ISDN - SIP/Basic_call/Successful
Selection criteria:	Subsequent UPDATE is rejected if a pending offer (PRACK) is not answered
Test purpose:	Ensure that a subsequent UPDATE following an UPDATE is rejected (500 Server
	Internal Error) as long as the pending offer (2) is not answered.
ISDN Parameter	BC=speech, no HLC
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)

Comments:					
	ISDN		SUT		SIP
	SETUP	→		→	INVITE with Offer 1
	CALL PROC	+			
				+	183 Session Progress answer
				→	PRACK
				+	200 OK PRACK
				+	UPDATE offer 2
				+	UPDATE offer 3
				→	500 Server Internal Error
				→	200 OK UPDATE answer 2
	ALERTING	←		←	180 Ringing
	CONNECT	←		+	200 OK INVITE
				→	ACK
			Conversation		
	DISC	→		→	BYE
	REL	+		+	200 OK BYE

IS_XX_UP_03	NGN reference to: ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3311 [31], clause 5.1							
TSS reference:	ISDN - SIP/Basi	ic call/Si		, ciause	: 5.1			
Selection criteria:			jected if a pending offer (INVITE	is not answered			
Test purpose:	Ensure that a su	ıbsequer	nt UPDATE following an or) as long as the first offer	INVITE	with SDP offer is rejected			
ISDN Parameter values:	BC=speech, no							
SIP Parameter values:	PIXIT for support Case a) no 100 Case b) Suppor	b = line (PIXIT)						
Comments:		1		1	1			
	ISDN		SUT		SIP			
	SETUP	→		→	INVITE offer 1			
	CALL PROC	+		-				
				←	UPDATE offer 2			
				→	500 Server Internal Error			
				+	183 Session Progress answer 1			
				→	PRACK			
				←	200 OK PRACK			
	ALERTING	+		+	180 Ringing			
	CONNECT	+		←	200 OK INVITE			
				→	ACK			
			Conversation					
	DISC	→		→	BYE			
	REL	+		←	200 OK BYE			

IS_XX_UP_04	NGN reference to: ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3311 [31], clause 5.1							
TSS reference:	ISDN - SIP/Basi							
Selection criteria:			rocedure, SDP version id					
Test purpose:	the SDP version	identifie		e.g. ba	ndwidth parameter changed), if			
ISDN Parameter	BC=speech, no	HLC						
values:								
SIP Parameter values:	PIXIT for support Case a) no 100 Case b) Support Case c) Support a = line (PIXIT) b = line (PIXIT)							
0	m = line (PIXIT)							
Comments:	IODNI		OUT		OID			
	ISDN		SUT	+	SIP			
	SETUP	→		→	INVITE with offer 1			
	0444 5500			_	with SDP version identifier			
	CALL PROC	+		+	183 Session Progress answer 1			
				→	PRACK			
				+	200 OK (PRACK)			
				+	UPDATE with offer 2			
					different SDP version identifier			
				→	200 OK UPDATE answer 2			
			Session parameter changed					
	ALERTING	(+	180 Ringing			
	CONNECT	+		+	200 OK INVITE			
	CONNECT	_		→	ACK			
			Conversation	7	AUN			
	DISC	→	Conversation	→	BYE			
	DISC	7		→				
	REL			~	200 OK BYE			

IS_XX_UP_05	NGN reference to: ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1 IETF RFC 3311 [31], clause 5.1							
TSS reference:	ISDN - SIP/Basi							
Selection criteria:			procedure, SDP version iden					
Test purpose:			E procedure is executed but					
107117			rsion identifier and SDP conte	ent h	ave not changed.			
ISDN Parameter	BC=speech, no	HLC						
values:	D: 1							
SIP Parameter values:	Dial string paran	neters	options=PIXII					
	PIXIT for suppor	ted he	ader:					
	Case a) no 100							
	Case b) Support							
	Case c) Support	ed: 100	0 rel and precondition					
	a = line (PIXIT)							
	b = line (PIXIT)							
	m = line (PIXIT)							
Comments:								
	ISDN		SUT		SIP			
	SETUP	→		→	INVITE with offer 1			
					with SDP version identifier			
	CALL PROC	+						
				+	183 Session Progress			
					answer 1			
				→	PRACK			
				+	200 OK (PRACK)			
				+	UPDATE with offer 2			
					identical SDP as offer 1			
				→	200 OK UPDATE answer 2			
		Session parameter are not changed						
	ALERTING	+		+	180 Ringing			
	CONNECT	+		+	200 OK INVITE			
	551111251	<u> </u>		→	ACK			
			Conversation	1	-			
	DISC	→		→	BYE			
	REL	-		+	200 OK BYE			

6.2.1.4 Test purposes for ISDN-SIP Basic call Successful - DTMF Tests

IS_XX_DT_01	ISDN reference ETSI EN 300 403-1 [i.3] ETSI EN 300 899-1 [23	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2.1							
TSS reference:	ISDN-SIP/Basic_call/Suc								
Selection criteria:	Basic call; DTMF - Inband								
Test purpose:	Ensure that the call estable Ensure that in the active of transmitted inband to the	call state (N10) the							
ISDN Parameter values:	BC=speech, no HLC								
SIP Parameter values:	Dial string parameters op	tions=PIXIT							
	PIXIT for supported head Case a) no 100 rel Case b) Supported: 100 r Case c) Supported: 100 r a = line (PIXIT)	·el	n						
	b = line (PIXIT) m = line (PIXIT)	b = line (PIXIT)							
Comments:	- (
	ISDN		SUT		SIP				
	Case a)								
	SETUP	→		→	INVITE with offer 1				
	CALL PROC	+							
	ALERTING	+		+	180 Ringing				
	CONN	(+	200 OK INVITE				
	33111			→	ACK				
			Conversation	+-	7.010				
	DISC	-	Conversation	+	BYE				
	REL	>		→	200 OK BYE				
	Case c) Supported: 100 rel and precondition				200 OK BTE				
	SETUP	→		→	INVITE				
	CALL PROC	+							
				(183 Session Progress				
				→	PRACK				
				+	200 OK				
				→	UPDATE				
				+	200 OK				
	ALERTING	+		+	180 Ringing				
				→	PRACK				
				+	200 OK				
	CONN	+		+	200 OK INVITE				
				→	ACK				
			Conversation						
	DISC	+		+	BYE				
	REL	→		→	200 OK BYE				

Values of codecs for test purposes IS_XX_DT_01									
VARIABLE	PT Encoding media type clock rate channels								
VA_01	0	PCMU	Α	8,000	1				
VA_02	3	GSM	Α	8,000	1				
VA_03	8	PCMA	Α	8,000	1				

IS_XX_DT_02	ISDN refere	nce to:	NGN reference to:						
10_7/7_51_02	ETSI EN 300 403-1 [i.:			[51], clause 7.1.1					
	ETSI EN 300 899-1 [23], clause 2.1.1 ETSI EN 383 001 [49], claus								
		1 ,			.20], clause 7.2.3.2.1				
TSS reference:	ISDN - SIP/Basic_call/Successful/DTMF								
Selection criteria:	Basic call; DTMF-RFC 28								
Test purpose:	Ensure that the call estab		loc sending is	perfor	med correctly.				
	Ensure that in the active								
	transmitted as payload for								
ISDN Parameter	BC=speech, no HLC								
values:									
SIP Parameter values:	Dial string parameters op	tions=PIXIT							
	PIXIT for supported head	ler:							
	Case a) no 100 rel								
	Case b) Supported: 100								
	Case c) Supported: 100 i	rei and precondition							
	a line (DIVIT)								
	a = line (PIXIT)								
	m = line (PIXIT)	b = line (PIXIT)							
Comments:									
Commonto.	ISDN		SUT		SIP				
	Case a)				O.I.				
	SETUP	→		→	INVITE with offer 1				
	CALL PROC	-		Ť	III WILL OHO!				
	0,121,130								
	ALERTING	+		+	180 Ringing				
	CONN	←		+	200 OK INVITE				
				→	ACK				
			Conversation		-				
	DISC	+		+	BYE				
	REL	→		→	200 OK BYE				
	Case c) Supported: 100								
	rel and precondition								
	SETUP	→		→	INVITE				
	CALL PROC	(
				+	183 Session				
					Progress				
				→	PRACK				
				(200 OK				
				→	UPDATE				
				+	200 OK				
	ALERTING	(+	180 Ringing				
				→	PRACK				
				+	200 OK				
	CONN	(+	200 OK INVITE				
			_	→	ACK				
			Conversation						
	DISC	(+	BYE				
	REL	→		→	200 OK BYE				

6.2.1.5 Test purposes for ISDN-SIP Basic call Successful -UDI

Successful	
UDI	

IS_UD_01	ISDN reference to:			NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI EN 300 899-1 [23], clause 2.1.1			ITU-T Q.1912.5 [51], clause 7.1 ETSI EN 383 001 [49], clause 7.1 ETSI TS 129 163 [i.20], clause 7.2.3.2			
TSS reference:	ISDN - SIP/Basic_call/Successful/UDI						
Selection criteria:	Basic call; UDI						
Test purpose:	Ensure that the call establishment using en-bloc sending is performed correctly. Ensure that the mapping of the SETUP parameters and the INVITE message parameters is performed correctly. Ensure that in the active call state (N10) the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).						
ISDN Parameter	BC= UDI, no HL			,			
values:							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
Comments:	a = line : rtpmap: <dynamic-pt> CLEARMODE/8000 b = line AS: 64 m = RTP/AVP</dynamic-pt>						
Comments.	ISDN		SUT		SIP		
	Case a)		001		- Oii		
	SETUP	→		→	INVITE		
	CALL PROC	-			IIIVII L		
	ALERTING	+		+	180 Ringing		
	CONN	È		(200 OK INVITE		
	CONN			→	ACK		
			Conversation		ACK		
	DISC	→	Conversance	→	BYE		
	REL	-		/	200 OK BYE		
	Case c)	_			200 OK BTE		
	SETUP	→		→	INVITE		
	CALL PROC	-			IIIVIIL		
	CALLTROC	_		+	183 Session Progress		
				→	PRACK		
					200 OK		
				→	UPDATE		
					200 OK		
	ALERTING	+		+	180 Ringing		
	ALLINING	1		→	PRACK		
					200 OK		
	CONN	+		(200 OK INVITE		
	COININ	_		→	ACK		
			Conversation		AON		
	DISC	→	Conversalic) →	BYE		
	REL	-			200 OK BYE		
	INEL			<u></u>	1200 UN DIE		

IS_UD_02	ISDN	referenc	e to:	NG	N reference to:				
10_05_02	ETSI EN 300 40			ITU-T Q.1912.5 [51], clause 7.3					
	ETSI EN 300 8			ETSI EN 3	I EN 383 001 [49], clause 7.1 S 129 163 [i.20], clause 7.2.3.2				
TSS reference:	ISDN-SIP/Basic_call/Successful/UDI								
Selection criteria:	Basic call; UDI; ITU-T Q.1912.5 [51] Profile A								
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly.								
	Ensure that the ISDN user in the state U3 receives an ALERTING message with the progress indicator information element "call is not end-to-end ISDN (#1)" location								
	"Network beyond Interworking point" when the SIP user answers with 180 Ringing								
	message.								
		Ensure that in the active call state (N10) the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).							
ISDN Parameter	BC= UDI, no HL		y. 100g Q00 pa.						
values:	DO- ODI, NO FILO								
SIP Parameter values:	Dial string param	neters opt	ions=PIXIT						
		•							
	PIXIT for suppor		er:						
	Case a) no 100 i								
	Case b) Support								
	Case c) Support	ed: 100 re	el and precondition	n					
	a – lina : rtnman	· -dvnami	OTS CLEADMO	NDE/9000					
	b = line AS: 64	a = line : rtpmap: <dynamic-pt> CLEARMODE/8000</dynamic-pt>							
	m = RTP/AVP								
Comments:									
	ISDN		SUT		SIP				
	Case a)								
	SETUP	→		→	INVITE				
	CALL PROC	(
	ALERTING	+		+	180 Ringing				
	PI #1								
	CONN	+		(200 OK INVITE				
			_	→	ACK				
			Conversa						
	DISC	→		→	BYE				
	REL	+		+	200 OK BYE				
	(222.2)								
	Case c)				INIVITE				
	SETUP CALL PROC	→		→	INVITE				
	CALL FRUC								
				(183 Session Progress				
				→	PRACK				
				-	200 OK				
				→	UPDATE				
				-	200 OK				
	ALERTING	+		+	180 Ringing				
	PI #1				3 3				
				→	PRACK				
				+	200 OK				
	CONN	+		+	200 OK INVITE				
				→	ACK				
	Conversation								
	DISC	→		→	BYE				
	REL	((200 OK BYE				

IS_UD _03	ETSI EN 300 403-1 [i.3], clause 5.1.5.1			NGN reference to: ITU-T Q.1912.5 [51], clause 7.3					
	ETSI EN 300 899-		23], clause 2.1.1						
TSS reference:	ISDN-SIP/Basic_call/Successful/Voice								
Selection criteria:	Basic call; UDI; ITU-T Q.1912.5 [51] Profile B with PI								
Test purpose:		Ensure that call establishment using en-bloc sending is performed correctly.							
	Ensure that the ISDN t								
	progress indicator info								
	Interworking point" who								
		Ensure that in the active call state (N10) the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).							
IODN Danasatan		(e.g. testing	QoS parame	ters).					
ISDN Parameter values:	BC= UDI, no HLC								
SIP Parameter	Dial string parameters options=PIXIT								
values:	Diai string parameters	options=PIX	d I						
values.	PIXIT for supported he	ader:							
	Case a) no 100 rel	auei.							
	Case b) Supported: 10	nn rel							
	Case c) Supported: 10		econdition						
	case of Supported. To	o roi ana pro	500114111011						
	a = line : rtpmap: <dyna< td=""><td>amic-PT> CL</td><td>EARMODE/8</td><td>3000</td><td></td></dyna<>	amic-PT> CL	EARMODE/8	3000					
	b = line AS: 64								
	m = RTP/AVP								
Comments:									
	ISDN		SU	Γ	SIP				
	Case a)								
	SETUP	→		→	INVITE				
	CALL PROC	+							
	ALERTING	+		←	180 Ringing				
	PI								
	CONN	+		+	200 OK INVITE				
				→	ACK				
	D100		Convers		5)/5				
	DISC	→		→	BYE				
	REL	+		(200 OK BYE				
	0								
	Case c)			→	IND/ITE				
	SETUP CALL PROC	→		7	INVITE				
	CALL PROC	_							
				+	183 Session				
					Progress				
				→	PRACK				
				/	200 OK				
				→	UPDATE				
				(200 OK				
	ALERTING PI# VA	+		+	180 Ringing				
				→	PRACK				
				(200 OK				
	CONN	+		(200 OK INVITE				
				→	ACK				
			Convers	ation					
	DISC	→		→	BYE				
1	REL	+		+	200 OK BYE				

IS_UD_04	ISDN		NGN reference to:				
	ETSI EN 300 40 ETSI EN 300 8	.1 ET	ITU-T Q.1912.5 [51], clause 7.3 ETSI EN 383 001 [49], clause 7.3 ETSI TS 129 163 [i.20], clause 7.2.3.2				
TSS reference:	ISDN-SIP/Basic_call/Successful/UDI						
Selection criteria:	Basic call; UDI; ETSI EN 383 001 [49] or ETSI TS 129 163 [i.20]						
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly. Ensure that the ISDN user in the state U3 receives an ALERTING message without the progress indicator information element when the SIP user answers with 180 Ringing message. Ensure that in the active call state (N10) the data transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).						
ISDN Parameter values:	BC= UDI, no HLC						
SIP Parameter values:	Dial string parameters options=PIXIT						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line : rtpmap: <dynamic-pt> CLEARMODE/8000 b = line AS: 64 m = RTP/AVP</dynamic-pt>						
Comments:		T		Т	0.15		
	ISDN		SUT		SIP		
	Case a)						
	SETUP	→		→	INVITE		
	CALL PROC	(
	ALERTING	(←	180 Ringing		
	CONN	(←	200 OK INVITE		
				→	ACK		
			Conversation				
	DISC	→		→	BYE		
	REL	+		(200 OK BYE		
	Case c)						
	SETUP	→		→	INVITE		
	CALL PROC	(
				(183 Session Progress		
				→	PRACK		
				(200 OK		
				→	UPDATE		
				←	200 OK		
	ALERTING	+		(180 Ringing		
				→	PRACK		
				(200 OK		
	CONN	(←	200 OK INVITE		
				→	ACK		
			Conversation				
	DISC	→		→	BYE		
	REL	+		+	200 OK BYE		

IS_UD_05	ISDN reference to:			NGN reference to:				
	ETSI EN 300 403-1 [i.		ITU-T C	2.1912.5 [51], clause 7.3				
	ETSI EN 300 899-1 [
TSS reference:	ISDN-SIP/Basic_call/Successful/UDI							
Selection criteria:	Basic call; UDI; SIP Profile A or Profile B optional							
Test purpose:	Ensure that call establishment using en-bloc sending is performed correctly.							
	Ensure that the ISDN user in the state U3 receives a CONNECT message with the							
	progress indicator informa							
	"Network beyond Interworking point" when the SIP user answers with 200 OK message.							
	Ensure that in the active call state (N10) the data transfer on the media and B-channels							
ISDN Parameter		is performed correctly (e.g. testing QoS parameters).						
values:	BC= ODI, 110 HLC	BC= UDI, no HLC						
SIP Parameter values:	Dial string parameters opt	tions-P	IXIT					
on rarameter values.	Diai string parameters op	10113-1	IXII					
	PIXIT for supported head	er:						
	Case a) no 100 rel							
	Case b) Supported: 100 rel							
	Case c) Supported: 100 re	el and p	recondition					
	a = line : rtpmap: <dynamic-pt> CLEARMODE/8000</dynamic-pt>							
	b = line AS: 64							
	m = RTP/AVP							
Comments:	IODNI		OUT		OID			
	ISDN		SUT		SIP			
	Case a) SETUP			→	INVITE			
		→		7	IINVITE			
	CALL PROC CONN PI# 1	-	+	+	200 OK INVITE			
	COMM 1 I# 1	_		→	ACK			
			Conversation		ACR			
	DISC	→	Oonversatio	→	BYE			
	REL	É		′	200 OK BYE			
	TVEE	—	+		200 01(2) 12			
	Case c) Supported: 100		+					
	rel and precondition							
	SETUP	→		→	INVITE			
	CALL PROC	+						
				+	183 Session Progress			
				→	PRACK			
				+	200 OK			
				→	UPDATE			
				+	200 OK			
	CONN PI# 2	+		+	200 OK INVITE			
				→	ACK			
			Conversation					
	DISC	→		→	BYE			
	REL	+		+	200 OK BYE			

IS_UD_06	ISDN reference	e to:		NGN	reference to:	
	ETSI EN 300 403-1 [i.3],	claus	e 5.1.5.1	ITU-T Q.19	12.5 [51], clause 7.3	
	ETSI EN 300 899-1 [23], clause 2.1.1					
TSS reference:	ISDN-SIP/Basic_call/Succes					
Selection criteria:	Basic call; UDI; ITU-T Q.191	2.5 [5	1] Profile B with F	기		
Test purpose:	Ensure that call establishme					
	Ensure that the ISDN user in					
	progress indicator information					
	Interworking point" when the					
	Ensure that in the active cal			ansfer on the	media and B-channels is	
100110	performed correctly (e.g. tes	ting Q	oS parameters).			
ISDN Parameter	BC= UDI, no HLC					
values:	Di Lui	DIX	/IT			
SIP Parameter	Dial string parameters option	ns=PIX	(II			
values:	DIVIT for a composite d b and an					
	PIXIT for supported header: Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel	and nr	econdition			
	Case c) Supported. 100 fer a	and pro	econdition			
	a = line : rtpmap: <dynamic-f< td=""><td>PT> CI</td><td>FARMODE/8000</td><td>1</td><td></td></dynamic-f<>	PT> CI	FARMODE/8000	1		
	b = line AS: 64	12 01				
	m = RTP/AVP					
Comments:						
	ISDN		SUT		SIP	
	Case a)					
	SETUP	→		→	INVITE	
	CALL PROC	+				
	CONN PI	+		(200 OK INVITE	
				→	ACK	
			Conversation			
	DISC	→		→	BYE	
	REL	←		+	200 OK BYE	
	Case c) Supported: 100 rel					
	and precondition					
	SETUP	→		→	INVITE	
	CALL PROC	+				
				+	183 Session	
		-			Progress	
				→	PRACK	
				+	200 OK	
				→	UPDATE	
	CONN. DIW. VA	_		+	200 OK INDUITE	
	CONN PI# VA	+		+	200 OK INVITE	
			0	→	ACK	
	DIGG	_	Conversation		D)/E	
	DISC	→		→	BYE	
	REL	(←	200 OK BYE	

IS_UD_07	ISDN refere	NGN reference to:				
	ETSI EN 300 403-1 [i.	3], clause 5.1.5.1	ITU-T Q.1912.5 [51], clause 7.3			
	ETSI EN 300 899-1 [ETSI EN 300 899-1 [23], clause 2.1.1 ETSI EN 383 001 [49], clause 7.1				
			ETSI TS 129	163 [i.	20], clause 7.2.3.2	
TSS reference:	ISDN-SIP/Basic_call/S					
Selection criteria:	Basic call; UDI; ETSI E					
Test purpose:	Ensure that call establi					
	Ensure that the ISDN u					
	progress indicator infor	rmation element whe	en the SIP user a	nswers	with 200 OK	
	message.	ra aall atata (NI10) th	a data transfer an	thom	adia and D abannala	
	Ensure that in the activities performed correctly			i the m	edia and b-channels	
ISDN Parameter	BC= UDI, no HLC	e.g. lesting Qos pa	iameters).			
values:	DC= ODI, NO FILC					
SIP Parameter	Dial string parameters	ontions=PIXIT			<u> </u>	
values:	Diai string parameters	options=1 ixi1				
valuoo.	PIXIT for supported he	eader:				
	Case a) no 100 rel					
	Case b) Supported: 10	00 rel				
	Case c) Supported: 10		on			
	a = line : rtpmap: <dyna< td=""><td>amic-PT> CLEARM</td><td>ODE/8000</td><td></td><td></td></dyna<>	amic-PT> CLEARM	ODE/8000			
	b = line AS: 64					
	m = RTP/AVP					
Comments:	IODAI	<u> </u>	OUT	1	OID	
	ISDN		SUT		SIP	
	Case a)			→	INIV/ITE	
	SETUP CALL PROC	→		7	INVITE	
	CALL PROC	7				
	CONN	(+	200 OK INVITE	
	OOM			`	ACK	
			Conversation	+	/ OIC	
	DISC	→	Conversation	→	BYE	
	REL	-		-	200 OK BYE	
		-		1		
	Case c)			1		
	SETUP	→		→	INVITE	
	CALL PROC	(
				+	183 Session	
					Progress	
				→	PRACK	
				+	200 OK	
				→	UPDATE	
				+	200 OK	
	CONN	+		+	200 OK INVITE	
				→	ACK	
			Conversation	1		
	DISC	→		→	BYE	
	REL	+	1	←	200 OK BYE	

IS_UD_08	ISDN	reference to:		NGN referen	ce to:	
10_02_00		103-1 [i.3], clause 5.3	3.3 IT	U-T Q.1912.5 [51]		
		399-1 [23], clause 2.1		SI EN 383 001 [4		
			ETSI	ETSI TS 129 163 [i.20], clause 7.2.3.2		
TSS reference:		_call/Successful/UDI				
Selection criteria:	Basic call; UDI					
Test purpose:		call establishment and				
		g user clears after ans		DISCONNECT m	essage indicating	
		# 16 "normal call clea				
		shall receive a BYE m		the access of FTC	N EN 000 004 [40]	
		der shall contain Cau	ise value #16 i	in the case of ETS	SI EN 383 001 [49]	
ISDN Parameter	and ETSI TS 129 BC= UDI, no HL	9 163 [1.20].				
values:	BC= ODI, NO FIL	C				
SIP Parameter values:	Dial string param	neters options=PIXIT				
on rarameter values.	Diai String Paran	ictors options=1 iXi1				
	PIXIT for suppor	ted header:				
	Case a) no 100 i					
	Case b) Support					
	Case c) Support	ed: 100 rel and preco	ndition			
		: <dynamic-pt> CLEA</dynamic-pt>	RMODE/8000			
	b = line AS: 64					
0	m = RTP/AVP					
Comments:	ISDN		SUT		SIP	
	Case a)		301		SIF	
	SETUP	→		→	INVITE	
	CALL PROC	-			IIIVIIL	
	ALERTING	((180 Ringing	
	CONN	-		-	200 OK INVITE	
	0011	-		→	ACK	
			Conversation			
	DISC	→		→	BYE	
	REL	+		(200 OK BYE	
	Case c)					
	SETUP	→		→	INVITE	
	CALL PROC	+				
				←	183 Session	
					Progress	
				→	PRACK	
				(200 OK	
				→	UPDATE	
	ALEDTING	<u></u>		+	200 OK	
	ALERTING	+		←	180 Ringing PRACK	
					200 OK	
	CONN	←		-	200 OK INVITE	
	COININ			→	ACK	
			Conversation	7	AUN	
	DISC	>	CONVENSATION	→	BYE	
	REL				200 OK BYE	
	INEE	1,		1.	200 ON DIL	

IS_UD_09	ISDN reference to:			NGN reference to:		
	ETSI EN 300 403-1 [i.3], clause 5.3.3 ETSI EN 300 899-1 [23], clause 2.1.1		1 ET	ITU-T Q.1912.5 [51], clause 7.7 ETSI EN 383 001 [49], clause 7.7 ETSI TS 129 163 [i.20], clause 7.2.3.2		
TSS reference:	ISDN-SIP/Basic	_call/Successful/UDI			1,	
Selection criteria:		ETSI EN 383 001 [49]	or ETSI TS 12	29 163 [i.20] and	ITU optional	
Test purpose:	Ensure that the of after answering	call clearing procedure with a BYE message. shall receive a DISCC	is performed	correctly when th	ne called user clears	
ISDN Parameter values:	BC= UDI, no HL					
SIP Parameter values:	Dial string param	neters options=PIXIT				
	Case a) no 100 r Case b) Support Case c) Support					
Comments:						
	ISDN		SUT		SIP	
	Case a)					
	SETUP	→		→	INVITE	
	CALL PROC	-			1144112	
	ALERTING	((180 Ringing	
	CONN	+		+		
	COMM	~			200 OK INVITE	
				→	ACK	
			Conversation			
	DISC	(←	BYE	
	REL	→		→	200 OK BYE	
	Case c)					
	SETUP	→		→	INVITE	
	CALL PROC	(IIIVII E	
				←	183 Session Progress	
				→	PRACK	
				+	200 OK	
				→	UPDATE	
				(200 OK	
	ALERTING	+		+	180 Ringing	
	CONN	((200 OK INVITE	
	COININ	_		→	PRACK	
						
		+			200 OK	
			2	→	ACK	
	2100		Conversation	_	D) (E	
	DISC	((BYE	
	REL	→		→	200 OK BYE	

6.2.1.6 Test purposes for ISDN-SIP Basic call Unsuccessful

Unsuccessful

IS_XX_U01	ISDN reference to: ETSI EN 300 403-1 [i.3], clauses 5.2.5.1, G.1.7 ETSI EN 300 899-1 [23], clause 2.1.1	NGN referend ITU-T Q.1912.5 [51], ETSI EN 383 001 [49] ETSI TS 129 163 [i.20],	clause 7.7.6 , clause 7.7.6				
TSS reference:	ISDN-SIP/Basic_call/Unsuccessful						
Selection criteria:	Basic call;						
Test purpose:	Ensure that, when the called user is busy a the circuit switched side is initiating call cle message indicating cause value #17 "user	aring with a DISCONNECT					
ISDN Parameter	BC = PIXIT						
values:							
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and preconditio a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:	The originating exchange sends a DISCONNECT message to the calling user with progress indicator #8 thus indicating that in-band information is available. Normal release procedure applies after the in-band information has been connected. The calling user shall receive in the disconnect indication state (N12) the in-band tone/announcement on the B-channel.						
		SUT	SIP				
	SETUP →	→	INVITE				
	DISC ←	+	486 Busy Here				
	REL →	→	ACK				
	RLC ←						

IS_XX_U02		N reference to: N 300 403-1 [i.3],		NGN referen ITU-T Q.1912.5 [51]		
	clause	es 5.2.5.1, G.1.7				
		899-1 [23], clause 2	2.1.1			
TSS reference:	ISDN-SIP/Basic_o	call/Unsuccessful				
Selection criteria:	Basic call;					
Test purpose:	Here (NDUB).		·	he PROXY responds wit	,	
		ed side is initiating c ng cause value #17 "		g with a DISCONNECT by".	or RELEASE	
ISDN Parameter values:	BC = PIXIT					
SIP Parameter values:	PIXIT for supporte	PIXIT for supported header:				
	Case a) no 100 re	el				
	Case b) Supporte	ed: 100 rel				
	Case c) Supporte	d: 100 rel and preco	ndition			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:	The originating ex	change sends a DIS	CONNE	CT message to the callin	g user with	
	progress indicator	r #8 thus indicating t	hat in-bar	nd information is availabl	e. Normal	
				ormation has been conne	ected. The calling	
	user shall receive	in the disconnect in	dication s	tate (N12) the in-band		
		ent on the B-channel				
	ISDN		SUT		SIP	
	SETUP	→				
	DISC	(
	REL	→				
	RLC	(

IS_XX_U03	ISDN refere ETSI EN 300 4 clauses 5.2.5 ETSI EN 300 899-1 [i03-1 [i.3], 5.4, G.1.9	ITU-T Q.19 ETSI EN 38	N reference to: 12.5 [51], clause 7.7.6 3 001 [49], clause 7.7.6 163 [i.20], clause 7.2.3.2		
TSS reference:	ISDN-SIP/Basic_call/U	_		100 [1120], 014400 1121012		
Selection criteria:	Basic call; Reason Hea		ed			
Test purpose:	network initiate call clea cause value #19 "no ar	Ensure that when there is no answer from the called user (but user alerted), the ISDN network initiate call clearing to the calling user with a DISCONNECT message indicating cause value #19 "no answer from user (user alerted)" and sends to the called user a CANCEL or BYE message indicating cause # 102 "recovery on timer expire" in the				
ISDN Parameter	BC = PIXIT					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments.	ISDN		SUT	SIP		
	SETUP	→	→	INVITE		
	CALL PROCEEDING ←					
	AL EDTING			100 Bi		
	ALERTING	+	(180 Ringing		
	DISC#19	+	→	CANCEL 200 OK		
			-	487 Request terminated		
			→	ACK		
			7	ACK		

IS_XX_U04	ISDN reference ETSI EN 300	NGN reference to: ITU-T Q.1912.5 [51], clause 7.7.6					
	clauses 5.2.	ETSI EN 383 001 [49], clause 7.7.6					
		ETSI EN 300 899-1 [23], clause 2.1.1 ETSI TS 129 163 [i.20], clau					
TSS reference:	ISDN-SIP/Basic_call/U	nsuccessful/			-		
Selection criteria:	Basic call; Reason Hea	der field is supported					
Test purpose:	Ensure that when there is no answer from the called user (but user alerted) and if the SIP network initiate call clearing before the SCN release the call, the SIP network shall send to the calling user a 480 Temporarily unavailable message and the SCN network initiate call clearing to the calling user with a DISCONNECT message indicating cause value # 20 Subscriber absent.						
ISDN Parameter	BC = PIXIT						
values:							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROCEEDING	←					
	ALERTING	+		(180 Ringing		
	DISC#20	←		+	480 temp. Unavailable		
	REL	→		→	ACK		

IS_XX_U05	ISDN reference to: ETSI EN 300 403-1 [i.3], clauses 5.2.5.4, G.1.9 ETSI EN 300 899-1 [23], clause 2.1.1		NGN reference to: ITU-T Q.1912.5 [51], clause 7.7.6 ETSI EN 383 001 [49], clause 7.7.6 ETSI TS 129 163 [i.20], clause 7.2.3.2				
TSS reference:	ISDN-SIP/Basic_call/U						
Selection criteria:	Basic call; Reason Hea						
Test purpose:	network initiate call cle	Ensure that when there is no answer from the called user (but user alerted), the ISDN network initiate call clearing to the calling user with a DISCONNECT message indicating cause value #19 "no answer from user (user alerted)" and sends to the called user a CANCEL or BYE					
ISDN Parameter	BC = PIXIT						
values:							
SIP Parameter values:	PIXIT for supported he Case a) no 100 rel Case b) Supported: 10	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:	IODN		OUT	OLD			
	ISDN		SUT	SIP			
	SETUP	→	→	INVITE			
	CALL PROCEEDING	+					
	ALERTING	+	+	180 Ringing			
	DISC#19	(→	CANCEL			
			(200 OK			

IS_XX_U06	ISDN refere ETSI EN 300 de clauses 5.2.4 ETSI EN 300 899-1 [403-1 [i.3], 5.4, G.1.9 [23], clause 2.1.1	ITU-T Q.191 ETSI EN 383	reference to: 2.5 [51], clause 7.7.6 001 [49], clause 7.7.6 63 [i.20], clause 7.2.3.2		
TSS reference:	ISDN-SIP/Basic_call/U					
Selection criteria:	Basic call; Reason Hea					
Test purpose:	Ensure that when there is no answer from the called user (but user alerted) and if the SIP network initiate call clearing before the SCN release the call, the SIP network shall send to the calling user a 480 Temporarily unavailable message and the SCN network initiate call clearing to the calling user with a DISCONNECT message indicating cause value # 20 Subscriber absent.					
ISDN Parameter values:	BC = PIXIT					
SIP Parameter values:	PIXIT for supported head Case a) no 100 rel Case b) Supported: 100	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)				
Comments:						
	ISDN		UT	SIP		
	SETUP	→	→	INVITE		
	CALL PROCEEDING	←				
	ALERTING	+	+	180 Ringing		
	DISC#20	((480 temp. Unavailable		
	REL	→	→	ACK		

IS_XX_U07	ISDN referen ETSI EN 300 40 clauses 5.1.9, 5.3 ETSI EN 300 899-1 [23	3-1 [i.3], 3.2, G.1.10	ITU-T Q.19 ETSI EN 38	N reference to: 12.5 [51], clause 7.7.6 3 001 [49], clause 7.7.6 163 [i.20], clause 7.2.3.2	
TSS reference:	ISDN-SIP/Basic_call/Ur	nsuccessful/			
Selection criteria:	Basic call				
Test purpose:	Ensure that when the called side rejects the call and responds with a 603 Decline message containing the Cause information element indicating the cause value #21 "call reject". The circuit switched network initiates call clearing to the calling user with a DISCONNECT or RELEASE message indicating cause value # 21 "call reject".				
ISDN Parameter	BC = PIXIT		<u> </u>	•	
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:	1001	T	0.17	OID.	
	ISDN	_	SUT	SIP	
	SETUP	→	→	INVITE	
	CALL PROCEEDING	-			
	DISC#21	-	←	603 Decline Unavailable	
			→	ACK	

IS_XX_U08	ISDN referen	ce to:	NG	N reference to:
	ETSI EN 300 40			12.5 [51], clause 7.7.6
	clauses 5.1.9, 5.3			3 001 [49], clause 7.7.6
	ETSI EN 300 899-1 [23	3], clause 2.1.1	ETSI TS 129	163 [i.20], clause 7.2.3.2
TSS reference:	ISDN-SIP/Basic_call/Un	successful		
Selection criteria:	Basic call;			
Test purpose:	Ensure that the call will			
	The circuit switched net			
	DISCONNECT or RELE	ASE COMPLETE	message with a	cause value # 28.
ISDN Parameter	BC = PIXIT			
values:				
SIP Parameter values:	Dial string parameters o	ptions=PIXIT		
	PIXIT for supported hea	der:		
	Case a) no 100 rel	uei.		
	Case b) Supported: 100	rel		
	Case c) Supported: 100		ion	
		,		
	a = line (PIXIT)			
	b = line (PIXIT)			
	m = line (PIXIT)			
Comments:	In some networks tones	or announcemen	t can be generate	d in the destination exchange
	(or intermediate exchange			
	The originating exchang			
	progress indicator #8 the			
	release procedure applie			
	The calling user shall re		nnect indication st	ate (N12)
	the in-band tone/annour	ncement.		
	ISDN		SUT	SIP-S-CSCF
	SETUP	→	→	INVITE
	CALL PROCEEDING	+		
	DISC#28	+	+	
			→	ACK

IS_XX_U09	ISDN refere		NGN reference to:			
	ETSI EN 300 403-1 [i.		ITU-T Q.1912.5 [51], clause 7.7.6			
	ETSI EN 300 899-1 [2	23], clause 2.1.1	ETSI EN 383 001 [49], clause 7.7.6 ETSI TS 129 163 [i.20], clause 7.2.3.2.12			
TSS reference:	ISDN-SIP/Basic_call/U	nsuccessful	210110120100 [i.20], olduse 7.2.0.2.12			
Selection criteria:	Basic call;					
Test purpose:	Ensure that when the c	called party is not re	gistered.			
	DISCONNECT or REL	EASE COMPLETE	clearing to the calling user with a message with a cause:			
	# 20 "subscriber absen	ıt"				
ISDN Parameter	BC = PIXIT					
values:						
SIP Parameter values:	PIXIT for supported he	ader:				
	Case a) no 100 rel					
	Case b) Supported: 10					
	Case c) Supported: 10	0 rel and preconditi	on			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	ISDN		SUT			
	SETUP	→				
	CALL PROCEEDING	+				
	DISC#20	+				

IS_XX_U10	ETSI EN 300 clauses 5.2	ISDN reference to: ETSI EN 300 403-1 [i.3], clauses 5.2.2, G.5.7 TSI EN 300 899-1 [23], clause 2.1.1		NGN reference to: ITU-T Q.1912.5 [51], clause 7.7.6 ETSI EN 383 001 [49], clause 7.7.6 ETSI TS 129 163 [i.20], clause 7.2.3.2.12				
TSS reference:	ISDN-SIP/Basic_call/U			L131 13 129 10	55 [1.20], Clause 7.2.5.2.12			
Selection criteria:	Basic call	TISGCCC33TGI						
Test purpose:		switched netwo	rk initi		onds with a 503 Service g to the calling user with a			
ISDN Parameter values:	BC = PIXIT							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:		T T		_	0.0			
	ISDN		SU		SIP			
	SETUP	→		→	INVITE			
	CALL PROCEEDING	(-	- 			
	DISC#127	+		(503 Service Unavailable			
				→	ACK			

IS_XX_U11	ISDN referer ETSI EN 300 403-1 [i.: ETSI EN 300 899-1 [2	3], clause G.1.6	NGN reference to: ITU-T Q.1912.5 [51], clause ETSI EN 383 001 [49], clause ETSI TS 129 163 [i.20], clause		2.5 [51], clause 7.7.6 001 [49], clause 7.7.6
TSS reference:	ISDN-SIP/Basic_call/U	nsuccessful			
Selection criteria:	Basic call;				
Test purpose:		lled user, the netw			6 "normal call clearing" aring to the called user with
ISDN Parameter values:	BC=PIXIT				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	ISDN		SUT		SIP
	SETUP	→		→	INVITE
	CALL PROCEEDING	+			-
	ALERTING	+		+	180 Ringing
	DISC#16	→		→	CANCEL
	REL	+		+	200 OK CANCEL
	RLC	→		+	487 Request terminated
				→	ACK

IS_XX_U012	ISDN referer ETSI EN 300 403-1 [i. ETSI EN 300 899-1 [2	3], clause G.1.6	ETSI E	NGN reference to: Q.1912.5 [51], clause 7.7.6 N 383 001 [49], clause 7.7.6 29 163 [i.20], clause 7.2.3.2.12	
TSS reference:	ISDN-SIP/Basic_call/Ur	nsuccessful			
Selection criteria:	Basic call;				
Test purpose:				s changed, the circuit switched DISCONNECT with Cause value	
ISDN Parameter values:	BC=PIXIT				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:		1			
	ISDN		SUT		
	SETUP	→			
	CALL PROCEEDING	(
	DISC#22	-			
	REL	→			

IS_XX_U13	ISDN referen ETSI EN 300 403-1 [i.: ETSI EN 300 899-1 [2:	3], clause G.1.6 3], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.7.6, ETSI EN 383 001 [49], clause 7.7.6 ETSI TS 129 163 [i.20], clause 7.2.3.2.12 IETF RFC 3261 [28] IETF RFC 4566 [25]		
TSS reference:	ISDN-SIP/Basic_call/U	nsuccesstul			
Selection criteria:	Basic call		4 11 1 7		
Test purpose:	INVITE messages), the DISCONNECT message	network initiate	call clearing to the		
ISDN Parameter values:	BC=PIXIT				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	ISDN		SUT	SIP	
	SETUP	→	→	INVITE	
	CALL PROCEEDING	(
			→	INVITE	
			→	INVITE	
			→	INVITE	
			→	INVITE	
			→	INVITE	
	DISC#20	(→	INVITE	
	REL	→			
	RLC	(

IS_XX_U14	ISDN referer ETSI EN 300 403-1 [i. ETSI EN 300 899-1 [2	3], clause G.1.6	ETSI	T Q.191 EN 383 129 16 IETF	reference to: 2.5 [51], clause 7.7.6, 001 [49], clause 7.7.6 3 [i.20], clause 7.2.3.2.12 RFC 3261 [28] RFC 4566 [25]		
TSS reference:	ISDN-SIP/Basic_call/U	nsuccessful					
Selection criteria:	Basic call; Reason Hea	ader field is suppor	ted				
Test purpose:	message 4XX defined a Sends a DISC or RELE	as SIP_Failure_V <i>F</i> EASE message. Th he ISDNCause Va	A. ne Cause V	alue in t	ed on receipt of a Failure he header field set to NREL message with the		
ISDN Parameter	BC=PIXIT						
values:							
SIP Parameter values:	PIXIT for supported he Case a) no 100 rel Case b) Supported: 10	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:	10511	Г			0.5		
	ISDN	_	SUT	+	SIP		
	SETUP	→		→	INVITE		
	CALL PROCEEDING	(
	DISC#CV_ISDN	←		←	SIP_Failure_VA		
	REL	→		→	ACK		
	RLC	←					

	Values for test purposes IS_XX_U14							
	←REL (Cause Value)	←4XX/5XX/6XX SIP message						
	CV_ ISDN	SIP_Failure_VA						
VA_01	CV_ ISDN	415 Unsupported Media type CV_SIP (PIXIT)						
VA_02	CV_ ISDN	420 Bad Extension CV_SIP (PIXIT)						
VA_03	CV_ ISDN	421 Extension required CV_SIP (PIXIT)						

CV_SIP = CV_ISDN

IS_XX_U15	ISDN referen ETSI EN 300 403-1 [i.: ETSI EN 300 899-1 [2:	3], clause G.1.6 3], clause 2.1.1	ETSI	Q.1912 EN 383 129 163 IETF	reference to: 2.5 [51], clause 7.7.6, 001 [49], clause 7.7.6 3 [i.20], clause 7.2.3.2.12 RFC 3261 [28] RFC 4566 [25]
TSS reference:	ISDN-SIP/Basic_call/Ur				
Selection criteria:	Basic call; Reason Hea		•		
Test purpose:	Ensure that the SUT if t message 4XX defined a				d on receipt of a Failure Cause Value 127.
ISDN Parameter values:	BC=PIXIT				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:	IODNI		OUT	1	
	ISDN	_	SUT	_	IND/ITE
	SETUP	→		→	INVITE
	CALL PROCEEDING	-			
	DISC#127	+		←	SIP_Failure_VA
	REL	→		→	ACK
	RLC	+			

	Values for test purposes IS_XX_U15					
	←REL (Cause Value)	←4XX/5XX/6XX SIP message				
SIP_Failure_VA						
VA_01	127	415 Unsupported Media type				
VA_02	127	420 Bad Extension				
VA_03	127	421 Extension required				

IS_UD_U16	ISDN referen		ITII		reference to:
	ETSI EN 300 403-1 [i.:				12.5 [51], clause 7.7
	ETSI EN 300 899-1 [2	oj, ciause z. i. i			3 001 [49], clause 7.7
	10001001000		E13113	129 163	3 [i.20], clause 7.2.3.2.12
TSS reference:	ISDN-SIP/Basic_call/Ur				
Selection criteria:	Basic call; SIP Network	does not support	UDI		
Test purpose:	Ensure that when the S	SIP Network is not	supporting l	JDI, the	network initiate call
	clearing to the calling us	ser with a DISCOI	NNECT mes	sage in	dicating cause value # 65
	"Bearer capability not in	mplemented"			-
ISDN Parameter	BC= UDI, no HLC	•			
values:	,				
SIP Parameter values:	Dial string parameters of	options=PIXIT			
	PIXIT for supported hea	ader:			
	Case a) no 100 rel				
	Case b) Supported: 100	O rel			
	Case c) Supported: 100	rel and precondit	ion		
	a = line (PIXIT)				
	b = line (PIXIT)				
	m = line (PIXIT)				
Comments:	III = IIIIe (FIXIT)				
Comments.	ICDN		CLIT	1	
	ISDN		SUT	+	IN NOTE
	SETUP	→		→	INVITE
	CALL PROCEEDING	-			

DISC#65	(
REL	→		
RLC	←		

IS_AU_U17	ISDN referer ETSI EN 300 403-1 [i. ETSI EN 300 899-1 [2:	3], clause 5.3.3	ETS	-T Q.191 EN 383	reference to: 12.5 [51], clause 7.7 3 001 [49], clause 7.7 3 [i.20], clause 7.2.3.2.12				
TSS reference:	ISDN-SIP/Basic_call/Ur	SDN-SIP/Basic_call/Unsuccessful							
Selection criteria:	Basic call; SIP Network	does not support	Teleservice	FAX G	3				
Test purpose:		ne calling user with	h a DISCON		service Fax G3, the network nessage indicating cause				
ISDN Parameter values:	BC=3,1 kHz audio, HLC	C= Facsimile G2/G	33						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)								
Comments:	ICDN	1	CUT	1	1				
	ISDN SETUP	→	SUT	→	INVITE				
	CALL PROCEEDING	←							
	DISC#79	←							
	REL	→							
	RLC	RLC +							

IS_XX_U18	ISDN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3], clause 5.3.3	ITU-T Q.1912.5 [51], clause 7.7
	ETSI EN 300 899-1 [23], clause 2.1.1	ETSI EN 383 001 [49], clause 7.7
		ETSI TS 129 163 [i.20], clause 7.2.3.2.12
TSS reference:	ISDN-SIP /Basic_call/Unsuccessful	
Selection criteria:	Basic call	
Test purpose:	that the other party knows that it is to mod new session.	is accomplished by sending a re-INVITE re-INVITE references the existing dialog so dify an existing session instead of establishing a cept the change, he sends an error response a also receives an ACK.
ISDN Parameter values:	BC=PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondit a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ion
Comments:		

IS_XX_U19	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.1.5.1 ETSI EN 300 899-1 [23], clause 2.1.1		NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 ETSI EN 383 001 [49], clause 7.1.1 ETSI TS 129 163 [i.20], clause 7.2.3.2 IETF RFC 3264 [30], clause 6		
TSS reference:	ISDN-SIP/Basic_call	/Successful/Voic	e		
Selection criteria:	Basic call				
Test purpose:	Ensure that answer r The media stream is Ensure that the call is	rejected (port nu	ımber is set t	o zero).	the 180 Ringing message.
ISDN Parameter values:	BC=PIXIT				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	ISDN		SUT		SIP
	SETUP	→		→	INVITE
	CALL PROCEEDING	€			
	ALERTING	+		+	180 Ringing answer 1
	Case a)				
	DISC	-		→	CANCEL
	REL	→		←	200 OK CANCEL
	RLC	(+	487 Request terminated
				→	ACK
	Case b)				
	DISC	+		→	BYE
	REL	→		+	200 OK
	RLC	(+	487 Request terminated
				→	ACK

IS_XX_U20	ISDN refe ETSI EN 300 403-1 ETSI EN 300 899-1	[i.3], clause 5.1.5.1 [23], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.1 IETF RFC 3264 [30], clause 6			
TSS reference:	ISDN-SIP/Basic_call/S	uccessful/Voice				
Selection criteria:	Basic call					
Test purpose:	message. The media s Ensure that the call is r	ated to the SDP offer is tream is rejected (port n ejected by sending a B`	umber is set			
ISDN Parameter values:	BC=PIXIT					
SIP Parameter values:	PIXIT for supported her Case a) no 100 rel Case b) Supported: 100	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)				
Comments:	,					
	ISDN	SUT		SIP		
	SETUP	→	→	INVITE offer 1		
	CALL PROCEEDING	+				
			+	200 OK INVITE answer 1		
			→	ACK		
	DISC	-	→	BYE		
	REL	→	(200 OK		
	RLC	+	+	487 Request terminated		
			→	ACK		

6.2.2 Test purposes for ISDN-SIP Supplementary services

6.2.2.1 CLIP/OIP

IS_XXSSCLIP01	ISDN reference to ETSI EN 300 092-1 [i.		NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.3				
	clause 9.3],			001 [49], clause 7.1.3		
	ETSI EN 300 403-1 [i	.31.	ETSI 129 163 [i.20], clause 7.2.3.2.2.3				
	clauses 4.5.10, 4.5.		ETSI TS 124 607 [43]				
TSS reference:	ISDN-SIP/Supplementary_s		LIP				
Selection criteria:	The called user is provided						
Test purpose:	Ensure that when the Callin passed) with the APRI "pres			d by th	ne calling user (verified and		
	The Type of number is defined			tha C	alling party number		
					ved) with following mapping		
	rules:	iccity deliv	ered to the calle	<i>i</i> u (361	ved) with following mapping		
		ed-Identity	header is Derive	ed fron	n Calling party information		
	element Address S				31 ,		
	The Calling Party I	Number is	mapped into the	e SIP I	From header.		
ISDN Parameter	BC= PIXIT						
values:							
SIP Parameter values:	Dial string parameters option	ns=PIXIT					
	PIXIT for supported header	:					
	Case a) no 100 rel	-					
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel		ndition				
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:							
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROCEEDING	←					
	ALERTING	+		+	180 Ringing		
	CONN	(+	200 OK INVITE		
	COINIA		Conversation		200 OK HAVITE		
	DISC	→	Conversation	→	BYE		
	REL	+		†	200 OK BYE		
	RLC	→			=======================================		

Values for the test purpose IS_XXSSCLIP01

SE	ΓUP→	INVITE→	
Calling par	ty number i.e.	From Header Field	P-Asserted -Identity
TYPE_NUMBER	Numbering plan identification		
National number	ISDN/telephony	The user is derived from the	The user is derived from the
	numbering plan	address string of the calling	address string of the calling
	or	party number IE	party number IE
	Unknown	sip: "+""+"CC+ NDC + SN	"+""+"CC+ NDC + SN
		@hostportion; user=phone	@hostportion; user=phone
International		The user is derived from the	The user is derived from the
number		address string of the calling	address string of the calling
		party number IE	party number IE
		sip: "+""+"CC+ NDC+ SN	sip: "+""+"CC+ NDC + SN
		@hostportion; user=phone	@hostportion; user=phone
Unknown		The user is derived from the	The user is derived from the
		address string of the calling	address string of the calling
		party number IE	party number IE
		sip: "+""+"CC+ NDC + SN	sip: "+""+"CC+ NDC + SN
		@hostportion; user=phone	@hostportion; user=phone
Subscriber number		The user is derived from the	The user is derived from the
		address string of the calling	address string of the calling
		party number IE	party number IE
		sip: "+""+"CC+ NDC + SN	sip: "+""+"CC+ NDC + SN
		@hostportion; user=phone	@hostportion; user=phone

IS_XXSSCLIP02	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5.	clause 9.3 i.3], .11	ITU-T Q.1 ETSI EN 3 ETSI 129 16 ETS	912.5 [5 83 001 [33 [i.20],	ence to: i1], clause 7.1.3 49], clause 7.1.3 clause 7.2.3.2.2.3 4 607 [43]	
TSS reference:	ISDN-SIP/Supplementary_se					
Selection criteria: Test purpose:	The called user is provided with CLIP Ensure that when no Calling party number information element is provided by the calling user, (and no Calling party subaddress), the Calling party number information element is network provided and correctly delivered to the called (served) user with following mapping rules: • The SIP P-Asserted-Identity header is Derived from Calling party information element Address Signal. • The Calling Party Number is mapped into the SIP From header.					
ISDN Parameter	BC = PIXIT		pped into the On	1 1011111	Jadoi.	
values:	B6 - 1 17(1)					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:	1001		0.17	1	O.D.	
	ISDN	_	SUT		SIP	
	SETUP	}		→	INVITE	
	CALL PROCEEDING	(
				ļ	100 51	
	ALERTING	(+	180 Ringing	
	CONN	(+	200 OK INVITE	
	7100		Conversation	1	5).7	
	DISC	→		→	BYE	
	REL	-		+	200 OK BYE	
	RLC	→				

Values for the test purpose IS_XXSSCLIP02

SETUI	SETUP→		/ITE→			
Calling party r	number i.e.	From Header Field	P-Asserted -Identity			
TYPE_NUMBER	Numbering plan identification					
No or invalid calling party number information element (see note)		Default Public user identity	Default Public user identity			
·		sip: "+""+"CC+ NDC + SN	sip: "+""+"CC+ NDC + SN			
		@hostportion; user=phone @hostportion; user=phone				
NOTE: Validity conditions of the calling party number information element are defined in clause 3.5.2.2.1 of ITU-T Q.951 [i.17].						

IS_XXSSCLIP03	ISDN reference ETSI EN 300 092-1 [i.14], ETSI EN 300 403-1 clauses 4.5.10, 4.	, clause [i.3], 5.11	ETSI ETSI TS	T Q.19 EN 38 129 16	N reference to: 12.5 [51], clause 7.1.3 3 001 [49], clause 7.1.3 63 [i.20], clause 7.2.3.2.2.3 I TS 124 607 [43]			
TSS reference:	ISDN-SIP/Supplementary_	SDN-SIP/Supplementary_services/CLIP						
Selection criteria:	The called user is provided		LIP					
	Special arrangement applie							
Test purpose:	Ensure that when a special arrangement applies and a Calling party number information element and a valid calling number is provided by the calling user, the user provided, not screened number (generic number) delivered to the called (served) user. In the SIP From header field the addr-spec is derived from unscreened Calling party number. The SIP P-Asserted-Identity header is Derived from Calling party information element							
ISDN Parameter	Address Signal. BC = PIXIT							
values:								
SIP Parameter values:	PIXIT for supported heade Case a) no 100 rel Case b) Supported: 100 re	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
Comments:								
	ISDN		SUT	+_	SIP			
	SETUP	→		→	INVITE			
	CALL PROCEEDING	←						
	ALERTING	+		+	180 Ringing			
	CONN	`		+	200 OK INVITE			
	COIVIN	_	Conversation	+	200 OK INVITE			
	DISC	→	Conversation	→	BYE			
	REL	-		+	200 OK BYE			
	RLC	→		1	200 310 12			

Values for the test purpose IS_XXSSCLIP03

SET	SETUP→		/ITE→
Calling part	y number i.e.	From Header Field	P-Asserted -Identity
TYPE_NUMBER	Numbering plan identification		
National number	ISDN/telephony numbering plan	The user is derived from the address string of the calling	Default Public user identity
	or	party number IE	sip: "+""+"CC+ NDC + SN
	Unknown	sip: "+""+"CC+ NDC + SN @hostportion; user=phone	@hostportion; user=phone
International number		The user is derived from the address string of the calling	Default Public user identity
		party number IE	sip: "+""+"CC+ NDC + SN
		sip: "+""+"CC+ NDC + SN	@hostportion; user=phone
		@hostportion; user=phone	

IS_XXSSCLIP04	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5	clause 9.3 i.3], .11	ETSI EI ETSI TS 12 E	Q.1912. N 383 00 29 163 [i	eference to: 5 [51], clause 7.1.3 01 [49], clause 7.1.3 i.20], clause 7.2.3.2.2.3 124 607 [43]
TSS reference:	ISDN-SIP/Supplementary_s		P		
Selection criteria:	The called user is provided special arrangement applies				
Test purpose:	Ensure that when a special information element is provious the calling user is correctly described in table 3a.	ded by the	calling user, the	default	number of the access of
ISDN Parameter	BC = PIXIT				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)				
Comments:	m = line (PIXIT)				
	ISDN		SUT		SIP
	SETUP	→		→	INVITE
	CALL PROCEEDING	+			
	ALERTING	←		+	180 Ringing
	CONN	+		+	200 OK INVITE
			Conversation		
	DISC	→		→	BYE
	REL	+		+	200 OK BYE
	RLC	→			

Table 3a: Mapping rules for the test purpose IS_XXSSCLIP04

SETUP→		INVITE→		
Calling party number i.e.		From Header Field	P-Asserted -Identity	
TYPE_NUMBER	Numbering plan identification		·	
No or invalid calling party r information element	umber	Default Public user identity	Default Public user identity	
		sip: "+""+"CC+ NDC + SN @hostportion; user=phone	sip: "+""+"CC+ NDC + SN @hostportion; user=phone	

6.2.2.2 CLIR/OIR

IS_XXSSCLIR01	ISDN reference ETSI EN 300 093-1 [i.4] ETSI EN 300 092-1 [i.14] figure 2], clause		ETS	J-T Q. SI EN : 129 1 ET IE	GN reference to: 1912.5 [51], clause 7.1.3 383 001 [49], clause 7.1.3 63 [i.20], clause 7.2.3.2.2.3 'SI TS 124 607 [43] TF RFC 3323 [33] TF RFC 3325 [34]
TSS reference:	ISDN-SIP/Supplementary_	services	/CLIR			
Selection criteria:	The calling user is provided					
Test purpose:	Ensure that when the Callin party subaddress: Sends a INVITE message value and no P-Ass	where th	e SIP Fron	n heade	r field	
ISDN Parameter	BC = PIXIT	ortoa ia	oritity riouc	101 10 10	001100	•
values:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	ISDN		SU	Т		SIP
	SETUP	→			→	INVITE
	CALL PROCEEDING	+				
	ALERTING	←			+	180 Ringing
	CONN	←			+	200 OK INVITE
			Conver	sation		
	DISC	→			→	BYE
	REL	←			←	200 OK BYE
	RLC	→				

IS_XXSSCLIR02	ETSI EN 300 0 ETSI EN 300 0	reference to: 93-1 [i.4], clause 9.4.1 92-1 [i.14], clause A.2, figure 2	ETSI 1	NGN referer T Q.1912.5 [51] EN 383 001 [49] [29 163 [i.20], c ETSI TS 124 (IETF RFC 33 IETF RFC 33	, clause 7.1.3), clause 7.1.3 lause 7.2.3.2.2.3 607 [43] 23 [33]	
TSS reference:		ementary_services/CLIR				
Selection criteria:		s provided with CLIR te				
Test purpose:	"presentation res Sends a INVITE	n the Calling party numb tricted" and with Calling message where the SIP I no P-Asserted-Identity	party subad From heade	dress: er field is set to "		
ISDN Parameter values:	BC=PIXIT					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:				T		
	ISDN		SUT		SIP	
	SETUP CALL PROCEEDING	→		→	INVITE	
	ALERTING	(←	180 Ringing	
	CONN	+		+	200 OK INVITE	
			nversation	1_		
	DISC	→		→	BYE	
	REL	+		←	200 OK BYE	
	RLC	→				

IS_XXSSCLIR03	ISDN reference to: ETSI EN 300 093-1 [i.4], clause 9.4.1 ETSI EN 300 092-1 [i.14], clause A.2, figure 2			NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.3 ETSI EN 383 001 [49], clause 7.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.2.2.3 ETSI TS 124 607 [43] IETF RFC 3323 [33] IETF RFC 3325 [34]		
TSS reference:	ISDN-SIP/Supplementary_	services/CL	IR			
Selection criteria:	The calling user is provided	with CLIR	permanent	mode sub	oscription	
Test purpose:	Ensure that when no Callin party subaddress): Sends a INVITE message value and no P-Ass	where the S	IP From he	eader field		
ISDN Parameter	BC=PIXIT					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	ISDN	<u> </u>	SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROCEEDING	+				
		1_				
	ALERTING	((180 Ringing	
	CONN	+		+	200 OK INVITE	
	2100		Conversation		D)/5	
	DISC	→		→	BYE OUT BYTE	
	REL	(+	200 OK BYE	
	RLC	→				

IS_XXSSCLIR04	ISDN reference to ETSI EN 300 093-1 [i.4], cla ETSI EN 300 092-1 [i.14], cl figure 2	ause 9.4.1 lause A.2,	ETSI EN 383 001 [49], clause 7.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.2.2. ETSI TS 124 607 [43] IETF RFC 3323 [33] IETF RFC 3325 [34]				
TSS reference:	ISDN-SIP/Supplementary_se						
Selection criteria:	The calling user is provided was the called user is provided was pecial arrangement applies	vith CLIP;					
Test purpose:	Ensure that when a special arrangement applies and a Calling party number information element and a valid calling number with presentation in not allowed is provided by the calling user: Sends a INVITE message where the SIP From header field is set to "anonymous" or "unavailable" and no P-Asserted-Identity header is received.						
ISDN Parameter	BC = PIXIT						
values:							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	1001	ı	OUT		OID.		
	ISDN	_	SUT	_	SIP		
	SETUP	→		→	INVITE		
	CALL PROCEEDING	+			_		
	AL EDTING	_		_			
	ALERTING	((180 Ringing		
	CONN	(+	200 OK INVITE		
		_	Conversation				
	DISC	→		→	BYE		
	REL	(+	200 OK BYE		
	RLC	→					

6.2.2.3 COLP/COLR (TIP/TIR)

IS_XXSSCOLP01	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]	ET	NGN reference to: FSI EN 383 001 [49] FSI TS 129 163 [i.20] FSI TS 124 608 [44]			
TSS reference:		ISDN-SIP/SS/COLP					
SIP selection criteria:		de presentation not restricte					
ISDN selection criteria:	COLP service	has been requested by the	calling party				
Test purpose:	SIP_MESSAG from the termi • no P-	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "none" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response					
		s a CONNECT message wit	in the Connec	ted Party Number			
		mation element coded:					
		Address signals = default p					
		Numbering plan indicator = Type of number = PIXIT	: ISDIN Humbe	ning pian			
		Screening indicator = netw	ork provided				
		Address presentation restri		- presentation allowed			
SIP Parameter values:		ameters options=PIXIT	ction indicator	= presentation allowed			
or raidifieter values.	PIXIT for supp	·					
	Case a) no 100						
	Case b) Suppo						
		orted: 100 rel and preconditi	on				
	a = line (PIXIT))					
	b = line (PIXIT						
	m = line (PIXIT						
ISDN Parameter	CONNECT:	,					
values:	Connected nu	ımber					
		I, not screened Connecte	d Party Numb	er not present			
Comments:	•	•					
	ISDN	SUT		SIP			
	SETUP	→	→	INVITE			
	CALL PROC	+					
	XXXX	+	(SIP MESSAGE VA			
	CONN	((200 OK INVITE			
			→	ACK			
			_				
		Conversation	Conversa	tion			
	DISC	→	→	BYE			
	REL	(-	200 OK BYE			
	RLC	→		230 311 212			

Values for test purpose IS_XXSSCOLP01					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

IS_XXSSCOLP02	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EI ETSI TS	reference to: N 383 001 [49] S 129 163 [i.20] S 124 608 [44]		
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary mode presentation not restricted						
ISDN selection	COLP service I	has been requested b	y the calling	party			
criteria:							
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "id" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = (PIXIT) - Screening indicator = network provided						
SIP Parameter values:		Address presentation ameters options=PIXIT		idicator = pre	sentation restricted		
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
ISDN Parameter	CONNECT;						
values:	Connected nu User provided	mber I, not screened Conr	nected Party	Number not	present		
Comments:							
	ISDN		SUT		SIP		
	SETUP	→	-	>	INVITE		
	CALL PROC	+					
	XXXX	+	€		SIP_MESSAGE_VA		
	CONN	+	•		200 OK INVITE		
			7	<u> </u>	ACK		
		Conversation	С	onversation			
	DISC	→	-3	•	BYE		
	REL	+	€	-	200 OK BYE		
	RLC	→					

Values for test purpose IS_XXSSCOLP02					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

		N 300 092-1 [i.14] N 300 403-1 [i.3]		ETSI TS	N 383 001 [49] S 129 163 [i.20] S 124 608 [44]	
	ISDN-SIP/SS/COLP					
SIP selection criteria: T	Temporary mode presentation not restricted					
		as been requested b				
S	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "user" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded:					
	- /	Address signals = not	t available			
		Numbering plan indic		N numbering p	lan	
		Type of number = PI				
		Screening indicator =				
		Address presentation		n indicator = pre	esentation restricted	
SIP Parameter values:	Dial string para	meters options=PIXI7	Γ			
a b	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
	CONNECT;					
	Connected num					
	Jser provided,	not screened Connec	cted Party	Number not pre	esent	
Comments:		Т		T		
	ISDN		SUT	_	SIP	
	SETUP	→		→	INVITE	
	CALL PROC	(
	XXXX	((SIP_MESSAGE_VA	
	CONN	+		-	200 OK INVITE	
_				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
<u> </u>	REL	(-	200 OK BYE	
	RLC	→				

Values for test purpose IS_XXSSCOLP03					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

ary mode presentatio			124 608 [44]					
		ISDN-SIP/SS/COLP						
Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "header" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided								
		ction indicator = pr	esentation restricted					
PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT;								
	d Connected	Party Number no	nt nresent					
Ovided, flot solectic	a connected	Traity Hamber In	or present					
N I	SLIT		SIP					
	301	-	INVITE					
-			INVITE					
(+	SIP_MESSAGE_VA					
((200 OK INVITE					
-		→	ACK					
Conversation		Conversation						
			BYE					
		-	200 OK BYE					
	that the SUT on receing SSAGE_VA with private terminating user: no P-Preferred-Ident sends a CONNECT information element - Address signate - Numbering plate - Type of number - Screening indition - Address present - Address pres	that the SUT on receipt of a provisi ESSAGE_VA with priv-value compose terminating user: no P-Preferred-Identity header fiesends a CONNECT message with information element coded: - Address signals = not availated a Numbering plan indicator = - Type of number = PIXIT - Screening indicator = network and a	ESSAGE_VA with priv-value component is set to "heade terminating user: no P-Preferred-Identity header field is provided with sends a CONNECT message with the Connected I information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan indicator = ISDN numbering plan indicator = PIXIT - Screening indicator = network provided - Address presentation restriction indicator = properties options=PIXIT or supported header:) no 100 rel) Supported: 100 rel) Supported: 100 rel and precondition (PIXIT) (PIXIT) (PIXIT) (PIXIT) (PIXIT) (CT; (CT) (CT) (CT) (CT) (CT) (CT) (CT) (CT)					

Values for test purpose IS_XXSSCOLP04					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

IS_XXSSCOLP05	ETSIE	N reference to: EN 300 092-1 [i.14] EN 300 403-1 [i.3]	E1 ET	NGN reference to: ISI EN 383 001 [49] ISI TS 129 163 [i.20] ISI TS 124 608 [44]			
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary mode presentation not restricted						
ISDN selection criteria:	COLP service	e has been requested by	the calling party				
Test purpose:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call without a Privacy header field: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided						
SIP Parameter values: ISDN Parameter values:	- Address presentation restriction indicator = presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) ANM:						
	Connected n	umber d, not screened Connect	ad Darty Number	r not propert			
Comments:	Oser provider	u, not screened connect	eu rang number	Hot present			
Comments.	ISDN	St	іт	SIP			
	SETUP → INVITE CALL PROC						
	CONN	+	←	200 OK INVITE			
			→	ACK			
		Conversation	Conversa	tion			
	DISC	→	→	BYE			
	REL	(′	200 OK BYE			
	RLC	→		ZOO OK BIL			
L	IVEO	-					

IS_XXSSCOLP06	ETSI E	N reference to: EN 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI E ETSI TS	reference to: N 383 001 [49] S 129 163 [i.20] S 124 608 [44]		
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:		ode presentation not		t			
ISDN selection criteria:		e has been requested					
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "none" has been received: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided						
	_	Address presentation	n restrict	tion indicator = p	presentation allowed		
ISDN Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT; Connected Party Number information element User provided, not screened Connected Party Number not present NoAS: NoA VALUE						
Comments:		T		1			
	ISDN	_	SUT		SIP		
	SETUP → INVITE CALL PROC						
	ALERTING	+		+	180 Ringing		
	CONN	+		+	200 OK INVITE		
	→ ACK						
		Conversation		Conversation			
	DISC	->		-	BYE		
	REL			-	200 OK BYE		
	RLC	}			ZOU OR BTE		
	INLO	7		1			

IS_XXSSCOLP07		N reference to:		reference to:				
		EN 300 092-1 [i.14],		N 383 001 [49]				
	EISI	EN 300 403-1 [i.3]		S 129 163 [i.20]				
TCC votovovos	ICDNI CID/CC	2/COL D	EISH	S 124 608 [44]				
TSS reference: SIP selection criteria:		ISDN-SIP/SS/COLP Temporary mode presentation not restricted						
ISDN selection criteria:			cieu					
Test purpose:		e has been requested he SUT on receipt of a 200	OK INIVITE for this	call with a Drivagy boader				
rest purpose.		eived with the value "PRIV_						
		P-Preferred-Identity header						
		ds a CONNECT message v						
		nent coded:		. ,				
	-	Address signals = not ava	ailable					
	-	Numbering plan indicator	= ISDN numbering	g plan				
	-	Type of number = PIXIT						
	-	Screening indicator = net						
		Address presentation res	triction indicator = p	oresentation restricted				
SIP Parameter values:	Dial string pa	rameters options=PIXIT						
	PIXIT for sup	ported header:						
	Case a) no 1							
		ported: 100 rel						
	Case c) Supp	ported: 100 rel and precond	ition					
	a line (DIVI	T /						
	a = line (PIXI b = line (PIXI							
	m = line (PIXI							
ISDN Parameter values:	CONNECT:	11)						
lobit i diameter values.		arty Number information ele	ement					
		d, not screened Connected		present				
Comments:	'	,	,					
	ISDN	SUT		SIP				
	SETUP	→	→	INVITE				
	CALL	+						
	PROC							
	ALERTING	+	+	180 Ringing				
	CONN ← 200 OK ÎNVÎTE							
			→	ACK				
		Conversation	Conversation					
	DISC	→	→	BYE				
	REL	-	(200 OK BYE				
	RLC	→	_					
L	ı -	1 -	1	1				

Values for test purpose IS_XXSSCOLP07				
VA	PRIV_VALUE			
VA_1	ld			
VA_2	User			
VA_3	Header			

IS_XXSSCOLP08	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI E ETSI T	reference to: :N 383 001 [49] S 129 163 [i.20] 'S 124 608 [44]			
TSS reference:	ISDN-SIP/SS/0	ISDN-SIP/SS/COLP					
SIP selection criteria:	Temporary mo	de presentation restricted					
ISDN selection criteria:	COLP service	has been requested by the	calling party				
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "none" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information						
		ent coded: Address signals = default p	nublic user identity				
		Numbering plan indicator =		olan			
		Type of number = PIXIT	- 10214 Hamboning F	siai.			
		Screening indicator = netw	ork provided				
		Address presentation restr		esentation allowed			
SIP Parameter values:		ameters options=PIXIT					
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
ISDN Parameter	CONNECT;						
values:	Connected nur						
	User provided,	not screened Connected F	Party Number not p	resent			
Comments:							
	ISDN	SUT		SIP			
	SETUP	→	→	INVITE			
	CALL PROC	(
	XXXX	(+	SIP_MESSAGE_VA			
	CONN	(+	200 OK INVITE			
			→	ACK			
		Conversation	Conversation				
	DISC	→	→	BYE			
	REL			200 OK BYE			
	RLC	→		ZUU UN DIE			
	KLC	7		1			

Values for test purpose IS_XXSSCOLP08					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

IS_XXSSCOLP09	ETSI E	N reference to: EN 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI EI ETSI TS	reference to: N 383 001 [49] S 129 163 [i.20] S 124 608 [44]				
TSS reference:	ISDN-SIP/SS/	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary mo	ode presentation restricted						
ISDN selection criteria:	COLP service	has been requested by the	calling party					
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "id" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available							
	-	Numbering plan indicator	= ISDN numbering p	lan				
	-	Type of number = (PIXIT)	-					
	-	Screening indicator = netv	vork provided					
	-	Address presentation rest	riction indicator = pre	esentation restricted				
SIP Parameter values:	Dial string par	ameters options=PIXIT						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
ISDN Parameter	CONNECT;							
values:	Connected nu							
	User provided	, not screened; Connected	Party Number not pr	esent				
Comments:			r					
	ISDN	SU		SIP				
	SETUP	→	→	INVITE				
	CALL PROC	-						
	XXXX	(+	SIP_MESSAGE_VA				
	CONN	(+	200 OK INVITE				
			→	ACK				
	1	Conversation	Conversation					
	DISC			DVE				
	DISC	→	→	BYE				
	REL		~	200 OK BYE				
	RLC	→						

Values for test purpose IS_XXSSCOLP09				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP10	ETSI E	N reference to: EN 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]		
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary mo	ode presentation restricte	ed				
ISDN selection criteria:	COLP service	has been requested by t	the calling	party			
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "user" has been received from the terminating user. • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded:						
	-	Address signals = not a	vailable				
	-	Numbering plan indicate	or = ISDN	numbering pla	an		
	-	Type of number = PIXIT					
	-	Screening indicator = ne	etwork pro	ovided			
	-	Address presentation re	estriction i	ndicator = pres	sentation restricted		
SIP Parameter values:	Dial string para	ameters options=PIXIT					
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
ISDN Parameter	CONNECT;						
values:	Connected nu						
	User provided	, not screened; Connecte	ed Party N	Number not pre	esent		
Comments:							
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROC	+					
	XXXX	+	•	(SIP_MESSAGE_VA		
	CONN	((200 OK INVITE		
				→	ACK		
		Conversation	(Conversation			
	DISC	→		→	BYE		
	REL	(-	200 OK BYE		
	RLC	→					
	j	1 -	I		1		

Values for test purpose IS_XXSSCOLP10					
VA	SIP MESSAGE_VA				
VA_1	180 Ringing				
VA_2	183 Session Progress				

IS_XXSSCOLP11	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]			ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]		
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary n	node presentation res	tricted				
ISDN selection criteria:	COLP service	e has been requested	by the ca	Illing party			
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "header" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available						
	_	Numbering plan inc			olan		
	-	Type of number = F		g p			
	-	Screening indicator	= networl	k provided			
	-	Address presentation	on restricti	ion indicator = pr	esentation restricted		
SIP Parameter values:	Dial string pa	arameters options=PI	KIT				
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
ISDN Parameter values:	CONNECT;						
	Connected n						
	User provide	ed, not screened; Con	nected Pa	rty Number not p	resent		
Comments:							
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROC						
	XXXX	+		(SIP_MESSAGE_VA		
	CONN ← 200 OK INV						
	→ ACK						
		Conversation		Conversation			
	DISC	→		→	BYE		
	REL	+		+	200 OK BYE		
	RLC	→					

Values for test purpose IS_XXSSCOLP11				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP12	ETSI E ETSI E	N reference to: :N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]			
TSS reference:		SDN-SIP/SS/COLP						
SIP selection criteria:		de presentation restric						
ISDN selection criteria:		has been requested b						
Test purpose:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call without a Privacy header field: • no P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided							
SIP Parameter values:	- Address presentation restriction indicator = presentation restricted Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT;							
values:	Connected nur User provided,	mber not screened Connec	ted Party	/ Number not pre	sent			
Comments:								
	ISDN	1	SUT		SIP			
	SETUP)		→	INVITE			
	CALL PROC	(1				
	CONN	(+	200 OK INVITE			
				→	ACK			
		Conversation		Conversation				
	DISC	→		→	BYE			
	REL	-		(200 OK BYE			
	RLC	→						

IS_XXSSCOLP13	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] :N 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]		
TSS reference:	ISDN-SIP/SS/C	COLP					
SIP selection criteria:	Temporary mod	de presentation restrict	ed				
ISDN selection criteria:	COLP service I	nas been requested by	the call	ing party			
Test purpose:	200 OK INVITE received:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call, a Privacy header field with the value "none" has been received:					
	sends a CONNECT message with the Connected Party Number information element coded: Address signals = default public user identity Numbering plan indicator = ISDN numbering plan Type of number = PIXIT Screening indicator = network provided Address presentation restriction indicator = presentation allowed						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
values:		nber Address signals = not screened; Connec					
Comments:							
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROC	+					
	CONN	(+	200 OK INVITE		
		→ ACK					
		Conversation		Conversation			
	DISC	→		→	BYE		
	REL				200 OK BYE		
	RLC	→		~	ZUU UN DIE		
	IKLU	7					

IS_XXSSCOLP14	ETSI EI	N reference to: N 300 092-1 [i.14], N 300 403-1 [i.3]	ETSI EN ETSI TS	eference to: I 383 001 [49] 129 163 [i.20] 5 124 608 [44]				
TSS reference:	ISDN-SIP/SS/C	OI P	210110	124 000 [44]				
SIP selection criteria:		de presentation restricted						
ISDN selection criteria:		COLP service has been requested by the calling party						
Test purpose:	Engure that the	The use that the CLIT having most received a previous and 4 VV recommendation of a						
SIP Parameter values:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call, a Privacy header field with the value "PRIV_VALUE" has been received: • no P-Preferred-Identity header field is provided within the 200 OK response sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided - Address presentation restriction indicator = presentation restricted							
	Case a) no 100 Case b) Suppo Case c) Suppo a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	b = line (PIXIT)						
ISDN Parameter	CONNECT;							
values:		nber Address signals = not not screened Connected P		sent				
Comments:				_				
	ISDN	SUT		SIP				
	SETUP	→	→	INVITE				
	CALL PROC	-						
	CONN	-	+	200 OK INVITE				
			→	ACK				
		Conversation	Conversation	+				
	DICC	→	→	BYE				
	DISC			I .				
	REL	((200 OK BYE				
	RLC	→						

IS_XXSSCOLP15	ETSI E ETSI I	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI EN ETSI TS	eference to: I 383 001 [49] 129 163 [i.20] I 124 608 [44]			
TSS reference:	ISDN-SIP/SS/	COLP					
SIP selection criteria:	Temporary mo	de presentation restricted					
ISDN selection criteria:	COLP service has been requested						
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "none" has been received: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan						
	-	Type of number = PIXIT					
	-	Screening indicator = netv					
SIP Parameter values:	<u> </u>	Address presentation rest ameters options=PIXIT	riction indicator = pre	sentation allowed			
ISDN Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) COONECT; Connected Party Number information element User provided, not screened Connected Party Number not present NoAS: NoA_VALUE						
Comments:				1			
	ISDN	SU		SIP			
	SETUP	→	→	INVITE			
	CALL PROC	+					
	ALERTING	(+	180 Ringing			
	CONN	+	+	200 OK INVITE			
			→	ACK			
		Convergation	Conversation	-			
	DICC	Conversation		BYE			
	DISC	→	→				
	REL	(~	200 OK BYE			
	RLC	→					

IS_XXSSCOLP16	ETSI E ETSI E	N reference to: N 300 092-1 [i.14], EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]			
TSS reference:	ISDN-SIP/SS/0							
SIP selection criteria:	Temporary mo	de presentation not res	tricted					
ISDN selection criteria:		has been requested						
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "PRIV_VALUE" has been received: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided							
					sentation restricted			
ISDN Parameter values:	- Address presentation restriction indicator = presentation restricted Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT; Connected Party Number information element User provided, not screened Connected Party Number not present NoAS: NoA VALUE							
Comments:								
	ISDN		SUT		SIP			
	SETUP	→		→	INVITE			
	CALL PROC	+						
	ALERTING	+		(180 Ringing			
	CONN	((200 OK INVITE			
		→ ACK						
		Conversation		Conversation				
	DISC	→		→	BYE			
	REL	(←	200 OK BYE			
	RLC	→						

Values for test purpose IS_XXSSCOLP16				
VA	PRIV_VALUE			
VA_1	ld			
VA_2	User			
VA_3	Header			

IS_XXSSCOLP17	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]		
TSS reference:	ISDN-SIP/SS/C	COLP					
SIP selection criteria:	permanent mod	de					
ISDN selection criteria:	COLP service	COLP service has been requested by the calling party					
Test purpose:	SIP_MESSAGI the terminating	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "none" has been received from the terminating user: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded:					
	_	Screening indicator =	network p	rovided			
		Address presentation	•		sentation allowed		
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
ISDN Parameter	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT CONNECT;	·))					
values:	Connected nur	mher					
Taidoo.		not screened Connec	ted Party	Number not pre	sent		
Comments:			tour unty				
	ISDN		SUT		SIP		
	SETUP	→		→	INVITE		
	CALL PROC	(
	XXXX	-		(SIP_MESSAGE_VA		
	CONN	-		(200 OK INVITE		
	CONT			→	ACK		
				 	/ Corc		
		Conversation		Conversation			
	DISC	→		→	BYE		
	REL	(-	200 OK BYE		
	RLC	\		1	200 OK BIL		
	INLO						

Values for test purpose IS_XXSSCOLP17				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP18	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]
TSS reference:	ISDN-SIP/SS/0				
SIP selection criteria:	Permanent mo				
ISDN selection criteria:		has been requested b			
Test purpose:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call without a Privacy header field: • no P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided				
SIP Parameter values:	- Address presentation restriction indicator = presentation restricted Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT;				
values:	Connected nur User provided,	nber not screened Connec	cted Party	Number not pre	sent
Comments:				1	0.0
	ISDN		SUT	1_	SIP
	SETUP	→		→	INVITE
	CALL PROC	+			
	CONN	+		(200 OK INVITE
				→	ACK
		Conversation		Conversation	
	DISC	→		→	BYE
	REL	(-	200 OK BYE
	RLC	→			

IS_XXSSCOLP19	ETSI E ETSI I	N reference to: :N 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI EN ETSI TS	eference to: I 383 001 [49] 129 163 [i.20] I 124 608 [44]				
TSS reference:	ISDN-SIP/SS/	COLP						
SIP selection criteria:	Permanent mo	ode						
ISDN selection criteria:	COLP service	COLP service has been requested by the calling party						
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "none" has been received:							
	• no P-	Preferred-Identity header fi	eld is provided within	the 200 OK response				
		s a CONNECT message wi ent coded:		rty Number information				
	-	Address signals = not avai						
	-	Numbering plan indicator =	= ISDN numbering pl	an				
	-	Type of number = PIXIT						
	-	Screening indicator = netw						
	-	Address presentation restr	iction indicator = pre	sentation allowed				
SIP Parameter values:	Dial string para	ameters options=PIXIT						
	PIXIT for supp	orted header:						
	Case a) no 10							
	Case b) Suppo	orted: 100 rel						
	Case c) Suppo	orted: 100 rel and precondit	ion					
	a = line (PIXIT b = line (PIXIT)						
	m = line (PIXI))						
ISDN Parameter	CONNECT;							
values:		rty Number information elei						
		, not screened Connected F	arty Number not pre	sent				
	NoAS: NoA_V	ALUE						
Comments:		1						
	ISDN	SU		SIP				
	SETUP	→	→	INVITE				
	CALL PROC	+						
	ALERTING	+	(180 Ringing				
	CONN	((200 OK INVITE				
		→ ACK						
		Conversation	Conversation					
	DISC	→	→	BYE				
	REL	-	+	200 OK BYE				
	RLC	→						

IS_XXSSCOLP20	ETSI E ETSI E	N reference to: N 300 092-1 [i.14], EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:	ISDN-SIP/SS/	COLP				
SIP selection criteria:	Temporary mo	ode presentation not i	restricted			
ISDN selection criteria:	COLP service	has been requested	by the call	ing party		
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "none" has been received from the terminating user: • P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT					
	-	Screening indicator		•	acontation allowed	
SIP Parameter values:	- Address presentation restriction indicator = presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter values:	CONNECT Connected nu	mber I, not screened Conne	ected Party	/ Number not pr	esent	
Comments:	Coor provided	, not concorned connic	otou i uit	, itamber net pr	000111	
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	-				
	XXXX	((SIP_MESSAGE_VA	
	CONN	((200 OK INVITE	
	→ ACK					
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	+		+	200 OK BYE	
	RLC	→				

Values for test purpose IS_XXSSCOLP20				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP21	ETSI E ETSI E	N reference to: IN 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:	ISDN-SIP/SS/0					
SIP selection criteria:	Temporary mo	de presentation not res	stricted			
ISDN selection criteria:		has been requested by				
Test purpose:	SIP_MESSAG the terminating P-Pre Send: eleme - - -	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "id" has been received from the terminating user: • P-Preferred-Identity header field is provided within the 1xx response				
		Screening indicator = i		rovided		
		Address presentation	•		sentation restricted	
SIP Parameter values:						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter	CONNECT					
values:	Connected nur					
	User provided,	not screened Connect	ed Party I	Number not pre	sent	
Comments:		1		T	_	
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	+				
	XXXX	+		←	SIP_MESSAGE_VA	
	CONN	+		←	200 OK INVITE	
				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	+		-	200 OK BYE	
	RLC	→				

Values for test purpose IS_XXSSCOLP21				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP22		N reference to: N 300 092-1 [i.14]			eference to: 383 001 [49]
		N 300 403-1 [i.3]		ETSI TS	129 163 [i.20]
				ETSI TS	124 608 [44]
TSS reference:	ISDN-SIP/SS/COLP				
SIP selection criteria:		de presentation not rest			
ISDN selection criteria:		nas been requested by			
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "user" has been received from the terminating user:				has been received from
	P-Preferred-Identity header field is provided within the 1xx response Sends a CONNECT message with the Connected Party Number information element coded: Address signals = not available Numbering plan indicator = ISDN numbering plan Type of number = PIXIT Screening indicator = network provided Address presentation restriction indicator = presentation restricted				
SIP Parameter values:		meters options=PIXIT	30111011011	maioaior – proc	oontation roothotoa
ISDN Parameter	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) CONNECT				
values:	Connected nun	nber			
	User provided.	not screened Connecte	ed Party I	Number not pre	sent
Comments:	,				
	ISDN		SUT		SIP
	SETUP	→		→	INVITE
	CALL PROC	(_	
	XXXX	(+	SIP_MESSAGE_VA
	CONN	(+	200 OK INVITE
		=		<u>`</u>	ACK
				-	,,,,,,
	 	Conversation		Conversation	
	DISC	→		→	BYE
	REL				200 OK BYE
	RLC	→		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	200 ON D1E
L	INLU	7		I .	1

Values for test purpose IS_XXSSCOLP22				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP23	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]	ETS ETS	NGN reference to: ETSI EN 383 001 [49] ETSI TS 129 163 [i.20] ETSI TS 124 608 [44]			
TSS reference:	ISDN-SIP/SS/COLP						
SIP selection criteria:	Temporary mo	de presentation not restr	cted				
ISDN selection criteria:	COLP service I	has been requested by the	ne calling party				
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "header" has been received from the terminating user: • P-Preferred-Identity header field is provided within the 1xx response • Sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT						
	-	Screening indicator = ne	twork provided				
	-	Address presentation res	striction indicator =	presentation restricted			
SIP Parameter values:		meters options=PIXIT		•			
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
ISDN Parameter	CONNECT						
values:	Connected nur						
	User provided,	not screened Connected	l Party Number no	t present			
Comments:							
	ISDN		UT	SIP			
	SETUP	→	→	INVITE			
	CALL PROC	←					
	XXXX	+	(SIP_MESSAGE_VA			
	CONN	+	←	200 OK INVITE			
		→ ACK					
		Conversation	Conversat	tion			
	DISC	→	→	BYE			
	REL	(-	200 OK BYE			
	RLC	→		200 01(2)2			

Values for test purpose IS_XXSSCOLP23			
VA	SIP MESSAGE_VA		
VA_1	180 Ringing		
VA_2	183 Session Progress		

IS_XXSSCOLP24	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:	ISDN-SIP/SS/0					
SIP selection criteria:	Temporary mo	de presentation not re	stricted			
ISDN selection criteria:		has been requested by				
Test purpose:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call without a Privacy header field: • P-Preferred-Identity header field is provided within the 200 OK response • Sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided					
SIP Parameter values: ISDN Parameter values:	- Address presentation restriction indicator = presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) ANM Connected number					
	User provided,	not screened Connec	ted Par	ty Number not pre	sent	
Comments:						
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	+				
	CONN	+		+	200 OK INVITE	
		→ ACK				
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	(-	200 OK BYE	
	RLC	→		-	200 01(012	
	IVEO	1 -			1	

IS_XXSSCOLP25	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]		NGN reference to: ETSI EN 383 001 [49] ETSI TS 129 163 [i.20] ETSI TS 124 608 [44]			
TSS reference:	ISDN-SIP/SS/COLP					
SIP selection criteria:	Temporary mo	de presentation not restrict	ed			
ISDN selection criteria:		has been requested				
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "none" has been received: • P-Preferred-Identity header field is provided within the 200 OK response • Sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT					
		Screening indicator = netw				
SIP Parameter values:		Address presentation restr	iction indicator = pre	sentation allowed		
ISDN Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT Connected Party Number information element User provided, not screened Connected Party Number not present NoAS: NoA_VALUE					
Comments:						
	ISDN	SU	Γ	SIP		
	SETUP	→	→	INVITE		
	CALL PROC	-				
	ALERTING	(+	180 Ringing		
	CONN	(+	200 OK INVITE		
		→ ACK				
		Conversation	Conversation			
	DISC	→	→	BYE		
	REL	-	-	200 OK BYE		
	RLC	→				

IS_XXSSCOLP26	_	N reference to: N 300 092-1 [i.14]		reference to: N 383 001 [49]			
		N 300 403-1 [i.3]		6 129 163 [i.20]			
				S 124 608 [44]			
TSS reference:	ISDN-SIP/SS/C	ISDN-SIP/SS/COLP					
SIP selection criteria:	Temporary mod	de presentation not restric	ted				
ISDN selection criteria:		nas been requested					
Test purpose:							
		\prime ed with the value "PRIV_ $^{\prime}$					
		ferred-Identity header field					
		s a CONNECT message w	rith the Connected Pa	arty Number information			
		ent coded:					
		Address signals = not ava		la a			
		Numbering plan indicator Type of number = PIXIT	= 15DN numbering p	ian			
		Screening indicator = netv	ork provided				
		Address presentation rest		sentation restricted			
SIP Parameter values:		meters options=PIXIT	notion indicator = pre	Socillation restricted			
		·					
	PIXIT for suppo						
	Case a) no 100						
	Case b) Suppo						
	Case c) Suppo	rted: 100 rel and precondi	tion				
	a line (DIVIT)						
	a = line (PIXIT) b = line (PIXIT)						
	m = line (PIXIT)						
ISDN Parameter	CONNECT;]					
values:		ty Number information ele	ment				
		not screened Connected		esent			
Comments:	, , , , , , , , , , , , , , , , , , ,		,				
	ISDN	SU	Т	SIP			
	SETUP	→	→	INVITE			
	CALL PROC	+					
	ALERTING	((180 Ringing			
	CONN	5 5					
			→	ACK			
	DIGG	Conversation	Conversation	D) (5			
	DISC	→	→	BYE			
	REL	(+	200 OK BYE			
	RLC	→					

Values for test purpose IS_XXSSCOLP26			
VA	PRIV_VALUE		
VA_1	ld		
VA_2	User		
VA_3	Header		

IS_XXSSCOLP27	ETSI E	N reference to: EN 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI EI ETSI TS	reference to: N 383 001 [49] S 129 163 [i.20] S 124 608 [44]	
TSS reference:	ISDN-SIP/SS/COLP				
SIP selection criteria:	Temporary mo	de presentation restricted	d		
ISDN selection criteria:	COLP service	has been requested by th	ne calling party		
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "none" has been received fruction that the terminating user: • P-Preferred-Identity header field is provided within the 1xx response				
	 Sends a CONNECT message with the Connected Party Number information element coded: Address signals = default public user identity Numbering plan indicator = ISDN numbering plan Type of number = PIXIT Screening indicator = network provided 				
SIP Parameter values:	Dial string par	Address presentation res ameters options=PIXIT	miliotion indicator – pro	occitation allowed	
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
ISDN Parameter	CONNECT				
values:	Connected nu				
	User provided	, not screened Connected	Party Number not pro	esent	
Comments:					
	ISDN		UT	SIP	
	SETUP	→	→	INVITE	
	CALL PROC	+			
	XXXX	+	+	SIP_MESSAGE_VA	
	CONN	+	+	200 OK INVITE	
			→	ACK	
		Conversation	Conversation		
	DISC	→	→	BYE	
	REL	((200 OK BYE	
	RLC	→			

Values for test purpose IS_XXSSCOLP27				
VA	SIP MESSAGE_VA			
VA_1	180 Ringing			
VA_2	183 Session Progress			

IS_XXSSCOLP28	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]		NGN reference to: ETSI EN 383 001 [49] ETSI TS 129 163 [i.20] ETSI TS 124 608 [44]			
TSS reference:	ISDN-SIP/SS/COLP					
SIP selection criteria:	Temporary mod	de presentation restricted				
ISDN selection criteria:	COLP service I	nas been requested by the	calling party			
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "id" has been received from the terminating user: • P-Preferred-Identity header field is provided within the 1xx response • Sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan					
		Type of number = (PIXIT) Screening indicator = netw	ork provided			
	-	Address presentation restr	iction indicator = pres	sentation restricted		
SIP Parameter values:		meters options=PIXIT				
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter	CONNECT					
values:	Connected nun					
	User provided,	not screened; Connected	Party Number not pre	esent		
Comments:		T		1		
	ISDN	SU		SIP		
	SETUP	→	→	INVITE		
	CALL PROC	(
	XXXX	((SIP_MESSAGE_VA		
	CONN	(+	200 OK INVITE		
	→ ACK					
		Conversation	Conversation			
	DISC	→	→	BYE		
	REL	(←	200 OK BYE		
	RLC	→				

Values for test purpose IS_XXSSCOLP28			
VA	SIP MESSAGE_VA		
VA_1	180 Ringing		
VA_2	183 Session Progress		

IS_XXSSCOLP29	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]			NGN reference to: ETSI EN 383 001 [49] ETSI TS 129 163 [i.20] ETSI TS 124 608 [44]		
TSS reference:	ISDN-SIP/SS/0					
SIP selection criteria:	Temporary mode presentation restricted					
ISDN selection criteria:		has been requested by the				
Test purpose:	Ensure that the SUT on receipt of a provisional 1XX response defined as SIP_MESSAGE_VA with priv-value component is set to "user" has been received from the terminating user: • P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT					
		Screening indicator = ne	twork prov	/ided		
		Address presentation res	•		sentation restricted	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter	CONNECT					
values:	Connected number					
	User provided, not screened; Connected Party Number not present					
Comments:						
	ISDN		UT		SIP	
	SETUP	→	-	<u> </u>	INVITE	
	CALL PROC	+				
	XXXX	(€		SIP_MESSAGE_VA	
	CONN	+	+	-	200 OK INVITE	
			-	•	ACK	
		Conversation		onversation		
	DISC	→)		BYE	
	REL	+	+	-	200 OK BYE	
	RLC	→				

Values for test purpose IS_XXSSCOLP29			
VA	SIP MESSAGE_VA		
VA_1	180 Ringing		
VA_2	183 Session Progress		

IS_XXSSCOLP30		N reference to:			eference to:	
		N 300 092-1 [i.14]			1 383 001 [49]	
	EISIE	EN 300 403-1 [i.3]			129 163 [i.20] 5 124 608 [44]	
TSS reference:	ISDN-SIP/SS/	SDN-SIP/SS/COLP				
SIP selection criteria:		Temporary mode presentation restricted				
ISDN selection criteria:		has been requested by t		a narty		
Test purpose:		SUT on receipt of a pro			defined as	
		E_VA with priv-value co				
	from the termin					
		eferred-Identity header fie	eld is pro	vided within the	e 1xx response	
		s a CONNECT message				
	eleme	ent coded:				
		Address signals = not a				
		Numbering plan indicate		N numbering pla	an	
		Type of number = PIXIT				
		Screening indicator = ne				
		Address presentation re	estriction	indicator = pres	sentation restricted	
SIP Parameter values:	Dial string para	ameters options=PIXIT				
	PIXIT for supp	orted header:				
	Case a) no 100					
	Case b) Suppo					
	Case c) Supported: 100 rel and precondition					
	a line (DIVIT)					
	a = line (PIXIT) b = line (PIXIT)					
	m = line (PIXIT)					
ISDN Parameter	CONNECT	1				
values:	Connected nur	mber				
		not screened Connecte	d Partv N	Number, numbe	er not present	
Comments:	,		<u>-</u>	,		
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	+				
	XXXX	+		(SIP_MESSAGE_VA	
	CONN	+		(200 OK INVITE	
				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	+		←	200 OK BYE	
	RLC	→				

Values for test purpose IS_XXSSCOLP30			
VA	SIP MESSAGE_VA		
VA_1	180 Ringing		
VA_2 183 Session Progress			

IS_XXSSCOLP31	ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:	ISDN-SIP/SS/C	SDN-SIP/SS/COLP				
SIP selection criteria:		Temporary mode presentation restricted				
ISDN selection criteria:	COLP service I	COLP service has been requested by the calling party				
Test purpose:	Ensure that the SUT having not received a provisional 1XX response, on receipt of a 200 OK INVITE for this call without a Privacy header field: • P-Preferred-Identity header field is provided within the 1xx response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided					
SIP Parameter values:		Address presentation rameters options=PIXIT	estrictio	n indicator = pres	sentation restricted	
ISDN Parameter	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter values:	CONNECT Connected nun	nber				
	User provided,	not screened Connect	ed Party	Number not pre	sent	
Comments:		T				
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	+				
	CONN	+		-	200 OK INVITE	
				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	(-	200 OK BYE	
	RLC	→				

IS_XXSSCOLP32	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]		ETSI E ETSI T	reference to: :N 383 001 [49] S 129 163 [i.20] 'S 124 608 [44]		
TSS reference:	ISDN-SIP/S					
SIP selection criteria:	Temporary r	mode presentation restrict	ed			
ISDN selection criteria:		COLP service has been requested by the calling party				
Test purpose: Ensure that the SUT having not received a provisional 1XX res 200 OK INVITE for this call, a Privacy header field with the value received:			value "none" has been			
	 P-Preferred-Identity header field is provided within the 200 OK response sends a CONNECT message with the Connected Party Number information element coded: Address signals = default public user identity Numbering plan indicator = ISDN numbering plan Type of number = PIXIT 					
		Screening indicator = n Address presentation re		aracantation allowed		
SIP Parameter values:	Dial string pa	arameters options=PIXIT	estriction indicator =	presentation allowed		
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
ISDN Parameter values:		number Address signals = ed, not screened; Connect				
Comments:						
	ISDN	SI	JT	SIP		
	SETUP	→	→	INVITE		
	CALL PROC	+				
	CONN	(+	200 OK INVITE		
			→	ACK		
		Conversation	Conversation	1		
	DISC	→	→ • • • • • • • • • • • • • • • • • • •	BYE		
	REL	(200 OK BYE		
	RLC	→				

eipt of a UE" has onse ormation				
UE" has				
ormation				
zted				
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oted				
tea				
b = line (PIXIT) m = line (PIXIT)				
-				

Values for test purpose IS_XXSSCOLP33			
VA	PRIV_VALUE		
VA_1	ld		
VA_2	User		
VA_3	Header		

IS_XXSSCOLP34	ETSI E ETSI I	N reference to: :N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:	ISDN-SIP/SS/0	ISDN-SIP/SS/COLP				
SIP selection criteria:	Temporary mo	de presentation restrict	ed			
ISDN selection criteria:		COLP service has been requested				
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "none" has been received: • P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = default public user identity - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT				e 200 OK response rty Number information	
	-	Screening indicator = r				
	-	Address presentation r	estriction i	indicator = pres	sentation allowed	
ISDN Parameter values: ISDN Parameter values: Comments:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT Connected Party Number information element User provided, not screened Connected Party Number not present NoAS: NoA_VALUE				sent	
Comments:	IODNI	1	OUT		OID	
	ISDN		SUT		SIP	
	SETUP	→		→	INVITE	
	CALL PROC	+		_		
	ALERTING	(_	180 Ringing	
	CONN	+		(200 OK INVITE	
				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	(′	200 OK BYE	
	RLC	`			200 OIL DIE	
L	IVEO					

IS_XXSSCOLP35	ISDN reference to: ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 [i.3]			ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]	
TSS reference:		ISDN-SIP/SS/COLP				
SIP selection criteria:		de presentation not				
ISDN selection criteria:	COLP service I	nas been requested	d			
Test purpose:	Ensure that the SUT on receipt of a 200 OK INVITE for this call with a Privacy header field was received with the value "PRIV_VALUE" has been received: • P-Preferred-Identity header field is provided within the 200 OK response • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = not available - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided					
SIP Parameter values:		Address presentation meters options=PIX		on indicator = pres	sentation restricted	
ISDN Parameter	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT					
values:		ty Number informat	ion eleme	nt		
	Connected Party Number information element User provided, not screened Connected Party Number not prese NoAS: NoA_VALUE		sent			
Comments:	1001	1	OUT		- OIB	
	ISDN	_	SUT	-	SIP	
	SETUP	→		→	INVITE	
	CALL PROC	(
	ALERTING	-		(180 Ringing	
	CONN	+		←	200 OK INVITE	
				→	ACK	
		Conversation		Conversation		
	DISC	→		→	BYE	
	REL	(-	200 OK BYE	
	1			 -		
	RLC	→				

	Values for test purpose IS_XXSSCOLP35			
VA	PRIV_VALUE			
VA_1	ld			
VA_2	User			
VA_3	Header			

IS_XXSSCOLP36	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]
TSS reference:	ISDN-SIP/SS/0	COLP			
SIP selection criteria:	permanent mod	de			
ISDN selection criteria:		has been requested by			
Test purpose:	SIP_MESSAG the terminating • P-Pre • sends eleme - - -		mponent eld is pro with the ult public or = ISDN	is set to "none ovided within the Connected Parauser identity N numbering pla	has been received from 200 OK response rty Number information
		Address presentation re	•		centation allowed
SIP Parameter values: ISDN Parameter values:	PIXIT for supporting case a) no 100 Case b) Supporting case c) Supporting a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) CONNECT Connected nur	meters options=PIXIT orted header: orted: 100 rel orted: 100 rel orted: 100 rel and precor	ndition		
Comments:			-	•	
	ISDN		SUT		SIP
	SETUP	→		→	INVITE
	CALL PROC	+			
	XXXX	+		←	SIP_MESSAGE_VA
	CONN	+		(200 OK INVITE
				→	ACK
		Conversation		Conversation	
	DISC	→		→	BYE
	REL	(←	200 OK BYE
	RLC	→			

Values for test purpose IS_XXSSCOLP36											
VA	SIP MESSAGE_VA										
VA_1	180 Ringing										
VA_2	183 Session Progress										

IS_XXSSCOLP37	ETSI E ETSI E	N reference to: N 300 092-1 [i.14] EN 300 403-1 [i.3]		ETSI EN ETSI TS	eference to: 383 001 [49] 129 163 [i.20] 124 608 [44]
TSS reference:	ISDN-SIP/SS/0				
SIP selection criteria:	Permanent mo				
ISDN selection criteria:		has been requested b			
Test purpose:	200 OK INVITE P-Pre sends eleme	E for this call without ferred-Identity heade	a Privacy r field is p ge with the t available ator = ISI XIT : network	header field: crovided within the ne Connected Pa e DN numbering pla provided	rty Number information
SIP Parameter values:	Dial string para PIXIT for support Case a) no 100 Case b) Support	ameters options=PIXI orted header: 0 rel orted: 100 rel orted: 100 rel and prec 0	Γ	maioator – prot	
values:	Connected nur	nber not screened Conne	cted Party	Number not pre	sent
Comments:		·		T	
	ISDN	<u> </u>	SUT		SIP
	SETUP	→		→	INVITE
	CALL PROC	+			
	CONN	+		(200 OK INVITE
				→	ACK
		Conversation		Conversation	
	DISC	→		→	BYE
	REL	(-	200 OK BYE
	RLC	→			

IS_XXSSCOLP38	ETSI E	N reference to: :N 300 092-1 [i.14] EN 300 403-1 [i.3]	ETSI ETSI	N reference to: EN 383 001 [49] TS 129 163 [i.20] TS 124 608 [44]
TSS reference:	ISDN-SIP/SS/	COLP		
SIP selection criteria:	Permanent mo			
ISDN selection criteria:		has been requested by the		
Test purpose:	field was recei P-Pre send	ved with the value "none' eferred-Identity header fie	has been received ld is provided within with the Connected ailable	the 200 OK response Party Number information
	-			
	-	Screening indicator = ne		area entetion allowed
SIP Parameter values:	Dial string para	Address presentation res ameters options=PIXIT	striction indicator = p	presentation allowed
	a = line (PIXIT b = line (PIXIT m = line (PIXIT	0 rel orted: 100 rel orted: 100 rel and precond))	dition	
ISDN Parameter	CONNECT			
values:		rty Number information e , not screened Connected ALUE		present
Comments:			ľ	
	ISDN		JT	SIP
	SETUP	→	→	INVITE
	CALL PROC	-		
	ALERTING	-	←	180 Ringing
	CONN	+	+	200 OK INVITE
			→	ACK
		Conversation	Conversatio	
	DISC	→	→	BYE
	REL	((200 OK BYE
	RLC	→		

SIP selection criteria: Temporary mode presentation not restricted The Tempinating UE sends an UPDATE request with an updated From and To header. The Tempinating UE sends an UPDATE request with an updated From and To header The Tempinating UE sends an UPDATE request after the ACK for the 200 OK INVITE containing a connected identity in the From header Sends a CONNECT message with the Connected Party Number information element coded: Address signals = unscreened number Numbering plan indicator = ISDN numbering plan Type of number = PIXIT Screening indicator = network provided Address presentation restriction indicator = presentation allowed SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) D = line (PIXIT) D = line (PIXIT) D = line (PIXIT) D = line (PIXIT) SIP messages: INVITE: Supported: from-change 18x/200: Supported: from-change 19x/200: Supported: from-change 19x/20	IS_XXSSCOLP39	ETSI E ETSI E	N reference to: :N 300 092-1 [i.14], EN 300 403-1 [i.3]	ETSI E ETSI TS ETSI TS 124 60	reference to: N 383 001 [49], S 129 163 [i.20], I8 [44], TIP/TIR reference use 4.5.2.12
Terminated user has special arrangement ISDN selection criteria: Test purpose: The Terminating UE sends an UPDATE request with an updated From and To header. Ensure that if the UE receives a "from-change" tag in a Supported header in an initial INVITE, and the user equipment sends an UPDATE request after the ACK for the 200 OK INVITE containing a connected identity in the From header • sends a CONNECT message with the Connected Party Number information element coded: • Address signals = unscreened number • Numbering plan indicator = ISDN numbering plan • Type of number = PIXIT • Screening indicator = network provided • Address presentation restriction indicator = presentation allowed SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SIP messages: INVITE: Supported: from-change 18x/200: Supported: from-change UPDATE: From <identity equipment="" user="">) ISDN Parameter values: CONNECT Connected number User provided, not screened Connected Party Number not present Comments: ISDN SUT INVITE with "from-change" tag National Properties of the ACK ACK ACK ALERTING ← 180 Ringing CONNECT CONN</identity>	TSS reference:				
ISDN selection criteria: COLP service has been requested by the calling party The Terminating UE sends an UPDATE request with an updated From and To header. Ensure that if the UE receives a "from-change" tag in a Supported header in an initial INVITE, and the user equipment sends an UPDATE request after the ACK for the 200 OK INVITE containing a connected identity in the From header • sends a CONNECT message with the Connected Party Number information element coded:	SIP selection criteria:				
Test purpose: The Terminating UE sends an UPDATE request with an updated From and To header. Ensure that if the UE receives a "from-change" tag in a Supported header in an initial INVITE, and the user equipment sends an UPDATE request after the ACK for the 200 OK INVITE containing a connected identity in the From header • sends a CONNECT message with the Connected Party Number information element coded: • Address signals = unscreened number • Numbering plan indicator = ISDN numbering plan • Type of number = PIXIT • Screening indicator = network provided • Address presentation restriction indicator = presentation allowed SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SIP messages: INVITE: Supported: from-change 18x/200: Supported: from-change UPDATE: From <identity equipment="" user="">) CONNECT Connected number User provided, not screened Connected Party Number not present Comments: SIDN SUT SIP ALERTING ← 180 Ringing DISC → 200 OK UPDATE CONNECT CONVECT C</identity>					
Ensure that if the UE receives a "from-change" tag in a Supported header in an initial INVITE, and the user equipment sends an UPDATE request after the ACK for the 200 OK INVITE containing a connected identity in the From header • sends a CONNECT message with the Connected Party Number information element coded: - Address signals = unscreened number - Numbering plan indicator = ISDN numbering plan - Type of number = PIXIT - Screening indicator = network provided - Address presentation restriction indicator = presentation allowed SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case b) Supported: 100 rel Case b) Supported: from-change UPDATE: From <identity equipment="" user="">) CONNECT Connected number User provided, not screened Connected Party Number not present Comments: SIDN SUT SIP ALERTING - 180 Ringing ALERTING - 200 OK INVITE ACK - UPDATE - With Updated From and To header - 200 OK UPDATE - CONN - 200 OK UPDATE</identity>					
ISDN Parameter values: Connected number User provided, not screened Connected Party Number not present Comments: ISDN SUT SIP SETUP → INVITE with "fromchange" tag ALERTING ← 180 Ringing ALERTING ← 180 Ringing ACK UPDATE with updated From and To header CONN ← 200 OK UPDATE CONN ← 500 Conversation Conversation DISC → BYE REL ← 200 OK BYE		Ensure that if INVITE, and th OK INVITE co	the UE receives a "from-chane user equipment sends ar intaining a connected identities a CONNECT message with ent coded: Address signals = unscree Numbering plan indicator = Type of number = PIXIT Screening indicator = network Address presentation restrated in the content is presented in the content in the	ange" tag in a Supp ange" tag in a Supp UPDATE request y in the From head th the Connected P ned number ISDN numbering p ork provided iction indicator = pr	orted header in an initial after the ACK for the 200 er arty Number information
values: Connected number User provided, not screened Connected Party Number not present SIP SETUP INVITE with "fromchange" tag ALERTING ALERTING ALERTING ACK PDATE with updated From and To header CONN CONVERSATION CONVERSATION CONVERSATION CONVERSATION DISC REL ACK PDATE With updated From and To header CONVERSATION CONVERSATION CONVERSATION DISC BYE REL CONN SIP SIP ACK PDATE with updated From and To header CONV ← CONVERSATION CONVERSATION DISC BYE REL CON BYE	ISDN Parameter		Tana and and a dark a dark and a		
SDN SUT SIP		Connected no		d Party Number no	ot present
SETUP →	Comments:				
Change" tag ALERTING					
→ 200 OK INVITE ACK ← UPDATE with updated From and To header CONN ← Conversation Conversation DISC → REL ← 200 OK INVITE With updated From and To header 200 OK UPDATE Conversation BYE REL ←					change" tag
ACK		ALERTING	(
Conversation DISC PEL CHARLE CHARLE CUPDATE with updated From and To header 200 OK UPDATE Conversation Conversation BYE REL CONN CONUMBYE				→	
with updated From and To header → 200 OK UPDATE					
CONN ← Conversation Conversation DISC → BYE REL ← 200 OK BYE					with updated From and To header
DISC → BYE REL ← 200 OK BYE		CONN	←	7	ZUU OK UPDATE
DISC → BYE REL ← 200 OK BYE			Conversation	Conversation	
REL ← 200 OK BYE		DISC			RVE
		RLC	→		ZOU OR BTE

6.2.2.4 CFU

6.2.2.4.1 CFU - ISI

SETUP (UE 1) → INVITE → INVITE → INVITE → INVITE → INVITE ← INVIT	ISI_XX	SSC	FU 01	(ETSI claus	ON refere EN 300 2 ses 6.1, 9	207-1 .2.2,	[i.5], 9.2.5				GN refero				
Selection criteria: Call forwarding by the network Call forwarding unconditional supported				ISDN-	-SIP-	ISDN/Sup	oplen	nentary_se	ervic	es/CFU						
Selection criteria: Call forwarding by the network Call forwarding unconditional supported	Configurat	ion:		The u	ser A	and the	user	C are in n	etwo	rk N1. The	use	r B is in i	net	vork N2 a	and is	
Call forwarding unconditional supported Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-B SETUP (UE 1) → INVITE → INVI				provid	ded w	ith CFU.	User	C is point	-to-n	nultipoint						
Call forwarding unconditional supported Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE	Selection of	crite	ria:	Call fo	orwai	rding by th	he ne	twork								
Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-SETUP (UE 1) → INVITE → INV									ortec	i						
Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: BC = PIXIT BC = PIXIT Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) INVITE INVIT	Test purpo	se:									rwa	rded to u	ser	C.		
Channels is performed correctly (e.g. testing QoS parameters).															d B-	
SDN Parameter values: Dial string parameters options=PIXIT																
values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-SETUP (UE 1) → INVITE →<	ISDN Para	met	er						9	g						
SIP Parameter values: Dial string parameters options=PIXIT					, .,	•										
PIXIT for supported header:		ete	r values.	Dial s	trina	naramete	rs or	ntions-PIX	ΊΤ							
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) The line (PIXIT) Magcf	On Talan	icic	i values.	Diai 3	unig	paramete	,13 OF	7110113-1 17								
Comments: ISDN				Case Case Case a = lir b = lir	a) no b) Si c) Si ne (P ne (P	in 100 relupported: upported: upported: IXIT) IXIT)	100	rel	econ	dition						
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-SETUP (UE 1) →				m = li	ne (F	PIXIT)										
SETUP (UE 1) → INVITE → INVITE → INVITE → INVITE ← INVIT		3:														
INVITE I	ISDN		MGC	CF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
INVITE I	CETUD (UE 4)			INIV/ITE		INIVITE										
NOTIFY (UE 1)	SETUP (UE 1)	7		IINVIIE	7	IINVIIE	7	INVITE	→							
NOTIFY (UE 1)																
NOTIFY (UE 1)						181	-	181	•							
SETUP (UE 2)	NOTIFY	+		181	+	101										
SETUP (UE 2)	(UE 1)					IND/ITE										
SETUP (UE 2) ← ALERTING (UE 2)				INVITE	+	INVITE										
(UE 2) 180																
180		→		180	→											
ALERTING (UE 1)	(OL Z)					180		180	→							
(UE 1)	AL EDTINO			100		180	+	180	+							
CONNECT (UE 2) 200 OK → 200 OK → CONNECT (UE 1) 200 OK ← 200 OK ← CONNECT (UE 1) ACK → ACK → ACK → ACK → ACK → ACK ← ACK ← ACK → DISC (UE1) → BYE → BYE → DISC (UE2) ← BYE ← BYE → REL (UE2) → 200 OK BYE → 200 OK BYE → RLC (UE2) ← 200 OK BYE → 200 OK BYE → REL (UE1) ← 200 OK BYE ← E 200 OK BYE ←		-		180	-											
200 OK	CONNECT	→	1 :	200 OK	→											
CONNECT (UE 1)	(UE 2)	+				200 OK		200 OK			1		\vdash		 	
CONNECT (UE 1) 200 OK € ACK → ACK → ACK → ACK € ACK € ACK € DISC (UE1) → BYE → BYE → BYE DISC (UE2) € BYE ← BYE ← BYE REL (UE2) → 200 OK BYE → 200 OK BYE → 200 OK BYE RLC (UE2) € BYE ← BYE ← BYE REL (UE1) € 200 OK BYE ← BYE ← BYE		+											H		-	
ACK → ACK → ACK → ACK → ACK → ACK ←		+	1 :	200 OK	+					İ						
ACK	(UE 1)	\vdash		ACK.		VCK.		VC _K					H		1	
DISC (UE1) → BYE → BYE → DISC (UE2) ← BYE ← BYE ← REL (UE2) → 200 OK BYE → 200 OK BYE → RLC (UE2) ← 200 OK BYE → 200 OK BYE → REL (UE1) ← 200 OK BYE ← 200 OK BYE ←		+	+								1		H		1	
REL (UE2) → 200 OK BYE → 200 OK BYE → RLC (UE2) ← 200 OK BYE → 200 OK BYE → 200 OK BYE ← 200 OK BYE ← REL (UE1) ← 200 OK BYE ←	DISC (UE1)			BYE	→	BYE	→	BYE	→							
RLC (UE2)						BYE	+	BYE	+							
BYE 200 OK BYE ← 200 OK BYE ←		_	200	OK BYE	→	200 OK		200 OK BAE	7	-	1		\vdash		 	
REL (UE1)	NLO (UEZ)	Ľ			<u></u>	BYE									<u></u>	
REL (UE1)							+	200 OK BYE	+							
	REL (UE1)	+	200	OK BYF	+	BIE				1			\vdash		 	
<u>, , , , , , , , , , , , , , , , , , , </u>	RLC (UE1)															

ISI_XXSS	SCF	U 02	ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45]												
									t	-15	15 124	604	4 [45]		
					6.1, 9.2.										
TSS referen			ISDN-SI	<u>P-ISI</u>	JN/Suppl	emer	ntary_serv	ices/	CFU						
Configuratio	n:								N1. The us						
									orwarded to						
									leased to t						
					notificati	on th	at the call	nas	been forwa	arae	d = res)	. U	iser C is p	oomt-	10-
Colootion or	to ri		multipoir		a by tha	notu	o rle								
Selection cri	цепа	a.			ng by the		al support	~d							
					ns suppo		ai support	eu							
Test purpos	۵.						lle usar R	the	call is forw	arde	ad to use		μερι Δ ίσ	noti	fied of
Test purpos	С.								-to number						
									rwarding r						
							of call dive			iaiiii	oci (asci	٠.	ias prese	man	"
									ne voice tra	nsf	er on the	me	edia and F	3-cha	nnels
									arameters).					. Jiiu	
ISDN Param	nete	r	BC = PI			\- · •		- 1							
values:	5														
SIP Parame	ter	values:	Dial strir	ng pa	rameters	optic	ns=PIXIT								
				5 1.5		,	•								
			PIXIT fo	r sup	ported he	eader	:								
			Case a)												
			Case b)	Supp	orted: 10	00 rel									
			Case c)	Supp	orted: 10	00 rel	and preco	nditi	on						
			a = line												
			b = line												
			m = line	(PIX	IT)										
Comments:						_				_					
ISDN		MC	GCF	-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
, ,							INVITE	→							
							INVITE 181	÷	MESSAGE	→					
					181	+					MESSAGE	→			
NOTIFY (UE 1)	4		181	+											
SETUP (UE 2)	+		INVITE	+											
ALERTING (UE 2)	→		180	→											
\-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					180	→	180	→							
ALERTING	+		180	+	180	+	180	+						-	
(UE 1)	Ĺ		100	•											
CONNECT	→		200 OK	→											
(UE 2)	Ĺ		200 010												
	\vdash				200 OK 200 OK	→	200 OK 200 OK	<u>→</u>							
CONNECT	+		200 OK	+	200 010	Ė	200 010								
(UE 1)	\vdash		ACK	→	ACK	→	ACK	→							
			ACK	+	ACK	+	ACK	+				E			
DISC (UE1)	+		BYE	→	BYE	→	BYE	→							
					BYE	+	BYE	+		L		F			
DISC (UE2)	+		BYE	+											
REL (UE2) RLC (UE2)	→		200 OK BYE	→	200 OK	→	200 OK BYE	→				_			
- (/					BYE										
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	+		200 OK BYE	+											
RLC (UE1)	→														

ISI_XXSS	CF	U 03	ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45] clauses 6.1, 9.2.2, 9.2.5												
TSS reference	ce:		ISDN-SI	P-ISI	DN/Suppl	lemei	ntary_serv	ices/	CFU						
Configuration			The use with CFL diversion	r A a J ("S n noti user	nd the us erved use fication" : receives	er C er allo = Yes	are in neto ows the pros, "diverting cation that	vork esen g nui	N1. The utation of formula taken and the table t	orwa lease	rded to U	RI 1 dive	to origina [.] erted-to u	ting u ser" :	ser in = No,
Selection crit	eria	:	Call forw	ardir ardir	ng by the	dition	ork al support	ed							
Test purpose):		Ensure t call diver allowed presenta Ensure t	F Notifications supported insure that when user A calls user B, the call is forwarded to user C, user A is notified all diversion and not informed of the diverted-to number (user C has presentation not lowed - COLR) and user C is not informed of the forwarding number (user B has resentation not allowed). User B is not notified of call diversion. Insure that in the active call state (N10) the voice transfer on the media and B-chanic performed correctly (e.g. testing QoS parameters).											not
ISDN Param values:	eter		BC = PI												
SIP Paramet	er v	alues:	PIXIT for Case a) Case b) Case c) a = line (b = line (al string parameters options=PIXIT XIT for supported header: ase a) no 100 rel ase b) Supported: 100 rel ase c) Supported: 100 rel and precondition = line (PIXIT)											
			m = line	(PIX	IT)										
Comments: ISDN		М	GCF	l-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→	INVITE INVITE 181	+							
NOTIFY (UE 1)	+		181	+	181	+	INVITE	+							
SETUP (UE 2) ALERTING (UE 2)	←		INVITE 180	←	INVITE	÷	400								
ALERTING (UE 1)	+		180	+	180 180	+	180 180	→							
CONNECT (UE 2)	>		200 OK	→	200 OK 200 OK	→	200 OK 200 OK	→							
CONNECT (UE 1)	+		200 OK ACK	÷	ACK	→	ACK	→							
DISC (UE1)	→		ACK BYE	←	BYE BYE	+ + +	BYE BYE	+ +							
DISC (UE2)	+		BYE	+											
REL (UE2) RLC (UE2)	+		200 OK BYE	→	200 OK BYE	→	200 OK BYE	→							
					200 OK BYE	+	200 OK BYE	+							
REL (UE1) RLC (UE1)	+		200 OK BYE	+			<u> </u>								

ISI_XXS	SCF	U 04	ISDN reference to: NGN reference									ence to:	to:		
					SI EN 30					- 1	ETSI TS	124	604 [45]	ĺ	
					uses 6.1										
TSS reference							entary_ser								
Configuration	n:		The use			ser C	and D are	in n	etwork N1	Th	e user B	is ir	n network	N2 a	and is
						sar C	are in net	work	N1. The u	cor	R is in ne	two	ork N2 an	d ie	
									he present						
									: No, "dive						:
									ves notifica						
							s point-to-								
Selection crit	teria	:		I forwarding by the network											
							nal suppor	ted							
_				Notifications supported sure that when user A calls user B, the call is forwarded to user C, user A is n											
Test purpose	9:														
									of the dive						JLP)
							ified of cal		ing numbe	(us	ei 🗈 nas	hre	sentation	JOI1 I	
									he voice tr	anei	fer on the	me	edia and l	B-ch:	annels
									arameters)				Jaia and	_ 5110	
ISDN Param	eter	values:	BC = P			(3.3									
SIP Paramet					arameter	s opti	ons=PIXIT	•							
						-									
					pported h	eade	er:								
			Case a												
					ported: 1										
			Case c	Sup	portea: 1	oo re	l and prec	ondit	ion						
			a = line	/DIY	IT\										
			b = line												
			m = line												
Comments:															
ISDN		MG	CF	l-	CSCF	S	-CSCF		AS	Ρ	-CSCF		UE-B	U	IE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→								ļ	
OLTOT (OLT)			IIIVIIL		IIIVIIL	Ĺ	INVITE	→							
	1				INVITE	+	INVITE	+							
			INVITE	+											
SETUP (UE 2) ALERTING	+		180	→										ļ	
(UE 2)					100		100	_						<u> </u>	
					180 180	→	180 180	→							
ALERTING (UE 1)	+		180	+											
` ,															
CONNECT (UE 2)	→		200 OK	→											
(02.2)					200 OK	→	200 OK	→							
CONNECT	+		200 OK	+	200 OK	+	200 OK	+				\vdash		 	
(UE 1)	-				A 014		ACK	_						<u> </u>	
	+		ACK ACK	→	ACK ACK	+	ACK ACK	+				\vdash		 	
DISC (UE1)	→		BYE	→											
	1				BYE BYE	→	BYE BYE	→						$oxed{oxed}$	
DISC (UE2) REL (UE2)	←		BYE	←											
. ,			200 OK BYE	 _											
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→							
	T				200 OK	+	200 OK BYE	+							
REL (UE1)	+		200 OK	+	BYE							\vdash			
` ′			BYE	BYE											
RLC (UE1)	→													i	

ISI_XXSS	CF	U 05	ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45] clauses 6.1, 9.2.2, 9.2.5											
TSS reference					DN/Supple									
Configuration	1:							ovided	d with CFL	J. U	ser C is p	oint-to-mult	ipoint	
Selection crit	eria	:			ng by the r									
			user C is	s use	ng uncond er determin	ied ι	ser busy							
Test purpose	:				t a call is re user B, the							ⁱ ul. termined us	er bu	sy.
ISDN Paramovalues:	eter	,		BC = PIXIT										
SIP Paramet	er v	alues:	Dial strir	al string parameters options=PIXIT										
			Case a) Case b) Case c) a = line	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)										
Comments:														
ISDN		MC	GCF	Į.	-CSCF	S	-CSCF		AS	Р	-CSCF	UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→								
						<u> </u>	INVITE INVITE	}						
							181	÷						
NOTIFY	4		181	+	181	+	INVITE	+						
(UE 1)	_		101	1			IINVIIE	7						
			INVITE	+	INVITE	+								
SETUP (UE 2)	+		IIVVIIE			 								
RLC (UE 2)	→		486 Busy here	→	486 Busy here	→	486 Busy here	→						
DISC (UE 1)	+		486 Busy here	+	486 Busy here	+	486 Busy here	+						
REL	→		ACK	+	ACK	→	ACK	→	-					
RLC	+	ļ	ACK	-	ACK	+	ACK	+				!		

SETUP (UE 1) → INVITE → INVITE → INVITE → INVITE → INVITE ← INVIT	ISI_XXS		U 06	E1 cla	SI E	N reference N 300 207- s 6.1, 9.2.2	1 [i , 9.	.5], 2.5	NGN reference to: ETSI TS 124 604 [45]								
Selection criteria: Call forwarding unconditional supported user C is network determined user busy To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is network determined user ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SETUP (UE 1) NOTIFY (UE 1) INVITE INV																	
Call forwarding unconditional supported user C is network determined user busy Test purpose: To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is network determined user ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B USETUP (UE 1) > INVITE > INV									ovid	ed with C	FU. U	lser C is p	oint-to-multi	point.			
To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is network determined user ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B USETUP (UE 1) SETUP (UE 1) > INVITE INVI	Selection c	riteria	1:	Call for	ward	ing uncondi	tior	nal support									
Values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B USETUP (UE 1) → INVITE → INV	Test purpos	se:		To verif	y tha	t a call is re	lea	sed correc	tly if					d user busy.			
PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B SETUP (UE 1) > INVITE > INVI		meter	•	BC = P	IXIT												
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE				Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)													
SETUP (UE 1) → INVITE → INVITE → INVITE → INVITE → INVITE ← INVIT	Comments																
INVITE	ISDN		MC	GCF		I-CSCF	()	S-CSCF		AS	P	-CSCF	UE-B	UE-C			
NOTIFY (UE 1)	SETUP (UE 1)	→	1	NVITE	→			INVITE	+								
INVITE •		+		181	+			INVITE	+								
1400 DUSVIT 1400 DUSVIRIRIT 1400 DUSVIT						INVITE 486 Busy here		486 Busy	→								
Interest	` ,		 	nere 186 Busi nere	/ ←	486 Busy here	+	here 486 Busy here	+								
REL → ACK → ACK → RLC ← ACK ← ACK ←																	

ISII_XXSSCFU 07	ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45]									
	clauses 6.1, 9.2.2, 9.2.5	2.6. 16 12. 66. [16]								
TSS reference:	ISDN-SIP-ISDN-ISDN/Supplementa	ary_services/CFU								
Configuration:	The user A and the user C and D a	re in network N1. The user B is in network N2 and is								
	1.	s the call to back to user B. User C is								
	point-to-multipoint.									
Selection criteria:	Call forwarding by the network									
	Call forwarding unconditional support	orted								
Test purpose:		B, the call is forwarded to user C and D.								
	User D forwards the call to back to	user B. Ensure that the call is released.								
ISDN Parameter	BC = PIXIT									
values:										
SIP Parameter values:	Dial string parameters options=PIX	IT								
	PIXIT for supported header:									
	Case a) no 100 rel									
	Case b) Supported: 100 rel									
	Case c) Supported: 100 rel and pre	condition								
	a = line (PIXIT)									
	b = line (PIXIT)									
	m = line (PIXIT)									
Comments:										

SII_XXSSCFU 08	ISDN reference to:	NGN reference to:								
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]								
	clauses 6.1, 9.2.2, 9.2.5									
TSS reference:	ISDN-SIP-ISDN-ISDN/Supplementary_servi	ces/CFU								
Configuration:	The user A and the user C and D are in netv	vork N1. The user B is in network N2 and is								
	provided with CFU. User D forwards the call. User C is point-to-multipoint.									
Selection criteria:	Call forwarding by the network									
	Call forwarding unconditional supported									
	Network option: maximal number of diversions for a single call N= 3									
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C, C to D.									
	User D has call forwarding activated. Ensure	e that the call is released.								
ISDN Parameter	BC = PIXIT									
values:										
SIP Parameter values:	Dial string parameters options=PIXIT									
	PIXIT for supported header:									
	Case a) no 100 rel									
	Case b) Supported: 100 rel									
	Case c) Supported: 100 rel and precondition	1								
	F (DI)(IT)									
	a = line (PIXIT)									
	b = line (PIXIT)									
	m = line (PIXIT)									
Comments:										

6.2.2.4.2 CFU - ISS

ISS_XXS	U 01		DN refei I EN 300 es 6.1, 9.	207-	1 [i.5],	NGN reference to: ETSI TS 124 604 [45]										
TSS referer	JCE.		ISDN-SIF			FU										
Configuration								,0,0,								
Selection co		a:	The user B is provided with CFU Call forwarding by the network													
		Call forwarding unconditional supported														
Test purpose:		Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is														
						sting QoS						0.10.				
ISDN Parar	nete	r	BC = PIXIT													
values:			Di La Cara di													
SIP Parame	eter		Dial string parameters options=PIXIT													
values:			DIVIT for supported header:													
			PIXIT for supported header: Case a) no 100 rel													
			Case b)			0 rel										
							and preco	nditio	on							
			a = line (
				b = line (PIXIT)												
Commonto			m = line	(PIXI	1)											
Comments: ISDN		M	GCF	CSCF		-CSCF		AS P-CSCF UE-B UE-C								
		101					0001		I	<u> </u>	0001					
SETUP	→		INVITE	→	INVITE	→	INVITE	→								
							INVITE	+								
					181	+	181	+								
NOTIFY	+		181	+	101				INVITE	→		INVITE	→			
									180	+		100 Trying 180	+			
					400	_	180	→								
ALERTING	+		180	+	180	+	180	+								
							000 011	→	200 OK	+		200 OK	+			
	+						200 OK 200 OK	+		1			1			
CONNECT	Ļ		200 014		200 OK	+										
CONNECT	+		200 OK ACK	←	ACK	→	ACK	→		1			1			
							ACK	+	4014			101/	Ţ.			
DISC (UE1)	→		BYE	→	 	 			ACK	→		ACK	→			
					BYE	→	D)/E	_								
	+						BYE BYE	→		\vdash	+					
									BYE	→		BYE	→			
	\vdash								200 OK BYE	+		200 OK BYE	+			
					200 014	ļ.,	200 OK BYE	→								
					200 OK BYE	+	200 OK BYE	+	<u></u>							
REL (UE1)	+		200 OK BYE	+												
RLC (UE1)	7				I		1		L	<u> </u>			<u> </u>	I		

ISS_XXS	-U 02			SDN refe				NGN reference to:									
			1		SI EN 300				ETSI TS 124 604 [45]								
TOO (clauses 6.1, 9.2.2, 9.2.5														
TSS refere			ISDN-SIP-SIP/Supplementary_services/CFU												-l 4-		
Configurati	ion:		The user B is provided with CFU ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to														
			the diverted-to user" = Yes, "served user receives notification that the call has been														
			forwarded" = Yes).														
Selection of	riter	ia·	Call forwarding by the network														
0010011011	,,,,,			Call forwarding unconditional supported													
		CF Notifications supported															
Test purpo	se:		Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of														
			call diversion and informed of the diverted-to number (user C has presentation allowed -														
			no TIR) and user C is informed of the forwarding number (user B has presentation														
			allowed). User B is notified of call diversion.														
			Ensure that in the active call state (N10) the voice transfer on the media and B-channels														
			is performed correctly (e.g. testing QoS parameters).														
ISDN Para	mete	er	BC = PI	XII													
values: SIP Param	\O+0 =		Dial of	20 52	romotore	on4i-	nc-DIVIT										
values:	leter		ואוטן אוטן	ig pa	nameters	optic	ns=PIXIT										
values.			PIXIT fo	reiir	ported he	ader											
			Case a)			auei											
					ported: 10	00 rel											
								nditi	on								
			Case c) Supported: 100 rel and precondition														
			a = line (PIXIT)														
			b = line	(PIXI	IT)												
			m = line	(PIX	IT)												
Comments	s:													1			
ISDN		MO	SCF	- I-CSCF			S-CSCF A			AS P-CSCF			UE-B UE-C				
SETUP	→		INVITE	→	INVITE	→											
					100 Truin a	_											
					100 Trying	+	INVITE	→									
							100 Trying	+	MEGGAGE								
							INVITE 100 Trying	<u>←</u>	MESSAGE	→	MESSAGE	→					
					404	_	181	+									
NOTIFY	+	-	181	+	181	+			INVITE	→	-		INVITE	→			
													100 Trying	+			
	+								100 Trying 180	+			180	+			
					400	_	180)									
ALERTING	+		180	+	180	+	180	+			 						
			- *				000 014		200 OK	+			200 OK	+			
	+	-			-		200 OK 200 OK	<u>→</u>									
	+				200 OK	+											
CONNECT	-	200 OK ACK	←	ACK	→	ACK	→										
					1.5		ACK	-	1611	Ļ			16:1				
DISC (UE1)	→		BYE	→	-				ACK	→	-		ACK	→			
	Í				BYE	→											
	+				-		BYE BYE	<u>→</u>			-			-			
							DIL	•	BYE	→			BYE	→			
	$+$ \blacksquare								200 OK BYE	+			200 OK BYE	+			
							200 OK BYE	→	200 ON DIE	É							
					200 OK BYE	+	200 OK BYE	+			1						
REL (UE1)	+		200 OK BYE	+	DIL												
RLC (UE1)	→		•														

ISS_XXS	SCF	U 03			ISDN refe					_		erence to: 24 604 [45		
					uses 6.1							24 004 [40	, 1	
TSS referen	ice:		ISDN-SII				ry_service	s/CF	-U					
Configuratio			User B is originatin	prov g use	rided with er in dive	CFU rsion	("Served notification	user า" = `	allows the Yes, "diver es notificat	ting numb	ber is i	released to	the	
Selection cr	iteria	a:	Call forw Call forw	ardin	g by the r g uncond ns suppo	itiona	ork al supporte	d						
Test purpos	e:		call diver allowed - presenta Ensure tl	sion and TIR) tion nation that the side of	and not in and use not allowe the activ	nform r C is d). U e call	ed of the o not inform ser B is no	diver ned co ot no 0) th	call is forwated to num of the forwatified of call e voice tra	ber (user Irding nur I diversio	C has mber (n	s presentat user B has	ion n	ot
ISDN Param	netei	r	BC = PIX		rectly (e.	g. 103	ung Qoo p	Jaiai	neters).					
values:	.5.01		1/											
SIP Parame	ter v	/alues:	Dial strin	g par	ameters	option	ns=PIXIT							
			Case a) (no 10 Supp Supp PIXIT PIXIT	orted: 100 orted: 100 	0 rel	and precor	nditio	on					
Comments:														
ISDN		M	GCF	l-	CSCF	S	-CSCF		AS	P-CSC	CF	UE-B	U	E-C
SETUP	→		INVITE	→	INVITE	→								
							INVITE 100 Trying	<u>→</u>						
							INVITE	+						
							100 Trying 181	→			-			
NOTIFY	+		181	+	181	+			INVITE	→		INVITE	→	
NOTH			101	Ì								100 Trying	÷	
									100 Trying 180	+		180	+	
							180	→						
ALERTING	+		180	+	180	+	180	+			-			
							200 OK	→	200 OK	+		200 OK	+	
							200 OK 200 OK	+						
CONNECT	+		200 OK	+	200 OK	+								
CONNECT	Ì		ACK	À	ACK	→	ACK	→						
	+		-		-		ACK	+	ACK	→	+	ACK	→	<u> </u>
DISC (UE1)	→		BYE	→	B) (=				7.010			, .0.1	Ĺ	
	+				BYE	→	BYE	→						
							BYE	+	DVE	→		D)/E	→	
									BYE	7		BYE 200 OK BYE	+	
							200 OK BYE	→	200 OK BYE	+				-
					200 OK	+	200 OK BYE	+						
REL (UE1)	+		200 OK BYE	+	BYE				1					
RLC (UE1)	→													

ISS_XXS	SCF	U 04			ISDN re							eference to					
					ETSI EN 3						ETSI TS	124 604 [4	5]				
T00 (IODAI		clauses 6.				/OFILE								
TSS reference					-SIP/Supp					4 -							
Configuration	:				A and the t with CFU	user	C and D a	re ın	network in	1. Ir	ne user B	is in netwo	K N2	and is			
						loor (C are in n	aturo.	rk N11 and i	ıoor	C in prov	idad with Co	ם וכ	Tho			
												ided with Co allows the p					
												= No, "divert					
												notification t					
					forwarded'			- 110	, 001100 0	00	00011001	notinodilon t	iat ti	io oan			
Selection crite	eria:				rding by th												
					rding unco			orted									
					ations sup												
Test purpose:	:		Ensur	e th	at when us	er A	calls user	B, th	ne call is fo	rwar	ded to us	er C, user A	is no	otified			
			of call	dive	ersion and	not ii	nformed o	f the	diverted-to	nur	nber and	user C is no	t info	rmed			
			of the	forv	varding nui	mber	(user B h	as pi	resentation	not	allowed).	User B is n	ot no	tified of			
			call di														
												e media and	l B-				
						ed co	rrectly (e.g	g. tes	sting QoS p	arar	neters).						
ISDN Parame			BC =														
SIP Paramete	er va	lues:	Dial s	Dial string parameters options=PIXIT													
			DD///-														
					supported	head	er:										
					o 100 rel	400 -											
					supported:				J:4:								
			Case	C) S	upported:	100 1	ei and pre	CONC	altion								
			a = lin	ے (E	NTIXIT)												
			b = lin														
			m = lir														
Comments:				(.	.,,												
ISDN		M	GCF		I-CSCF	S	-CSCF		AS	P	-CSCF	UE-B	U	IE-C			
SETUP	→		INVITE	→	INVITE	→											
					100 Trying	+											
							100 Trying	→									
							INVITE	+									
	_						100 Trying	→	INVITE	→		INVITE	→				
	士											100 Trying	+				
	_								100 Trying 180	+		180	+				
	士						180	→	100	_		100	-				
ALERTING	+		180	+	180	+	180	+									
ALLINING			100	Ĺ					200 OK	+		200 OK	+				
	\bot						200 OK	+ +									
	\pm			E	200 OK	+	200 OK										
CONNECT	+		200 OK	+	ACV	→	ACK	→									
	+		ACK	7	ACK	 	ACK ACK	+									
DISC (UEA)	→		DVC	→					ACK	→		ACK	→				
DISC (UE1)	+~		BYE	7	BYE	→											
							BYE	→									
	+			<u> </u>		-	BYE	+	BYE	→		BYE	→				
	工											200 OK BYE					
	+				-		200 OK BYE	→	200 OK BYE	+							
	#			Ļ	200 OK BYE	+	200 OK BYE	+									
REL (UE1) RLC (UE1)	←		200 OK BYE	+	1								-				
INLO (UE I)				L	i .	L	1		1				1				

ISS_XXS		FU 05		С	ISDN re TSI EN 3 lauses 6.	00 20 1, 9.2	07-1 [i.5], 2.2, 9.2.5				_	eference to 5 124 604 [4		
TSS referer							ıtary_servi							
Configuration							I2 and is p	rovic	led with C	FU				
Selection co	riteri	a:			ling by the									
			Call for	ward	ling uncor	nditio	nal suppo	rted						
Test purpos	se:						ased corre							
					user B, t	he ca	all is forwa	rded	to user C	who	is user d	letermined u	ıser b	usy.
ISDN Parar	nete	r values:	BC = P	TIXI										
SIP Parame	eter	values:	Dial str	ing p	arameter	s opt	ions=PIXI	Γ						
				٠.		•								
			PIXIT f	or su	pported h	eade	er:							
			Case a											
					pported: 1	00 re	el							
							el and pred	condi	tion					
				, ,	•		•							
			a = line	(PI)	(IT)									
			b = line											
			m = line											
Comments:														
ISDN		MG	CF	Į.	-CSCF	S	-CSCF		AS	P	-CSCF	UE-B	U	E-C
SETUP	→		INVITE	→	INVITE	→								
					100 Trying	+								
							INVITE	→						
							100 Trying INVITE	++						
							100 Trying	→						
							181	+		\perp				
NOTIFY	+		181	+	181	+	INVITE		I	→		INVITE	→	
INOTIFY	+		101			1			486	+		486	+	
							486	→				ACK	→	
DICC # 47	+		400	+	486	+	486	+		+			-	
DISC # 17 REL	7		486 ACK	→						+			1	
RLC	+				ACK	→								
							ACK	→						
	+						ACK	+	ACK	→			 	
L		1		·	1	·	1		AUN			<u> </u>	1	l

ISS_XXS	SCI	-U 06		С	ISDN ref TSI EN 30 lauses 6.	00 20 1, 9.2	07-1 [i.5], 2.2, 9.2.5					eference to: 5 124 604 [4	
TSS referen	ce:						ntary_servi						
Configuration	n:						√2 and is p	rovio	ded with C	FU			
Selection cr	iteria	a:			ling by the								
							nal suppo						
Test purpos	e:						ased corre						
			User A	calls	user B, t	he ca	all is forwa	rded	to user C	who	is netwo	rk determin	ed user
			busy.										
ISDN Paran	nete	r values:											
SIP Parame	ter \	/alues:	Dial str	ing p	arameters	s opt	ions=PIXI	Γ					
Comments:			Case a	i) no i) Sup i) Sup ii (PI) ii (PI)	KIT) KIT)	00 re		condi	tion				
ISDN	1	MG			-CSCF	0	S-CSCF		AS		-CSCF	UE-B	UE-C
ISDIN		IVIG	OF	1.	-0301	3	1		AS		-0301	OE-B	UL-C
SETUP	→		INVITE	→	INVITE	→							
					100 Trying	+							
							INVITE	→					
							100 Trying INVITE	+					
							100 Trying	`					
							INVITE			→			
	+						486	→	486	+			
					486	+	486	+					
DISC # 17 REL	←		486 ACK	+ +									
RLC	+		AUN	7	ACK	→				-			
	1 1						ACK	→					1 1
	+						ACK	+		-			

ISSI_XXSSCFU 09	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	ISDN-SIP-SIP-ISDN/Supplementary_services	s/CFU
Configuration:	The user A and the user C are in network N1.	. The user B is in network N2 and is
	provided with CFU. User D in network N2 for	wards the call to back to user B.
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
Test purpose:	Ensure that when user A calls user B, the cal	I is forwarded to user C and then forwarded
	to user D. User D forwards the call to back to	user B. Ensure that the call is released.
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

ISSI_XXSSCFU 10	ISDN reference to: ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	ISDN-SIP-SIP-ISDN/Supplementary_service	es/CFU
Configuration:	The user is A in network N1. The user B an provided with CFU. User D forwards the cal	
Selection criteria:	Network option: maximal number of diversion	ons for a single call N=3
Test purpose:	Ensure that when user A calls user B, the c call forwarding activated Ensure that the ca	all is forwarded to user C, C to D. User D has II is released.
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	n
Comments:		

6.2.2.5 CFB

6.2.2.5.1 CFB - ISI

ISDN-SIP-ISDN/SUpplementary_services/CFB	ISI_XXSS	CF	B 01		ETS	SDN refe SI EN 300 uses 6.1,	207	-1 [i.5],						rence to: 4 604 [45	5]	
Configuration: The user A and the user C are in network N1. The user B is in network N2 and is provided with CFB (network determined). User C is point-to-multipoint. Selection criteria: Call forwarding by the network Call forwarding busy supported. Test purpose: Ensure that din user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case o) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1)	TSS referen	ce:		ISDN-SIF	P-ISE	N/Supple	emen	tary_servi	ces/	CFB						
Selection criteria: Call forwarding by the network Call forwarding busy supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) 1				The user	A ar	nd the use	er C a	are in netw	ork l	N1. The us			NOI	rk N2 and	is pr	ovided
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). BC = PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) > INVITE > INV	Selection cri	teria	a:	Call forw	ardin	g by the r	netwo	ork								
Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). BC = PIXIT values: BIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) MGCF	Test nurnes	٠.							the	call is forw	arda	d to user	\overline{C}			
ISDN Parameter values: Dial string parameters options=PIXIT	rest purpose	5 .		Ensure th	nat in	the activ	e cal	l state (N1	0) th	ie voice tra					-chai	nnels is
SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header:	ISDN Param	ete	r			roomy (or	g. 100	ing Qoo	para							
PIXIT for supported header:																
Case a) No 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SETUP (UE 1)	SIP Parame	ter v	values:	Dial strin	g par	ameters	optio	ns=PIXIT								
Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (LE 1) → INVITE ← INVITE → INVITE ← INVITE							ader:									
Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) linuit = line (PIXIT) linuit = line (PIXIT) linuit = linu							0 rel									
b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP (UE 1) I→ INVITE → INVITE → INVITE ← INVITE → ACK ← A								and preco	nditio	on						
M = line (PIXIT) MGCF																
Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C																
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C				m = line	(PIXI	T)										
SETUP (UE 1) → INVITE → INVIT																
Note	ISDN		M	GCF	I-	CSCF	S	-CSCF		AS	P	-CSCF		UE-B	L	JE-C
NVITE NVIT	SETUP (UE 1)	→		INVITE	→	INVITE	→									
NOTIFY																
								INVITE		INVITE	→					
ACK								400		486	+					
NOTIFY (UE 1)																
NOTIFY (UE 1)								404		ACK	→					
NOTIFY (UE 1)						181	+	181								
INVITE		+		181	+											
NVITE						INVITE	+	100 Trying	→							
SETUP (UE 2)																
SETUP (UE 2)																
(UE 2) 180 → 180 ← 180 ← ALERTING (UE 1) CONNECT (UE 2) 200 OK → 200 OK ← 200 OK ← CONNECT (UE 1) ACK → ACK → ACK → ACK → ACK ← ACK																
ALERTING (UE 1) CONNECT (UE 2) CONNECT (UE 1) CONNECT (UE 1) ACK 200 OK 200 OK 200 OK 4 (UE 1) ACK		→		180	→											
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CONNECT (UE 1)		>		200 OK	→											
CONNECT (UE 1) 200 OK ← ACK → ACK → ACK → ACK → ACK → ACK ← BYE → BYE → BYE → BYE ← BYE → B																
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DISC (UE1) → BYE → BYE → BYE → BYE → BYE ← BYE		H								1	<u> </u>				 	
DISC (UE2)	DISC (UE1)	→														
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RLC (UE2)					+	DIL	Ė	DIL					E			
BYE 200 OK BYE ←				200 OK BYE	→	300 OV		200 OK BAL								
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ISI_XXSS	CF	B 02		1	SDN refe	renc	e to:				NGN ref	ere	nce to:		
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					uses 6.1										
TSS referen							ntary_serv								
Configuratio	n:		provided	with	CFB (use	er de	termined)		N1. The user C is poin				rk N2 and	l is	
Selection cri	teri	a:			ng by the										
Test purpose	e:		Ensure t	hat w	hen user	A ca	lls user B		call is forw						
									ne voice tra			me	edia and		
ISDN Param values:	ete	er	BC = PI	ΚIT	•						·				
SIP Parame	ter	values:	Dial strin	g pa	rameters	optio	ns=PIXIT								
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SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+									
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							100 Trying INVITE	↑		-					
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							486	→	486	+	486	+			
							ACK	+	ACK	→	ACK				
							181	+	ACK	7	ACK	→			
NOTIFY			404		181	+		+							
NOTIFY (UE 1)	+		181	+			INVITE								
					INVITE	+	100 Trying	→							
					100 Trying	→									
			INVITE 100 Trying	←											
SETUP (UE 2)	+		100 Hyllig	7											
ALERTING (UE 2)	→		180	→											
(OL 2)					180	→	180	→							
ALERTING (UE 1)	+		180	+	180	↓	180	↓							
CONNECT	→		200 OK	→						 		F			
(UE 2)					200 OK	→	200 OK	→							
CONNECT (UE 1)	+		200 OK	+	200 OK	+	200 OK	+				L			
	\Box		ACK ACK	}	ACK ACK	→	ACK ACK	+				1			
DISC (UE1)	→		BYE	-								L			
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REL (UE2)	→		200 OK BYE	→	200 014	→	200 OK BYE	→				F			
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	ليا				BYE	_	200 OR DIE								
REL (UE1) RLC (UE1)	+		200 OK BYE	+						1		1			

TSS reference: Configuration: The user A and the user C are in network N1. The user B is provided with CF ("Served user allows the presentation of forwarded to URI to originating user notification" = Yes, "diverting number is released to the diverted-to user" = Ye user receives notification that the call has been forwarded" = Yes). User C is multipoint. Selection criteria: Call forwarding by the network Call forwarding busy supported (user determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A call diversion and informed of the diverted-to number and user C is informed forwarding number (user B has presentation allowed). User B is notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and is performed correctly (e.g. testing QoS parameters). ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	in dives, "so	erved t-to- tified of e												
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Comments:		IF C												
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B		UE-C												
SETUP (UE 1) → INVITE → INVITE →														
100 Trying	+	_												
INVITE →														
100 Trying	+	_												
100 Trying →		<u> </u>												
INVITE →	+	1												
486 ★ 486 ★														
486 → ACK ← ACK	+	+												
ACK → ACK →														
181 🗲	+	+												
NOTIFY ← 181 ← INVITE ← MESSAGE →														
(UE 1) 100 Trying → MESSAGE →	+	+												
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100 Trying →		 												
SETUP (UE 2)	+-	+												
(UE 2)		+												
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BYE → BYE →	\perp	1												
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REL (UE2) → 200 OK BYE →	\pm	1												
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ISI_XXS	SC	FB 04	4 ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45] clauses 6.1, 9.2.2, 9.2.5 ISDN-SIP-ISDN/Supplementary_services/CFB														
TSS refere	enc	e:															
Configurat	ion	:	("Serve notificat user red	d use ion" : ceive:	er allows t = Yes, "di	he pr vertir	esentation ng number	n of f	N1. The user orwarded to been forw	to UI	RI to orig	ina to u	ting user ıser" = Ye	in div es, "se	erved		
Selection of	orite	orio:	multipoi		ng by the	notu	ork										
Selection	JIILE	ena.	Call for	wardi		uppo	rted (user	dete	ermined)								
Test purpo	se:		call dive forward User B Ensure	ersior ing n is no that i	n and info umber (us t notified o n the acti	rmed ser B of cal ve ca	of the div has prese I diversion Ill state (N	erted entati n. 10) t	call is forward-to number ion allowed the voice transmeters)	er an d). ansf	d user C	is i	nformed	of the)		
ISDN Para	ame	eter	BC = PI	XIT													
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Comments	3:				•												
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(02.7)					100 Trying	+	IND/ITE							$oxed{oxed}$			
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									100 Trying	+	1510/075	Ļ					
									486	+	INVITE 486	→		1			
							486 ACK	→						1			
							ACK	-	ACK	→	ACK	→					
					181	+	181	+						1			
NOTIFY	+		181	+	101		INVITE	+						+			
(UE 1)	H						100 Trying	→						+	-		
					INVITE	+											
	\vdash		INVITE	+	100 Trying	→								+			
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SETUP (UE 2) ALERTING	+		180	→										1			
(UE 2)	\sqcup				180	→	180	→						-			
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ALERTING (UE 1)	+		180	+													
CONNECT (UE 2)	→		200 OK	→	200 OK	→	200 OK	→									
CONNECT (UE 1)	+		200 OK	+	200 OK	+	200 OK	+									
	\vdash		ACK ACK	→	ACK ACK	→	ACK ACK	→		1		+		+	 		
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	\vdash				BYE BYE	→	BYE BYE	+						+	 		
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REL (UE1) RLC (UE1)	←		200 OK BYE	+										<u> </u>			

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							486 ACK	→						+				
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					404	_	181	+		\vdash				\bot				
NOTIFY	+		181	+	181	+	INVITE	+			 			+				
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RLC (UE2)	+			Ť	200 OK	→	200 OK BYE	→				\vdash		†				
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					200 OK BYE	+	200 OK BYE	+										
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Configurat									re in netwo		N1. The u	ser	B is in ne	etwor	k N2		
					provided												
			-	The us	er A and	the u	user C are	in ne	etwork N1	and	user C is	pr	ovided wi	th CC	DLP.		
									provided w								
									originating								
									e diverted-t								
			r	notifica	ation that	the c	all has be	en fo	rwarded" =	= no). User C	is	point-to-n	nultip	oint.		
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			(CF No	tifications	sup	ported	•		•							
Test purpo	ose:							user	B, the call	is fo	orwarded	to	user C, u	ser A	is		
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			r	not info	ormed of	the fo	orwarding	num	ber (user E	3 ha	s present	tatio	on not allo	owed'). User		
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]																	
				a = line (PIXIT) b = line (PIXIT)													
					e (PIXIT)												
Comments	٥٠		l l	– 111													
	٥. ا	,	AGCE	1	CSCE	0	CSCE		۸٥	_		1	IIE D	1	IE C		
ISDN		IN	/IGCF	1-	CSCF	ు	-CSCF		AS		-CSCF	1	UE-B	0	IE-C		
SETUP (UE 1) 		INVITE	→	INVITE	→											
-				1	100 Trying	+	INIVITE					1					
				+			INVITE 100 Trying	<u>→</u>				1					
							INVITE	+									
							100 Trying	→	INVITE	→		<u> </u>					
				1					100 Trying	+		+		1			
											INVITE	→					
				1			486	→	486	+	486	+					
							ACK	-				1					
									ACK	→	ACK	→					
							INVITE 100 Trying	<u>+</u>									
					INVITE	+	100 Hyllig					ݪ					
		•	D 11 //		100 Trying	→		•									
-			INVITE 100 Trying	<u>←</u>							-	1		1			
SETUP (UE 2)										L		L					
ALERTING	→		180	→	-												
(UE 2)					180	→	180	→				1					
					180	+	180	+									
ALERTING (UE 1)	+	_	180	+				_]]		
CONNECT	→		200 OK	→					1			1		1			
(UE 2)			-		000 011		000 011					<u> </u>					
-				1	200 OK 200 OK	→	200 OK 200 OK	<u>→</u>			-	1		1			
CONNECT	+		200 OK	+	200 OR	Ť	200 OK		1		<u> </u>						
(UE 1)				<u> </u>	4617		1011					<u> </u>					
			ACK ACK	→	ACK ACK	→ +	ACK ACK	→				1		1			
DISC (UE1)	→		BYE	<u>`</u>													
				1	BYE	→	BYE	→				\vdash		1			
DISC (UE2)	+		BYE	+	BYE		BYE					\vdash		 			
REL (UE2)	→		200 OK BYE														
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→	1		1						
				+	200 OK	+	200 OK BYE	+				1					
DE: 0.=			000 011-1	1 -	BYE							<u> </u>					
REL (UE1) RLC (UE1)	←		200 OK BYE	· +					1		 	-			-		
INLO (UL I)			1				1		L		<u> </u>		l	1	1		

ISI XX	SSC	FB (07			ISDN	refe	rence to:				NGN refe	ere	nce to:		
			-			ETSI EN	1 300	207-1 [i.5], 9.2.2, 9.2.5			E	TSI TS 1	24	604 [45]		
TSS referer	ice:			IS	DN-S			lementary_se	rvice	es/CFB						
Configuration				Th ("S div	ie us Serve Zersio	er A and t ed user all on notifica	he us ows tion"	ser C are in ne the presentation = Yes, "divert eives notificat	etwo on of ing r	rk N1. The f forwarded number is r	l to elea	URI to ori	igin e d	nating use liverted-to	er in o usei	r" =
Selection cr	itoric	· ·				is point-to warding b										
Selection ci	пепа	1.		Ca	all for	warding b	usy s	supported (net	worl	k determine	ed)					
Test purpos	.e.					ifications that when		orted r A calls user	B th	ne call is fo	rwa	rded to us	ser	C user A	\ is	
root purpos	0.			no inf Us Er	tified forme ser B nsure	of call dived of the foliations of the foliation of the f	versions orwaid of call of acti	on and informer ding number all diversion. ve call state (did correctly (e.g.	ed of (use N10)	f the diverter t B has pre the voice	ed-te sen tran	o number station allo sfer on th	an	id user C ed).	is	
ISDN Paran	nete	r valu	ues:		C = P			• • •				•				
SIP Parame		/alue	es:	PI Ca Ca a b	XIT for a se a se b a se c se c se c se c se c se c se c se	or suppor) no 100 r) Support	ted h el ed: 1			dition						
ISDN		МС	GCF		I-	CSCF		S-CSCF		AS F	-CS	SCF	UE	-B	UE-0	0
SETUP (UE 1)	→		INVIT	E	→	INVITE	→								+	1
, ,						100 Trying	+								1	
						100 Hying		INVITE 100 Trying INVITE 100 Trying	→ + +	INVITE	→					
								486	→	486	+					
								ACK	+	ACK	→					
						181	+	181	+						-	1
NOTIFY (UE 1)	+		181		+			INVITE	+	MESSAGE	→					
						INVITE	+	100 Trying	→			MESSAGE	→			
	ļ		INVIT	F	+	100 Trying	→								-	-
			100 Try		→											
SETUP (UE 2) ALERTING	+		180		→										+	
(UE 2)						180	→	180	→							
ALERTING (UE 1)	+		180		+	180	+	180	+							
CONNECT (UE 2)	→		200 O	K	→	200 OK	→	200 OK	→							
CONNECT (UE 1)	+		200 O		÷	200 OK ACK	+	200 OK ACK	+							
			ACK		+	ACK	÷	ACK	+							
DISC (UE1)	+		BYE		→	BYE	→	BYE	→						$oldsymbol{oldsymbol{L}}$	
DIGG (1:==:	Ę		F. (-			BYE	+	BYE	+							
DISC (UE2) REL (UE2)	↓		200 OK I		+				 				-		+	
RLC (UE2)	÷					200 OK BYE 200 OK	→	200 OK BYE 200 OK BYE	→							
REL (UE1)	+		200 OK I	3YF	+	BYE			1		<u> </u>	-	Ͱ		+	
RLC (UE1)	→		230 OK	- 1 -												\vdash

ISI_XXS	SC	FB 08		_	DN refer						NGN refe		nce to: 604 [45]		
					ses 6.1, 9					_	131131	24	004 [43]		
TSS refere	ence	e:	ISDN-S	IP-IS	DN/Supp	leme	ntary_ser\	/ices	/CFB						
Configurat	tion		("Serveonotificat	d use ion" : eives	r allows t = Yes, "di	he pr vertir	esentation ng number	of for is re	N1. The user orwarded to been forwarded	to UI the o	RI to origi diverted-t	na o u	ting user i ıser" = Ye	n div s, "se	erved
Selection	crite	eria:	Call for Call for	vardi vardi	ng by the ng busy s ons suppo	uppo	orted (netw	ork (determined	d)					
Test purpo			call dive forwardi User B Ensure	ersion ing not is not that i	and infolumber (us tified of ca n the acti	rmed ser B all div ve ca	of the div has prese version. all state (N	erted entati 10) t	call is forward-to number ion allowed the voice transmeters	er an d). ansf	d user C	is i	nformed o	of the	
ISDN Para	ame	ter	BC = PI	XIT											
values:			Dialotai			4:-	DIVIT								
SIP Paran values:	iete	:1	PIXIT for Case a)	no 1 Sup Sup (PIXI	oported he 00 rel ported: 10 ported: 10 T)	eader 00 rel			ion						
Comments	s:				0005		2225				0005		5		
ISDN		M	GCF	I-	CSCF	S.	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+	15.0/175								
							INVITE 100 Trying	1							
							INVITE 100 Trying	↓							
							100 1171119		INVITE	→					
							486	→	486	+					
							ACK	+	ACK	→					
							181	+	AOR	Ĺ					
NOTIFY	+		181	+	181	+	INVITE	+							
(UE 1)							100 Trying	→							
					INVITE	+									
			INVITE	+	100 Trying	→									
SETUP (UE 2)	+		100 Trying	→											
ALERTING	→		180	→											
(UE 2)					180	→	180	→							
ALERTING (UE 1)	+		180	+	180	+	180	+							
CONNECT (UE 2)	>		200 OK	→	200 OK	→	200 OK	→							
CONNECT (UE 1)	+		200 OK	+	200 OK 200 OK	+	200 OK 200 OK	+							
, ,			ACK	}	ACK	→	ACK	→							
DISC (UE1)	→		ACK BYE	→	ACK		ACK								
	$\vdash \exists$				BYE BYE	→	BYE BYE	+		+ -					
DISC (UE2)	+		BYE	+	DIL	_	515	_							
REL (UE2) RLC (UE2)	→		200 OK BYE	→	200 OK BYE	→	200 OK BYE	→							
					200 OK BYE	Ψ	200 OK BYE	4		_		L			
REL (UE1) RLC (UE1)	←		200 OK BYE	+											

ISI_XXS	SSC	FB (09			300 2	nce to: 07-1 [i.5], 2 and 9.2				_	eference to 6 124 604 [4		
TSS refere							mentary_s							
Configurat	tion	:										network N2		
												rwarded to		
			origi	natin	g user in	divers	sion notific	cation	า" = Yes	s, "dive	ting num	ber is relea	sed to	the
											tion that t	the call has	been	
C-14.							C is point-	-to-m	ultipoin	t.				
Selection	crite	eria:			arding by			4	مدماء					
							pported (r	ietwo	ork aete	imined)			
Tact nurns	200				cations su			or D	the coll	ic form	arded to	user C, use	r A io	
Test purpo	JSE.											mber (user		
												of the forwa		5
												otified of ca		ersion
												the media a		
							orrectly (e							
ISDN Para	ame	eter		= PIX			, , ,			1				
values:														
SIP Paran	nete	er	Dial	string	g paramet	ers o	ptions=PI	XIT						
values:			PIXI	T for	supported	d hea								
			Case	e a) r	no 100 rel									
					Supported									
						: 100	rel and p	recor	ndition					
				•	PIXIT)									
				•	PIXIT)									
0 :			m =	line (PIXIT)									
Comments	s:	-	4005		0005	_	0005		^ ^	1 -	0005	Lucs		IF C
ISDN		N	MGCF	I-	CSCF	S.	-CSCF		AS	P	-CSCF	UE-B		JE-C
SETUP (UE	→		INVITE	→	INVITE	→								1
1)				-	1					_		+		+
					100 Trying	+								
							INVITE 100 Trying	→				+		+
							INVITE	+						
				-			100 Trying	→	INVITE	. →				1
									486	+				
							486 ACK	+					+ -	1
				L					ACK	→				
					181	+	181	+			-		1	
NOTIFY	+		181	+	101	-	INVITE	+						1
(UE 1)				-	-		100 Trying	→						1
					INVITE	+	100 Hyllig	É						
			INVITE	+	100 Trying	→								
			100 Trying	→										<u> </u>
SETUP (UE 2)	+]									
ALERTING	→		180	→										†
(UE 2)				-	180	→	180	→				\Box		1
					180	+	180	+						
ALERTING (UE 1)	+		180	+]									
CONNECT (UE 2)	→		200 OK	→	<u> </u>									
(UL 2)					200 OK	→	200 OK	→						<u> </u>
CONNECT	_		200 014	+	200 OK	+	200 OK	+						
CONNECT (UE 1)	4		200 OK			L		L						<u>L</u>
			ACK	→	ACK	→	ACK	→						
DISC (UE1)	→		ACK BYE	←	ACK	+	ACK	+						+
, ,					BYE	→	BYE	→						
DISC (UE2)	+		BYE	+	BYE	+	BYE	+		+		+	+	+
REL (UE2)	→		200 OK BYE		000.00		000 01/ 5: //							
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→						
					200 OK	+	200 OK BYE	+						
REL (UE1)	+		200 OK BYE	+	BYE					-				+
RLC (UE1)	<u>, </u>		T	1	1	i	1						1	

SI_XXS	SCF	B 10			ISDN re						N refere				
							07-1 [i.5], 2.2, 9.2.5			ETSI	TS 124	604	l [45]		
TSS refere	ence	j.	ISDN-				nentary_service:	s/CFF	3						
Configurat							C are in network			3 is ir	netwo	rk N	2 and is		
J					ith CFB										
							C are in networl								
							nd is provided v								
							iginating user in o user" = No, "s								
							ser C is point-to			1003	Hotinoat	.1011	inat the t	Jan He	33
Selection of	crite	ria:			ding by th										
			Call fo	orwar	ding busy	sup _l	ported (network	dete	rmined)						
					ations sup										
Test purpo	ose:						calls user B, the								
							ormed of the div								
			call di			er (u	ser B has prese	entatio	on not allov	vea).	User B	is n	ot notine	ea or	
						ctive	call state (N10)	the v	oice transf	er on	the me	dia a	and B-ch	anne	ls
							g. testing QoS p			J ii		J	5 011	٠١٥	
SIP Param	nete	r					tions=PIXIT								
values:				·	•	•									
					upported	head	ler:								
					100 rel	400	1								
					upported:		rei rel and precondi	tion							
			a = lin			1001	ei and precond	lion							
			b = lin												
			m = lir												
Comments	s:														
ISDN		MG	<u>CF</u>	I-	CSCF		S-CSCF	Α	S P-C	SCF	U	E-B	U	IE-C	
SETUP (UE 1)	→	1	NVITE	→	INVITE	→									
	-				100 Trying	+	INVITE	→							
							100 Trying	+							
							INVITE 100 Trying	←				++			
							, ,		INVITE	→					
									100 Trying	+		1 1			
							486	→	486	+					
							ACK	+							
	_						INVITE	+	ACK	→					
							100 Trying	→							
	├				INVITE 100 Trying	←						++			
	口		NVITE	+								H			
SETUP (UE 2)	+	10	0 Trying	→				+				++		1	-
ALERTING (UE 2)	→		180	→											
(UE 2)					180	→	180	→							
ALERTING	+		180	+	180	+	180	+				++			
(UE 1)	\square							1				$\sqcup \downarrow$		-	
CONNECT	→	2	200 OK	→				1		\vdash		+		1	
(UE 2)	$\vdash \vdash$				200 OK	→	200 OK	→		$\vdash \vdash$		++			-
					200 OK 200 OK	+	200 OK 200 OK	+				Ш			
CONNECT (UE 1)	+	2	200 OK	+											
(32 1)			ACK	→	ACK	→	ACK	→				耳			
	→		ACK BYE	←	ACK	+	ACK	+				++			
DISC (UE1)	1		_		BYE	→	BYE	→				H			
DISC (UE1)	+		BYE	+	BYE	+	BYE	+				$\pm \dagger$		<u>t</u> –	L
DISC (UE1)	+											o		T	
DISC (UE2) REL (UE2)	→	200	OK BYE	→	200 014		200 OK BYE			 		++			
DISC (UE2)		200	OK BYE	→	200 OK BYE	→	200 OK BYE	→							
DISC (UE2) REL (UE2)	→	200	OK BYE	→		→	200 OK BYE 200 OK BYE	→							

ISI_XXS			ETSI claus	l EN ses	referenc N 300 207 S 6.1, 9.2.	'-1 [i. 2, 9.2	5], 2.5		E		N referei TS 124				
TSS refere							ntary_servic								
Configurat							2 and is prov	/ide	ed with CFI	B. U	ser C is	ooir	nt-to-mult	ipoint	t.
Selection of	crite	ria:	Call forwa												
			Call forwa												
<u> </u>			user C is	<u>use</u>	<u>r determi</u>	<u>ned ι</u>	iser busy	٠,	OFD						
Test purpo	ose:						sed correctly								
ICDN Daw			BC = PIXI		user B, th	e cai	l is forwarde	αι	o user C w	no i	s user a	etei	minea us	ser bu	isy.
ISDN Para values:	ame	ier													
SIP Param	nete	r	Dial string	j pa	rameters	optic	ns=PIXIT								
values:															
			PIXIT for			eader	:								
			Case a) n			· · · · · ·									
			Case b) S	upp	ported: 10	o rei	and precon	۲:t:	on						
			Case c) S	upp	onea. 10	o rei	and precon	aiti	OH						
			a = line (F	NΙ	T)										
			b = line (F												
			m = line (l												
Comments	s:		,												
ISDN		М	GCF	I	-CSCF	3	S-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	1		INVITE	→	INVITE	→									
SETOF (OL 1)		-	INVIIL	Ĺ											
					100 Trying	+	INVITE	→				-		+	
							100 Trying	+							
				<u> </u>			100 Trying	+				_		-	
							yg		INVITE	→					
				<u> </u>					100 Trying	+	INVITE	→		-	
										<u> </u>	486	+			
				_			486	→	486	+		-		1	
							ACK	+				Ļ			
				\vdash			INVITE	+	ACK	→	ACK	→		+	
	П				INIVATE	_	100 Trying	→						1	
	H	-		\vdash	INVITE 100 Trying	4				<u> </u>		+		+	
			INVITE	+										$ldsymbol{f eta}$	
SETUP	+		100 Trying	→								1		+	
(UE 2) RLC (UE 2)	→		486 Busy here	→								╄		↓	
RLC (UE 2)	7		400 Dusy nere	7	486 Busy here	→	486 Busy here	→						1	
	П			Ę	ACK	+	ACK	+							
	$ \cdot $		ACK	+	486 Busy	+	486 Busy here	+				\vdash			
DISC (UE 1)	+	-	486 Busy here	+	here		1					1		+	
RÉL	→		ACK	→											
RLC	+				ACK	1	ACK	4				1			

TSS reference Configuration: Selection crite Test purpose: ISDN Parame values: SIP Paramete values:	: eria: :	The use Call forw Call forw user C is To verify User A c busy. BC = PIX Dial strir PIXIT fo Case a) Case b)	r B is vardii va	ng by the ng busy s work detern a call is ruser B, the arameters opported he oo rel ported: 10 ported: 10 T)	netw uppo rmine release e cal optic	2 and is proork rited ed user bused correct I is forwar ons=PIXIT	usy ctly if ded t	CFB was to user C w	not s	successf	ul.			
Test purpose: ISDN Parame values: SIP Paramete	eria:	Call forw Call forw user C is To verify User A c busy. BC = PIX Dial strir PIXIT fo Case a) Case b) Case c) a = line (b)	vardii vardii vardii vathat vathat calls vand XIT r sup no 1 Supp Supp (PIXI (PIXI	ng by the ng busy s work detern a call is ruser B, the arameters opported he oo rel ported: 10 ported: 10 T)	netw uppo rmine releas e cal optic	ork rted ed user bused correct l is forwar ons=PIXIT	usy ctly if ded t	CFB was o user C w	not s	successf	ul.			
Test purpose: ISDN Parame values: SIP Paramete	eter	Call forwuser C is To verify User A c busy. BC = PIX Dial strir PIXIT fo Case a) Case b) Case c) a = line c b = line c	varding network that calls was said and the calls was said and the calls was said and the call a	ng busy s work dete a call is r user B, th arameters oported he 00 rel ported: 10 ported: 10	opticeader	rted ed user bused correct lis forwar ons=PIXIT	ctly if ded t	ouser C w	not s /ho i	successfi s netwo	ul. r k c	determine	ed use)ł
ISDN Parame values: SIP Paramete	eter	To verify User A c busy. BC = PIX Dial strin PIXIT fo Case a) Case b) Case c) a = line (b = line)	that calls XIT Ing pa r sup no 1 Sup Sup (PIXI) (PIXI)	a call is ruser B, the arameters oported he ported: 10 ported: 10 T)	opticeader	sed corred l is forwar ons=PIXIT	ctly if ded t	ouser C w	not s	successfi s netwo	ul. rk c	determine	ed use	er .
values: SIP Paramete		Dial strir PIXIT fo Case a) Case b) Case c) a = line (b = line (control line)	r sup no 1 Sup Sup (PIXI (PIXI	oported he 00 rel ported: 10 ported: 10	eader 00 rel	:		ion						
	er	PIXIT fo Case a) Case b) Case c) a = line (b = line (r sup no 1 Supp Supp (PIXI	oported he 00 rel ported: 10 ported: 10	eader 00 rel	:		on						
values:		PIXIT fo Case a) Case b) Case c) a = line (b = line (r sup no 1 Supp Supp (PIXI	oported he 00 rel ported: 10 ported: 10	eader 00 rel	:		ion						
		m = ime												
Comments:														
ISDN	MG	CF	I-	CSCF	S-	-CSCF		AS	P	-CSCF	<u> </u>	UE-B	UI	E-C
SETUP (UE → 1)		INVITE	→	INVITE	→									
				100 Trying	+								+	
						INVITE	→							
						100 Trying INVITE	+						+	
						100 Trying	→							
								INVITE	→					
<u> </u>								100 Trying	+	INVITE	→		+	
										486	+		+	
								486	+					
						486 181	→						+	
 	+			181	+	101	-						+	\vdash
NOTIFY (UE 1)		181	+			INVITE 100 Trying	←							
				INVITE	+	100 Trying	7						+	
				100 Trying	→									
		INVITE	÷											
—		100 Trying	→										+	
		486 Busy here	→											
				486 Busy here ACK	+								<u> </u>	
		ACK	+	7.010	_								+	
				486 Busy here	+									
DISC (UE 1) ←		486 Busy here ACK	←											
RLC €		AUN		ACK	→								+	\vdash

6.2.2.5.2 CFB - ISS

ISS_XXS		B 01		ETS cla	SDN refe SI EN 300 uses 6.1,	207 9.2.2	-1 [i.5], 2, 9.2.5				NGN ref TSI TS 1		nce to: 604 [45]		
TSS referen							ary_service	es/CF	-B						
Configuratio			The user												
Selection cri	iteria	a:	Call forw				ork ted (user	deter	rmined)						
Test purpos	e:		Ensure the active ca	nat w II sta	hen user te (N10) t	A ca	lls user B,	the or	call is forwant the media						the
ISDN Param values:	nete	r	BC = PIX	ΊΤ											
SIP Parame	ter v	/alues:	Dial strin	g par	ameters	optio	ns=PIXIT								
			PIXIT for Case a) (Case b) (Case c) (a = line (b = line (no 10 Supp Supp PIXIT PIXIT	00 rel orted: 10 orted: 10	0 rel	and preco	nditio	on						
Comments:															_
ISDN		M	GCF	I-	CSCF	S	-CSCF		AS	F	-CSCF	-	UE-B	UE	-C
SETUP	→		INVITE	→	INVITE	→	INVITE	→							
							INVITE	+				+			
									INVITE	→	INVITE	→			
							486	→	486	+	486 ACK	+			-
							ACK	+			AOR	Ť			
									ACK	→					
NOTIFY (UE 1)	+		181	+	181	+	181 INVITE	+							
							INVITE	→					INVITE	→	
									180	+			180	+	
AL EDTINO	Ļ		400		400	Ļ,	180	→							
ALERTING	+		180	+	180	+	180	-				-	200 OK	+	
									200 OK	+			200 010	_	
							200 OK	→							
CONNECT	+		200 OK	+	200 OK	+	200 OK	+							
1	+		ACK	→	ACK	→	ACK ACK	+	 	-		+		1	\vdash
DISC (UE1)	→		BYE	→					ACK	→			ACK	→	
, ,					BYE	→	BYE	→							
-	-					<u> </u>	BYE	+	BYE	→		1			\vdash
	+					1	1		DIE	7		+	BYE	→	\vdash
	+								1			+	200 OK BYE	+	
									200 OK BYE	+					
	1				200 014		200 OK BYE	→							Щ
					200 OK BYE	+	200 OK BYE	~	1						
REL (UE1)	+		200 OK BYE	+											
RLC (UE1)	→														

ISS_XXSS	CFB	02	ETSI claus	EN 3 ses 6	eference 300 207-1 5.1, 9.2.2,	[i.5] 9.2.5	j		ET		referenc TS 124 60				
TSS reference	e:		ISDN-SIP	-SIP/	Suppleme	entar	y_services	CFI	В						
Configuration	1:		The user to originat	B is p ing u o use	rovided v ser in div r" = Yes,	vith C ersior	FB ("Serv	ed u on" =	ser allows = Yes, "dive es notificat	ertin	g numbeı	' is	released		
Selection crit	eria:		Call forwa Call forwa CF Notific	rding rding	by the no	porte		etern	mined)						
Test purpose	C.		Ensure the call divers no TIR) an allowed). User B is	at whion and us	en user And informer C is infection to the contraction of call the active	calls ed of forme diver calls	the diverted of the formula the sion. State (N10)	ted-to orwa	all is forwar o number (rding numb e voice tran neters).	use er (r C has pi user B ha	resons p	entation a presentation	illowe on	ed -
ISDN Parame	eter		BC = PIXI						,						
SIP Paramete	01 74		PIXIT for s Case a) n Case b) S Case c) S a = line (F b = line (F	suppo o 100 uppo uppo PIXIT)	orted hea) rel rted: 100 rted: 100	der: rel		ditio	n						
Commonto			m = line (I)										
Comments: ISDN		١	MGCF	I-	CSCF	S.	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP	 		INVITE	→	INVITE	→	INVITE INVITE	} +	INVITE 486	→ ←	INVITE 486 ACK	→ ← →			
	-						ACK	+	ACK	→					
NOTIFY (UE 1)	+		181	+	181	+	181	+	Non						
	+						INVITE INVITE	+ +	MESSAGE	→					
	口										MESSAGE	→			
	+												INVITE	→	
ALERTING	+		180	+	180	+	180 180	→	180	+			180 200 OK	+	
	+						200 OK	→	200 OK	+					
CONNECT	+		200 OK	+	200 OK	+	200 OK	+							
	++		ACK	→	ACK	→	ACK ACK	→			1	\vdash			
DISC (UE1)	→		BYE	→			AUN		ACK	→			ACK	→	
	$+$ \Box		1		BYE	→	BYE	→				\Box			
	++		+				BYE	+	BYE	→	<u> </u>	H			
	口		1							Ė			BYE	→	
	++		1				-		200 OK BYE	+	-	\vdash	200 OK BYE	+	
	$\pm \pm$						200 OK BYE	→	200 ON DIE	É					
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	+		200 OK BYE	+											
RLC (UE1)	→						l .				l				

ISS_XX	SSCF	B 03		ETSI	ON refere	207-1	[i.5],				IGN refe SI TS 12				
TSS refer	ronoo				es 6.1, 9			200/	CED						
Configura			Licar B	Sie ni	rovided w	ith C	ntary_servion FB ("Serve	4 m	or allowe t	ha n	recentat	ion	of forward	lad t	o LIPI to
Comigura	ation.		origina diverte	ıting ı ed-to	user in di [,] user" = N	versio	on notification erved user	on"	= Yes, "div	ertir	ng numb	er is	s released	to t	
Calaatian	:4	:	forward				باسميار								
Selection	criter	ıa:	Call fo	rward	ding by the ding busy tions sup	supp	orted (user	de	termined)						
Test purp	uose.						calls user B	th	e call is for	war	ded to us	ser	C. user A	is no	ntified of
root puip			call div allowe presen Ensure	ersic d - TI ntation e that	on and no IR) and us n not allo t in the ac	t infoi ser C wed). tive c	rmed of the is not infor User B is not infor user B is not all state (Note that the image).	div me ot r 10)	rerted-to nud of the formotified of contified of continuous the voice to	mbe ward all d rans	er (user (ding num liversion.	C h ibei	as present r (user B h	tatio as	n not
ISDN Par	ramati	or	BC = F			y (e.g	j. lesting Q	03	parameters	·)·					
values:	aniell	5 1	DC = F	IAH											
SIP Parai	meter		Dial st	rina r	aramete	rs ont	ions=PIXIT								
values:			Case a Case b Case o	a) no o) Su c) Su _l		100 re		ond	ition						
			a = line b = line m = lin	e (PI)	XIT)										
Commen	ts:				<i>,</i> ,										
ISDN		MGC	F	Į-	CSCF	9	S-CSCF		AS	P	-CSCF		UE-B		UE-C
SETUP	→		INVITE	→	INVITE	→						-			
OLIGI					IIVVIIL		INVITE	→							
							INVITE	+	INVITE	→	INVITE	→			
									486	+	486	+			
							486 ACK	→			ACK	→			
								+	ACK	→					
NOTIFY (UE 1)	+		181	+	181	+	181	7							
							INVITE INVITE	+					INVITE	→	
							INVITE		180	+			180	É	
ALERTING	+		180	+	180	+	180 180	→				-			
ALLINING	Ì		100		100		100	Ì					200 OK	+	
							200 OK	→	200 OK	+					
CONNECT	+		200 OK	+	200 OK	+	200 OK	+							
			ACK	→	ACK	→	ACK ACK	+				-			
DISC (UE1)	→		BYE	→	->/-				ACK	→			ACK	→	
					BYE	→	BYE BYE	→				+			
									BYE	→			D)/E	-7	
	\vdash											+	BYE 200 OK BYE	<u>→</u>	-
							200 OK BVE	→	200 OK BYE	+					
					200 OK	+	200 OK BYE 200 OK BYE	+				\vdash			
REL (UE1)	+		200 OK BYE	+	BYE										
RLC (UE1)	→														

ISS_XX	xss	CFB 04		ETSI	DN refer EN 300 ses 6.1, 9	207-	1 [i.5],				IGN refe SI TS 12				
TSS refer	renc	e:					entary_se	rvice	s/CFB						
Configura			The operation of the provided t	user / ded v ved u sion i	A and the with CFB. user allow notification	use The vs the	r C and D user A an presenta Yes, "dive	are in d the tion or rting	n network Ne user C are of forwarde number is hat the call	e in d to rele	network URI to c ased to t	N1. rigi he	nating use	er in o use	
Selection	crite	eria:	Call f	orwa forwa	rding by	the n	etwork pported (u		letermined)		, <u>, , , , , , , , , , , , , , , , , , </u>		<u> </u>	<u> </u>	
Test purp	ose	:	ensu of ca of the call c Ensu	ire that Il dive e forw livers ire that	at when uersion and warding noting ion.	user / d not umbe	A calls use informed er (user B er call state	of the has p (N1)	the call is for diverted-to the call is for th	o nu n nc tra	umber ar ot allowed nsfer on	nd u d).U the	ser C is no	ot in	formed
ISDN Par	rame	eter	BC =			ned c	correctly (e	.g. te	esting QoS	para	ameters)				
values: SIP Parai	mot	ar valuos:	Dial	etrina	naromot	ore o	ptions=PI	YIT.							
Common	to		Case Case Case a = li b = li	e a) ne e b) S e c) S ne (P ne (P	YIXIT)	l: 100		ecor	ndition						
Commen	เรา	MGC		1.4	CSCF		-CSCF		AS	D	-CSCF	1	UE-B		JE-C
ISDIN		MGC	<u> </u>	1-1	CSCF	3	-0307		AS	Г	-0301		UE-B) <u></u> C
SETUP	→	II.	NVITE	→	INVITE	→	INVITE	→							
							INVITE	+							
						<u> </u>			INVITE 486	→	INVITE 486	→			
							486	→	400	•	ACK	→			
							ACK	+	4.014						
NOTIFY (UE 1)	+		181	+	181	+	181	+	ACK	→					
	-						INVITE INVITE	<u>←</u>					INVITE	→	
							HAVIIL		180	+			180	÷	
AL EDTING	_		180		180	+	180	}							
ALERTING	+		160	+	160	_	180						200 OK	+	
									200 OK	+					
CONNECT	+	20	00 OK	+	200 OK	+	200 OK 200 OK	<u>→</u>				+			
	Ħ		ACK	\	ACK	À	ACK	→							
DISC (UE1)	→		BYE	→			ACK	+	ACK	→		+1	ACK	→	
DISC (UE1)			DIL		BYE	→	BYE	→	AUN	_		廿	AUN		
	\Box						BYE	+	D)/E			Ħ			
	\vdash					-			BYE	→		+	BYE	→	
													200 OK BYE	÷	
-	\vdash					-	200 OK BYE	→	200 OK BYE	+		++			
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	←	200	OK BYE	+		<u> </u>						+			
RLC (UE1)	7			<u> </u>		!	1		Į			11	ļ		L

ISS_XXS	SCFE	3 05		ET	ISDN ref SI EN 30 auses 6.1	0 20	7-1 [i.5],				_	eference to 124 604 [4		
TSS referen		IS	SDN-SI	P-SII	P/Supple	menta	ary_servic	es/C	FB					
Configuratio		TI	he use	r B is	provided	l with	CFB							
Selection cri	iteria:				ng by the			ork d	determined)	١				
Test purpos	e:	E:	nsure t	hat wall sta	hen use te (N10)	A ca	alls user B	the er o	call is forw	arde		C. Ensure t nels is perfo		
ISDN Param values:	neter		C = PI											
SIP Parame	ter va	lues: D	ial strir	ng pa	rameters	optic	ns=PIXIT							
0		C C C a b	ase a) ase b)	no 1 Supp Supp (PIXI (PIXI	oorted: 10 oorted: 10 T) T)	00 rel		onditi	on					
Comments:														
ISDN		MGC	F	I-	CSCF	S	-CSCF		AS	P-	CSCF	UE-B		UE-C
SETUP	→	I	NVITE	→	INVITE	→								
							INVITE INVITE	→						
							IIVIIL		INVITE	→				
							486	→	486	+				
							ACK	7						
									ACK	→				
NOTIFY (UE 1)	+		181	+	181	+	181 INVITE	+						
							INVITE	-				INVITE	→	
									180	+		180	+	
ALERTING	+		180	+	180	+	180 180	→						
ALLINING			100	•	100	_	100					200 OK	+	
,									200 OK	+				
CONNECT	+	2	200 OK	+	200 OK	+	200 OK 200 OK	→						
001111101	$\pm \pm$		ACK	→	ACK	→	ACK	→					L	
B100 :::=::							ACK	+	16:1					
DISC (UE1)	→		BYE	→	BYE	→	BYE	→	ACK	→		ACK	→	-
	士士				D12	Ľ	BYE	-						
									BYE	→				
	++								 			BYE 200 OK BYE	→	
	++								200 OK BYE	+		200 OK BTE	-	
-							200 OK BYE	→						
					200 OK BYE	+	200 OK BYE	+						
REL (UE1)	+	200	OK BYE	+										
RLC (UE1)	→						1		1					

ISS_XXSS	CFE	06			SDN refe								rence to: 24 604 [45		
					ıses 6.1,						L10110	12	בדן דטט ד.	'1	
TSS reference	e.		ISDN-SIP				ry_service	s/CF	B						
Configuration									user allows	the	presenta	tio	n of forwa	rded	to URI
Cormgulation			to origina	ting i	ıser in div	ersic/	n notificat	ion"	= Yes, "div	ertir	ng numbe	r is	released	l to th	ne
			diverted-t = Yes).	o use	er" = Yes,	, "ser	ved user r	ecei	ves notifica	tion	that the o	call	has beer	1 forv	varded"
Selection crit	eria:		Call forwa												
			Call forward CF Notific				ted (netwo	rk de	etermined)						
Test purpose	:						ls user B.	the c	all is forwa	rde	d to user	C.	user A is	notifi	ed of
	-								to number						
								<i>ı</i> ardi	ng number	(us	er B has _l	ore	sentation	allov	ved).
			User B is)) th	e voice trar	nefe	r on the m	ner	dia and R-	chan	nels is
							ting QoS p			1010		100		oriar	1101010
ISDN Parame	eter		BC = PIX			,	J = 2 = P		- · - · ·						
values:															
SIP Paramet	er va	lues:	Dial string	para	ameters	ptior	ns=PIXIT	_						_	
			PIXIT for			ader:									
			Case a) n	io 10	0 rel										
			Case b) S												
			Case c) S	Suppo	orted: 100) rel a	and precor	ditic	n						
			a = line (F	PIXIT)										
			b = line (F												
			m = line (
Comments:						_				_					
ISDN		M	GCF]-(CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	ι	JE-C
SETUP	→		INVITE	→	INVITE	→	INI\/ITE								
							INVITE INVITE	<u>→</u>							
									INVITE 486	→					
							486	→	400	È					
							ACK	+	ACK	→					
NOTIFY (UE 1)	+		181	+	181	+	181	+	non	Ť					
(0E 1)							INVITE	+	MESSAGE	→					
<u> </u>	+		<u> </u>				INVITE	→			MESSAGE	1			
							180	→					INVITE	→	
ALERTING	+		180	+	180	+	180	+	180	+			180 200 OK	+	
							200 014		200 OK	+					
CONNECT	+		200 OK	+	200 OK	+	200 OK 200 OK	→				F			
			ACK	→	ACK	→	ACK ACK	→							
DISC (UE1)	→		BYE	→					ACK	→			ACK	→	
-	+				BYE	→	BYE BYE	<u>→</u>						1	
	\perp								BYE	→			D) (5		
	+									 			BYE 200 OK BYE	→	
	\Box						200 OK BVE	→	200 OK BYE	+					
	+				200 OK	+	200 OK BYE 200 OK BYE	+							
REL (UE1)	+		200 OK BYE	+	BYE					 					
RLC (UE1)	→														

ISS_XXS	SSC	FB 07			ISDN re				NGN reference to: ETSI TS 124 604 [45]							
							07-1 [i.5], 2.2, 9.2.5				E1511	5 1	124 604 [4	IJ		
TSS refere	ance	a·	ISDN-S				ary_servic	- <u>As/</u> C	·FR							
Configurat			User B i	is pro	vided wit	h CFI	B ("Served	d use	r allows th	e pr	esentatio	n c	of forwarde	ed to	URI to	
Comigurat	.1011.		User B is provided with CFB ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = No, "served user receives notification that the call has been													
						, "ser	ved user ı	ecei	ves notifica	ation	that the	cal	ll has beer	า		
0 1 1			forwarde													
Selection (crite	ria:		Call forwarding by the network Call forwarding busy supported (network determined)												
					ons supp		irtea (netw	OIK (Jeterminec	1)						
Test purpo	ose:						alls user B	. the	call is forw	/ard	ed to use	er C	. user A is	s noti	fied of	
									rted-to nur							
									of the forw			er ((user B ha	ıs		
									otified of ca							
									he voice tra		er on the	me	edia and E	3-cha	nnels	
ISDN Para	mo	tor	BC = PI		correctly	(e.g.	testing Q	oo pa	arameters)	•						
values:	anne	(G)	DC = P1	ΛΠ												
SIP Param	nete	r	Dial strii	ng pa	rameters	optic	ns=PIXIT	,								
values:				51												
					ported h	eader	:									
			Case a)													
					ported: 1			الد د.د								
			Case c)	Supp	эопеа: 10	ou rei	and preco	onaiti	ion							
			a = line	(PIXI	T)											
			b = line													
			m = line													
Comments	s:					,										
ISDN		MG	CF		CSCF	S.	-CSCF		AS	Р	-CSCF		UE-B	U	E-C	
SETUP	→		INVITE	→	INVITE	→										
							INVITE	→								
									INVITE	→	INVITE	→				
							486	→	486	+	486 ACK	+				
							ACK	+	ACK	→						
NOTIFY	+		181	+	181	+	181	+	ACK	7						
(UE 1)							INVITE	+								
							INVITE	→	400	Ļ			INVITE	→		
							180	→	180	+			180	+		
ALERTING	+		180	+	180	+	180	+					200 OK	+		
									200 OK	+			200 OK	_		
CONNECT	4		200 OK	+	200 OK	+	200 OK 200 OK	+								
	Ė		ACK	→	ACK	→	ACK	→								
DISC (UE1)	→		BYE	→			ACK	+	ACK	→		1	ACK	→		
					BYE	→	BYE BYE	+ +								
							DIL		BYE	→						
	\vdash									<u> </u>		-	BYE 200 OK BYE	→ +	<u> </u>	
							200 01/ 51/5		200 OK BYE	+		L				
					200 OK	+	200 OK BYE 200 OK BYE	→				-				
REL (UE1)	+		200 OK	+	BYE					<u> </u>		-				
, ,			BYE													
RLC (UE1)	→													ĺ		

ISS_XX	XSSCFB 08 ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45]													
					ses 6.1, 9					E1	31 13 12	4 604 [45]		
TSS refer	renc	ь.					entary_se	rvice	s/CFB					
Configura			The	user	A and the	LISE	C and D	are i	n network i	J1 .	The user	B is in netwo	rk N	2 and is
Comigare	atioi i	•							user C ar				11111	2 4114 15
												riginating use	er in	
												ne diverted-to		er" =
												warded" = no		
Selection	crite	eria:	Call f	Call forwarding by the network										
			Call f	forwa	irding bus	sy su	oported (n	etwo	rk determir	ned)				
					ations su									
Test purp	ose	:										iser C, user /		
												d user C is n		
					•	umbe	er (user B	has _l	oresentatio	n no	t allowed). User B is r	not n	otified
					ersion.	4:		/N.I.4.	0) tha				٦D	
												he media an	a B-	
ISDN Par	omo	otor	BC =			neu c	orrectly (e	.g. ι	esting QoS	μai	ameters).			
values:	anne	, ici	BC	- 1 1/										
SIP Parai	mete	er value	s. Dial	string	naramet	ers o	ptions=PI	XIT						
On raid		or raido	J. 12.14.1	J	, paramo	.0.0 0	puono-i i	, .						
			PIXI	T for	supported	d hea	der:							
					o 100 rel									
			Case	e b) S	Supported	l: 100								
			Case	c) S	upported	: 100	rel and pi	ecor	ndition					
					PIXIT)									
					PIXIT)									
0			m = 1	line (PIXIT)									
Comment	ts:	MG	CE		CSCF	6	CCCE		AS	В	-CSCF	UE-B		JE-C
ISDIN		IVIG	СГ	-	LSCF	S-CSCF			AS I	Г	-0307	UE-B		JE-C
SETUP	→		INVITE	→	INVITE	→	IND OTE							
							INVITE INVITE	+						
									INVITE	→				
	-						486	→	486	+				
							ACK	+	4014	_				
							INVITE	+	ACK	→				
							INVITE	→	400	+		INVITE	→	
							180	→	180	_		180		
ALERTING	+		180	+	180	+	180	+				200 OK	_	
-	+	+				1	 		200 OK	+		200 OK		
CONNECT	_		200 014	_	000 01/		200 OK	→						
CONNECT	+		200 OK ACK	←	200 OK ACK	←	200 OK ACK	→						
DIOC (UE4)			DVE				ACK	+	4014			101/		
DISC (UE1)	→	+	BYE	→	BYE	→	BYE	→	ACK	→		ACK	→	
							BYE	+	DVE	→				
	Lt	+							BYE	7		BYE	→	
									200 OK BYE	+		200 OK BYE	+	
	Lt	+					200 OK BYE	→	200 OK BYE					
					200 OK BYE	+	200 OK BYE	+						
REL (UE1)	+	2	00 OK BYE	+	DIE									
RLC (UE1)	→			<u> </u>										

ISS_XXSSCI	FB 09	09 ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5] ETSI TS 124 604 [45] clauses 6.1, 9.2.2, 9.2.5												
TSS reference:						ary_servic								
Configuration:		provided N2 and i origination	l with s pro ng us	CFB. Th	e use h CF ersion	er A and th B ("Served	ne us d use	etwork N1. er C are in er allows the No, "divert	net e pr	work N1. esentatio	Th n c	e user B i of forwarde	s in i	network
Selection criteria	a:	User B h	nas a /ardir	ctivated the	he Ca uppo			ION service I by the UE						
Test purpose:		call dive forwardii Ensure t	F Notifications supported nounce that when user A calls user B, the call is forwarded to user C, user A is notified on all diversion and not informed of the diverted-to number and user C is not informed of the diverted number (user B has presentation not allowed). In the active call state (N10) the voice transfer on the media and B-channels are formed correctly (e.g. testing QoS parameters).											
ISDN Paramete values:		BC = PI												
SIP Parameter	values:	PIXIT for Case a)	r sup no 1 Supp Supp (PIXI)	ported he 00 rel ported: 10 ported: 10 T)	eader 00 rel		onditi	on						
Comments:		•	•	•										
ISDN	M	GCF	l-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	l	JE-C
SETUP (UE 1) →		INVITE	→	INVITE	→									\vdash
				100 Trying	+	INVITE 100 Trying INVITE 100 Trying	→ ← ← →	INVITE 100 Trying	→ ←	INVITE 100 Trying	→ +			
						302 ACK	→	302 ACK	÷	302 ACK	÷			
						INVITE 100 Trying	←	INVITE	→			INVITE 100 Trying 180	→ +	
ALERTING ←		180	+	180	+	180 180	}	180	+					
(UE 1)		100		200 OK	+	200 OK 200 OK	}	200 OK	+			200 OK	+	
CONNECT ←		200 OK ACK	←	ACK	→	ACK ACK	→	16:1				16::		
DISC →		BYE	→	BYE	→	BYE BYE	→	ACK	→			ACK	→ —	
REL €		200 OK BYE	+	200 OK BYE	+	200 OK BYE 200 OK BYE	→	BYE 200 OK BYE	→			BYE 200 OK BYE	+	
RLC →		ZUU ON DIE	~											

ISS_XXS		В 10	ET cla	SI EN	reference N 300 207 S 6.1, 9.2	7-1 [i. .2, 9.2	5], 2.5				SN refere SI TS 124					
TSS referer							ary_servic									
Configuration								ovide	d with CF	<u>В</u>						
Selection cr	riteria	a:			ng by the											
				all forwarding busy supported by verify that a call is released correctly if CFB was not successful .												
Test purpos	se:												nined use	er bu	sv	
ISDN Parar	nete	r		ser A calls user B, the call is forwarded to user C who is user determined user busy. C = PIXIT												
values:	11010	•		/ (11												
SIP Parame	eter v	/alues:	Dial stri	าต กล	rameters	optio	ns=PIXIT	,								
			Case a) Case b)	no 10 Supp Supp (PIXI ⁻ (PIXI ⁻	oorted: 10 oorted: 10 T) T)	00 rel	and preco	onditio	on							
Comments:						,				,						
ISDN		M	GCF	l-	CSCF	S.	-CSCF		AS	Р	-CSCF		UE-B	l	JE-C	
SETUP	→		INVITE	→	INVITE	→		-		-		-				
02.0.							INVITE	→								
							INVITE	+	INVITE	→						
									486	+						
							486	→								
				-		<u> </u>	ACK	+	ACK	→						
						1	INVITE	+	ACK	7				1		
				1				INVITE →								
													INVITE	→		
				 		 			400	+		$\sqcup \bot$	486	+		
	+			-			486	→	486	-		\vdash	ACK	→		
DISC # 17	+		486	+	486	+	486	+		1						
REL	→		ACK	→	ACK	→	ACK	→								
RLC	+						ACK	+		1						
	$oldsymbol{\bot}$			1	<u> </u>	<u> </u>	L		ACK	→		Щ		<u> </u>		

ISS_XXSSCF	В 11		ET cla	ISDN ref SI EN 30 auses 6.1	0 207 1, 9.2	7-1 [i.5], .2, 9.2.5		NGN reference to: ETSI TS 124 604 [45]							
TSS reference:						ary_servic									
Configuration:		The use	r B is	in netwo	rk N2	and is pr	ovide	d with CF	В						
Selection criteria	a:	Call forw	all forwarding by the network												
				ig busy s											
Test purpose:		To verify User A of busy.	ul. c determine	ed user											
ISDN Paramete values:	r	BC = PI	BC = PIXIT												
SIP Parameter	values:	PIXIT fo Case a) Case b) Case c) a = line b = line													
		m = line													
Comments:			,												
ISDN	M	GCF	I-	CSCF	S	-CSCF		AS	Р	-CSCF	UE-B	UE-C			
SETUP 🗦		INVITE	→	IND/ITE	→										
SETUP 7		INVITE	7	INVITE	7	INVITE	→								
						INVITE	+								
								INVITE	→						
					ļ	400	L.	486	+						
					 	486 ACK	→		-			 			
					1	AUN		ACK	→			 			
					†	INVITE	+	7.010	Ť			† †			
								INVITE	→						
					ļ		→	486	+						
DISC # 17 ←		486	+	486	+	486 486									
REL →		ACK	→ -	ACK	→ -	ACK					 				
RLC 🗲		7.0.1		7.0	1 -	ACK	→								
								ACK	→						

ISSI_XXSSCFB 14	ISDN reference to: NGN reference to:								
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]							
	clauses 6.1, 9.2.2, 9.2.5								
TSS reference:	ISDN-SIP-SIP-SIP/Supplementary_service:	s/CFB							
Configuration:	The user A and the user C are in network N with CFU. User D forwards the call to back	I1. The user B is in network N2 and is provided to user B.							
Selection criteria:	Call forwarding busy by the network Call forwarding busy supported								
Test purpose:	Ensure that when user A calls user B, the c	all is forwarded to user C and D.							
	User D forwards the call to back to user B.	Ensure that the call is released.							
ISDN Parameter	BC = PIXIT								
values:									
SIP Parameter values:	Dial string parameters options=PIXIT								
	PIXIT for supported header:								
	Case a) no 100 rel								
	Case b) Supported: 100 rel								
	Case c) Supported: 100 rel and preconditio	n							
	a = line (PIXIT)								
	b = line (PIXIT)								
	m = line (PIXIT)								
Comments:									

ISSI_XXSSCFB 15	ISDN reference to: NGN reference to:												
	ETSI EN 300 207-1 [i.5],	ETSI TS 129 163 [i.20]											
	clauses 6.1, 9.2.2, 9.2.5												
TSS reference:	ISDN-SIP-SIP-ISDN/Supplementary_services/	CFU											
Configuration:		e user is A in network N1. The user B and the user C are in network N2. User B is ovided with CFU. User E forwards the call to back to user B.											
Selection criteria:	Network option: hop counter supported N<5												
Test purpose:	Ensure that when user A calls user B, the call is	s forwarded to user C, C to D. User D											
	forwards the call to back to user B.												
	User D forwards the call to back to user B. Ens	ure that the call is released.											
ISDN Parameter	BC = PIXIT												
values:													
SIP Parameter values:	Dial string parameters options=PIXIT												
	PIXIT for supported header:												
	Case a) no 100 rel												
	Case b) Supported: 100 rel												
	Case c) Supported: 100 rel and precondition												
	a = line (PIXIT)												
	b = line (PIXIT)												
	m = line (PIXIT)												
Comments:		·											

6.2.2.6 CFNR

6.2.2.6.1 CFNR - ISI

ISI_XXSSCFNR01	ISDN reference to: NGN reference to:									
	ETSI EN 300 403-1 [i.3],	ETSI TS 124 604 [45]								
	clauses 9.2.2, 9.2.4.4, 9.2.5									
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/CFN	IR/								
Configuration:	The user A and the user C are in network N1.	The user B is in network N2 and is								
	provided with CFNR. User C is point-to-multipo	oint.								
	Served user communication retention on invoc	cation of diversion (forwarding or								
	deflection) = No [Clear call to the served user	on invocation of call diversion]								
Selection criteria:	CFNR supported									
Test purpose:	Ensure that when user A calls user B, if unans									
	Ensure that in the active call state (N10) the vo	pice transfer on the media and B-								
	channels is performed correctly (e.g. testing Q	oS parameters).								
ISDN Parameter										
values:										
SIP Parameter values:	Dial string parameters options=PIXIT									
	PIXIT for supported header:									
	Case a) no 100 rel									
	Case b) Supported: 100 rel									
	Case c) Supported: 100 rel and precondition									
	a = line (PIXIT)									
	b = line (PIXIT)									
	m = line (PIXIT)									

Comments	•														
ISDN	<u> </u>	MGC	F	I-	-CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	IE-C
						_			1					<u> </u>	
SETUP (UE 1)	→		NVITE	→	INVITE	→									
					100 T :										
					100 Trying	+	INIVITE	→				\vdash			
	-						INVITE 100 Trying	+						1	
							INVITE	÷							
							100 Trying	→							
							, 0		INVITE	→					
											INVITE	+			
									180	+	180	4			
							180	→							
					100	,	180	+							
			100	+	180	+				1		\vdash		1	-
			180	_			181	+				\vdash		-	
					181	+	101	_		1		H		1	
NOTIFY	+		181	+	101	•						H		1	
(UE 1)				-											1
							CANCEL	+							
							CANCEL	→							
											CANCEL	→			
											487	4			
											Request				
							-		487 Request	+	terminated	\vdash		-	
									terminated	~					
							487 Request	→	terminated						
							terminated								
							ACK	+							
									ACK	→					
											ACK	1			
							INVITE	+							
					INVITE	+									
CETUD (UE 2)	_	<u> </u>	NI) /ITE		100 Trying	→						\vdash			
SETUP (UE 2)	+		NVITE 0 Trying	+										1	
ALERTING	→	10	180	→						1		\vdash		+	
(UE 2)		1	100												
\/					180	→	180	→							
					180	+	180	+							
ALERTING	+		180	+											
(UE 1)										1		ш			
001111505	\vdash		200 014		200 016		222.014					Щ		1	
CONNECT	→	2	200 OK	→	200 OK	→	200 OK	→							
(UE 2) CONNECT	+		200 OK	+	200 OK	+	200 OK	+		1	-	Н		+	
(UE 1)		4	100 OK	_	200 OK	_	200 OK	~							
(02 1)			ACK	→	ACK	→	ACK	→				H		1	
			ACK	+	ACK	+	ACK	+				\Box		1	
DISC (UE1)	→		BYE	→	BYE	→	BYE	→							
DISC (UE2)	4		BYE	+	BYE	+	BYE	+							
REL (UE2)	1	200	OK BYE												
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→							
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	+	200	OK BYE	+								Щ		1	
RLC (UE1)	→										l	Ш			l

ISI_XXSSCFNR02	ISDN reference to: NGN reference to:								
	ETSI EN 300 403-1 [i.3],	ETSI TS 124 604 [45]							
	clauses 9.2.2, 9.2.4.4, 9.2.5								
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/CFN	IR/							
Configuration:	The user A and the user C are in network N1.								
	("Served user allows the presentation of forward								
	diversion notification" = Yes, "diverting number								
	Yes, "served user receives notification that the								
	user communication retention on invocation of								
	[Clear call to the served user on invocation of o	call diversion]. User C is point-to-							
O a la ati a sa a sita sia s	multipoint.								
Selection criteria:	CFNR supported								
To at my war and	CF Notifications supported	wared the cell is few warded to wear C							
Test purpose:	Ensure that when user A calls user B, if unans User A is notified of call diversion and informed								
	presentation allowed - no COLR) and user C is								
	(user B has presentation allowed). User B is no								
ISDN Parameter	BC = PIXIT	otilied of dail diversion.							
values:	50 - 1 1/41								
SIP Parameter values:	Dial string parameters options=PIXIT								
	PIXIT for supported header:								
	Case a) no 100 rel								
	Case b) Supported: 100 rel								
	Case c) Supported: 100 rel and precondition								
	a = line (PIXIT)								
	b = line (PIXIT)								
	m = line (PIXIT)								

Comments	:														
ISDN		MGC	F	l-	CSCF	S	-CSCF		AS	F	P-CSCF	Į	JE-B	U	E-C
											_				
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+									
					100 Trying		INVITE	→							
							100 Trying	+							
							INVITE	+							
							100 Trying	→							
									INVITE	→					
											INVITE	→			
							L		180	+	180	+			
							180	→							
	_				180	+	180								
			180	+	100	_	+		1	 	1	 			
			100				181	+		-		1			
					181	+	1.0.								
NOTIFY	+		181	+	-										
(UE 1)															
							CANCEL	+							
	$oxed{oxed}$						CANCEL	→		<u> </u>	041:07:	<u> </u>			
					1		1			<u> </u>	CANCEL 407 Degrees	+			
											487 Request terminated	_			
									487 Request terminated	+					
							487 Request terminated	→							
							terminated ACK	+							
									ACK	→					
											ACK	→			
					15 15 41 77 77		INVITE	+	MESSAGE	→	14500105				
					INVITE 100 Trying	+					MESSAGE	→			
SETUP (UE 2)	+		INVITE	+	100 Trying	7									
OLTOT (OL Z)			100 Trying	`											
ALERTING	→		180	→											
(UE 2)															
					180	→	180	→							
	تابا				180	+	180	+							
ALERTING (UE 1)	+		180	+											
CONNECT	→		200 OK	→	200 OK	→	200 OK	→							
(UE 2) CONNECT	+		200 OK	+	200 OK	+	200 OK	+							
(UE 1)			ACK	→	ACK	→	ACK	→							
			ACK	+	ACK	+	ACK	+							
DISC (UE1)	→		BYE	→	BYE	→	BYE	→							
DISC (UE2) REL (UE2)	+		BYE	+	BYE	+	BYE	+							Ī
	4		200 OK BYE	→											
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→							
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	+		200 OK BYE	+											
RLC (UE1)	→														

ISI_XXSSCFNR 03	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/CFN	
Configuration:	The user A and the user C are in network N1. with CFNR ("Served user allows the presentation in diversion notification" = Yes, "diverting number the control of the control	on of forwarded to URI to originating user per is released to the diverted-to user" =
	No, "served user receives notification that the communication retention on invocation of diver C is point-to-multipoint.	
Selection criteria:	Call forwarding by the network Call forwarding not reply supported CF Notifications supported	
Test purpose:	Ensure that when user A calls user B, if unansor A is notified of call diversion and not informed of presentation not allowed - COLR) and user C is (user B has presentation not allowed). User B is not notified of call diversion	of the diverted-to number (user C has
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	

Comments:														
ISDN		MGCF	ļ-	CSCF	S-CSCF		AS		P-CSCF		UE-B		UE-C	
SETUP (UE 1)	→	INVITE	→	INVITE	→									
SETUP (UE I)	17	IINVITE		INVITE	7									
				100 Trying	+									
						INVITE	1							
						100 Trying	+							
						INVITE	+							
						100 Trying	→							
								INVITE	→		Ļ			
						+		180	+	INVITE 180	↑ ↓			
						180	→	180	_	180	~		<u> </u>	
						180	+							
				180	+	100	_							
	- 1	180	+	100	_	 		†			H			
		1.22				181	+	1						
				181	+									
NOTIFY	+	181	+											
(UE 1)						1								
	+					CANCEL	+							
	$\perp \perp \perp$			ļ		CANCEL	→			OANOE:	Ļ			
	+					+		 		CANCEL 487	+		-	
										487 Request	~			
						1				terminated				
								487 Request	+	terrimated				
								terminated	_					
						487 Request	→							
						terminated								
						ACK	+							
								ACK	→					
	1					150 075	,			ACK	→			
	 			IND/ITE		INVITE	+	1						
	-			INVITE 100 Trying	+	-							<u> </u>	
SETUP (UE 2)	+	INVITE	+	100 Trying	7	+		-						
OLTOT (OL 2)	+	100 Trying	÷			-								
ALERTING	→	180	,			1		<u> </u>						
(UE 2)						1								
				180	→	180	→							
				180	+	180	+							
ALERTING (UE 1)	+	180	+]						
CONNECT	→	200 OK	→	200 OK	→	200 OK	→							
(UE 2) CONNECT	+	200 OK	+	200 OK	+	200 OK	+	 			\vdash		-	
(UE 1)	`	200 OK	~	200 OK	•	200 OK	•	1	l					
		ACK	→	ACK	→	ACK	→	1						
		ACK	+	ACK	+	ACK	+							
DISC (UE1)	→	BYE	→	BYE	→	BYE	→							
DISC (UE2)	+	BYE	+	BYE	+	BYE	+							
REL (UE2)	→	200 OK BYE	→											
RLC (UE2)	+			200 OK BYE	→	200 OK BYE	→							
				200 OK	+	200 OK BYE	+							
DEI /IIE1)	+	200 OK BYE	+	BYE		+		-			\vdash		-	
REL (UE1) RLC (UE1)	→	ZUU OK BYE				+		-			\vdash		1	
NLU (UE1)	7					1		1		l	ш		<u> </u>	I

ISI_XXSSC	FN	R 04	ET	SI EI	l referenc N 300 207 s 6.1, 9.2.	-1 [i.	5],	NGN reference to: ETSI TS 124 604 [45]								
TSS reference:								/ices	/CFNR							
Configuration:			ISDN-SIP-ISDN/Supplementary_services/CFNR The user A and the user C and D are in network N1. The user B is in network N2 and is provided with CFNR. The user A and the user C are in network N1 and user C is provided with COLP. The user B is in network N2 and is provided with CFNR ("Served user allows the presentation													
			of forwarded to URI to originating user in diversion notification" = No, "diverting number is released to the diverted-to user" = No, "served user receives notification that the call has been forwarded" = no); Served user communication retention on invocation of diversion (forwarding or deflection) = No. User C is point-to-multipoint.													
Selection crite	ria:		Call forwarding by the network Call forwarding not reply supported CF Notifications supported													
Test purpose:		Ensure that when user A calls user B, if unanswered, the call is forwarded to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion												ıs		
ISDN Parame	ter '	values.	_			· oai	1 411010101									
SIP Parameter values:			Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)													
Comments: ISDN		N/A	GCF	-	-CSCF		S-CSCF		AS		P-CSCF		UE-B		JE-C	
ISDIN		IVI	301		-0307		-030F		AS	Г	-0301		UE-B) <u></u> C	
SETUP (UE 1)	→		INVITE	→	INVITE	→										
					100 Trying	+	INVITE 100 Trying INVITE 100 Trying	+ + + +	INVITE	→	IND OTT					
									180	+	INVITE 180	→				
							180	→								
					180	+	180	+								
ALERTING (UE1)	_		180	+			CANCEL	+								
ALERTING (UET)	_						CANCEL	→			CANCEL 487 Request terminated	→				
									487 Request terminated	+						
							487 Request terminated ACK	→								
							ACK		ACK	→						
	H						INVITE	+		-	ACK	→		-		
					INVITE	←										
SETUP (UE 2)	+		INVITE	+	100 Trying	→						1		-		
	<u>`</u>		100 Trying	<u>`</u>												
ALERTING (UE 2)	7		180	7	180	→	180	→						-		
			100		180	+	180	+								
			180	+	1		1								1	
CONNECT (UE 2)	→		200 OK	→	200 OK	→	200 OK	→								
CONNECT	+		200 OK	+	200 OK	+	200 OK	+								
(UE 1)			ACK	→	ACK	→	ACK	→								
DISC (UE1)	→		ACK BYE	+	ACK BYE	+	ACK BYE	+ +				1		1		
DISC (UE2)	+		BYE	+	BYE	+	BYE	+								
REL (UE2) RLC (UE2)	→		200 OK BYE	→	200 OK BYE	→	200 OK BYE	→				-				
			300 OK DVC	+	200 OK BYE	+	200 OK BYE	+								
REL (UE1) RLC (UE1)	←		200 OK BYE	_								E		<u> </u>		

ISI_XXSSC	IR 05	ETS	SIEN	referenc I 300 403 .2.2, 9.2.	-1 [i.:		NGN reference to: ETSI TS 124 604 [45]									
TSS reference	e:		ISDN-SIP-ISDN/Supplementary_services/CFNR/													
Configuration	า:		The user A and the user C are in network N1. The user B is provided with CFNR Served user communication retention on invocation of diversion (forwarding or deflection) = Yes. User C is point-to-multipoint.													
Selection crit	eria	1:	CFNR supported CF Notifications supported													
Test purpose) :		Ensure that when user A calls user B, if unanswered, the call is forwarded to user C The diverting user accepts the communication after sending the INVITE request, the communication path towards the diverted to user shall be released according to the rules and procedures in IETF RFC 3261 [28].													
ISDN Parame	eter		BC = PIXIT													
values:		Dial string parameters entions—DIVIT														
SIP Paramet	alues:	PIXIT for Case a) Case b) Case c) a = line (b = line (Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)													
			m = line	n = line (PIXIT)												
Comments:								ı		_		T				
ISDN		M	GCF		-CSCF S-CSCF			AS			-CSCF		UE-B	U	E-C	
SETUP (UE 1)	→		INVITE	→	INVITE	→										
					100 Trying	+										
					, ,		INVITE	→								
							100 Trying	+								
							INVITE 100 Trying	+								
							100 Trying		INVITE	→						
											INVITE	→				
											180	+				
							400	_	180	+						
							180 180	→								
					180	+	100	_								
ALERTING (UE1		+	180	+												
NOTIFY	+		181	+	181	+	181	+								
(UE 1)					INVITE	+	INVITE	+								
					100 Trying	→		•								
			INVITE	+												
SETUP (UE 2)	_		100 Trying	→												
ALERTING	→		180	→	180	→	180	→								
(UE 2)							CANCEL	+								
							CANCEL	→			0411051	_				
											CANCEL 487 Request terminated	+				
									487 Request terminated	+						
							487 Request	→								
<u> </u>	\vdash						terminated ACK	+				-				
	H						AUN		ACK	→						
											ACK	→				
CONNECT	→		180 200 OK	<u>+</u>	180	+	180	+								
(UE 2)	Щ				000.00		000.5:1									
	\vdash				200 OK 200 OK	→	200 OK 200 OK	+				-				
CONNECT	+		200 OK	+	200 OK	t 🔪	200 OK	<u> </u>								
(UE 1)	Ш															
	\vdash		ACK ACK	<u>→</u>	ACK ACK	→	ACK ACK	→ +						-		
DISC (UE1)	→		BYE	→	AUI	Image: limit of the limit of	AUI	<u> </u>								
, ,					BYE	→	BYE	→								
DISC (UEO)	+		BYE													
DISC (UE2) REL (UE2)	←		200 OK BYE	-												
RLC (UE2)	÷		200 OK → 200 OK BYE →													
					BYE 200 OK	+	200 OK BYE	+								
REL (UE1)	+		200 OK BYE	+	BYE							_		-		
RLC (UE1)	→		LOO ON DIE									L				

ISI_XXSSC	FNR	06	ETS	I EN	reference 300 403-1 .2.2, 9.2.4.4	[i.3				_	referenc ΓS 124 60				
TSS reference			ISDN-SIP	-ISDI	N/Supplem	enta	ary_servic								
Configuration:			The user A	A and	d the user (C ar	e in netwo	ork N	1. The use	r B i	s provide	ed v	vith CFN	R	
· ·			("Served ι	user a	allows the	pres	entation o	of for	warded to l	JRI	to origina	atin	g user in		
									ber is relea						
									the call has						ed
			user comr	nunio	cation reter	ntior	on invoc	ation	of diversio	n (f	orwarding	g or	deflection	on) =	
					point-to-m	ultip	oint.								
Selection crite	eria:		CFNR sup												
					s supporte										
Test purpose:									inswered, tl						
									on after se						
									user shall	be I	released	acc	cording to	the t	
					edures in II										
									ned of the o						
						g nu	ımber (use	er B I	nas present	tatic	n allowe	d).	User B is	s notifi	ied
			of call dive	ersio	n										
ISDN Parame	ter														
values:															
SIP Paramete	r va						s=PIXIT								
			PIXIT for s	supp	orted head										
			Case a) n												
					rted: 100 r										
					rted: 100 r	el a	nd precon	dition	า						
			a = line (P	(TIXI ^r)										
			b = line (P	(TIXI ^r)										
			m = line (f	PIXIT)										
Comments:					•										
ISDN		N	1GCF	I	-CSCF	S	S-CSCF		AS	Р	-CSCF		UE-B	UE	-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
			_		100 Trying	+	INVITE	→				<u> </u>		-	-
							100 Trying	+							
					-		INVITE	←				-			
							100 Trying	7	INVITE	→				-	
											INVITE	→			
									180	+	180	+		+	-
							180	→	100	_				+	
					400	+	180	+							
ALERTING (UE1)	+	180	+	180									+	1
NOTIFY	+		181	+	181	+	181	+							
(UE 1)	\vdash				INVITE	+	INVITE	+	MESSAGE	→				+	1
					100 Trying	→				_				_	
	1		INVITE	+							MESSAGE	→			
SETUP (UE 2)	+ - +		100 Trains	->							MESSAGE	→		\pm	
JL 1 (JL Z)	←		100 Trying	→							MESSAGE	→		=	
ALERTING	←		100 Trying 180	→ →	180	→	180	→			MESSAGE	→			
			, ,		180	→	180	→			MESSAGE	→			
ALERTING			, ,		180	→					CANCEL	→			
ALERTING			, ,		180	→	CANCEL	+			CANCEL 487				
ALERTING			, ,		180	→	CANCEL	+			CANCEL	→			
ALERTING			, ,		180	→	CANCEL	+	487 Request	+	CANCEL 487 Request	→			
ALERTING			, ,		180	→	CANCEL CANCEL 487 Request	+	487 Request terminated	+	CANCEL 487 Request	→			
ALERTING			, ,		180	→	CANCEL CANCEL 487 Request terminated	÷		+	CANCEL 487 Request	→			
ALERTING			, ,		180	→	CANCEL CANCEL 487 Request	← →		÷	CANCEL 487 Request	→			
ALERTING			180	→			CANCEL CANCEL 487 Request terminated ACK	÷ ÷	terminated		CANCEL 487 Request	→			
ALERTING (UE 2)			180		180	→ ←	CANCEL CANCEL 487 Request terminated	÷	terminated		CANCEL 487 Request terminated				
ALERTING	>		180	÷	180	+	CANCEL CANCEL 487 Request terminated ACK 180	÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
ALERTING (UE 2)	>		180	÷	180 200 OK	←	CANCEL CANCEL 487 Request terminated ACK 180 200 OK	÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2)	>		180	÷	180	+	CANCEL CANCEL 487 Request terminated ACK 180	÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
ALERTING (UE 2) CONNECT (UE 2)	→ →		180 180 200 OK	÷	180 200 OK 200 OK	+	CANCEL CANCEL 487 Request terminated ACK 180 200 OK 200 OK	÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2)	→ →		180 180 200 OK	+	180 200 OK	←	CANCEL CANCEL 487 Request terminated ACK 180 200 OK	÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2)	→ →		180 180 200 OK 200 OK	÷ ÷ ÷	180 200 OK 200 OK ACK ACK	÷	CANCEL CANCEL 487 Request terminated ACK 180 200 OK 200 OK ACK ACK	÷ ÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2) CONNECT (UE 2))		180 200 OK 200 OK ACK ACK	÷ ÷ ÷	180 200 OK 200 OK ACK ACK BYE	÷	487 Request terminated ACK 180 200 OK 200 OK ACK ACK BYE	÷ ÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2) CONNECT (UE 2))		180 200 OK 200 OK ACK ACK	÷ ÷ ÷	180 200 OK 200 OK ACK ACK	÷	CANCEL CANCEL 487 Request terminated ACK 180 200 OK 200 OK ACK ACK	÷ ÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2) CONNECT (UE 2) CONNECT (UE 1) DISC (UE1) DISC (UE2) REL (UE2)	÷		180 200 OK 200 OK ACK ACK BYE	÷ ÷ ÷ ÷ ÷ ÷	180 200 OK 200 OK ACK ACK BYE BYE	÷	ACK ACK ACK BYE BYE	÷ ÷ ÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2) CONNECT (UE 1) DISC (UE1))		180 180 200 OK 200 OK 200 OK ACK ACK BYE	+ + + + + + + + + + + + + + + + + + + +	180 200 OK 200 OK ACK ACK BYE BYE 200 OK BYE	÷	CANCEL CANCEL 487 Request terminated ACK 180 200 OK 200 OK ACK ACK BYE BYE 200 OK BYE	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ † † † †	terminated		CANCEL 487 Request terminated				
CONNECT (UE 2) CONNECT (UE 2) CONNECT (UE 1) DISC (UE1) DISC (UE2) REL (UE2)	÷		180 180 200 OK 200 OK 200 OK ACK ACK BYE	+ + + + + + + + + + + + + + + + + + + +	180 200 OK 200 OK ACK ACK BYE BYE	÷	ACK ACK ACK BYE BYE	÷ ÷ ÷ ÷ ÷ ÷	terminated		CANCEL 487 Request terminated				

ISI_XXSSC	FN	R 07	ETS	SIEN	reference 300 207- 6.1, 9.2.2	1 [i.			E		N referen I TS 124 6				
TSS reference	e:		ISDN-SIF	-ISD	N/Suppler	nen	tary_servi	ces/0	CFNR						
Configuration			The user with CFN diversion "served u communication of the communication of the communication of the communication of the user	A an R ("S notifi ser re	d the user Served use ication" = ' eceives no n retentior	C a er all Yes, otific	re in netw ows the p diverting ation that	ork N reser num the c	N1. The use ntation of fo nber is rele- call has bee liversion (fo	orwa asec en fo	arded to U d to the di orwarded"	RI t vert = n	o origina ed-to us o) Serve	iting er" = d use	user in No, er
Selection crit	eria	:	Call forwa	arding arding	nuitipoint. g by the ne g not reply ns support	sup	ork oported								
Test purpose	:		Ensure the The diver communicand processor A is informed	ting ucation ting ucation to the contract th	hen user Auser Auser accep n path towes in IETF ied of call	cal ots the ards RFC dive	he commus the diver 3261 [28 ersion and umber (us	nicated to [].	answered, tion after so o user shal med of the has preser	endi I be dive	ng the IN\ released erted-to no	VITE acc umb	E reques ording to ber and u	t, the the	rules
ISDN Paramo	eter	,	BC = PIX		lotined or	caii	aiversion.								
SIP Paramet	er v	alues:	PIXIT for Case a) r Case b) S	supp to 10 Suppo Suppo PIXIT PIXIT	orted: 100 orted: 100 ()	der: rel		nditic	on						
Comments:			005		0005		0005		4.0	_	0005				
ISDN		IVI	GCF INVITE	<u> -</u>	CSCF INVITE	→	S-CSCF		AS	F	P-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		IINVIIE	7	INVITE	7	 								
					100 Trying	÷	INVITE 100 Trying INVITE 100 Trying	+ + + + + + + + + + + + + + + + + + +	INVITE 180	→ ←	INVITE 180	→ +			
ALERTING (UE 1)	() (+	+	180 181	+	180 181 INVITE	+	180 181 INVITE	+							
SETUP (UE 2)	+		INVITE 100 Trying	←	100 Trying	→	INVITE								
ALERTING (UE 2)	→		180	→	180	→	180 CANCEL	→							
							CANCEL	→	487 Request terminated	+	CANCEL 487 Request terminated	→			
							487 Request terminated ACK	→	ACK	→	ACK	→			
CONNECT (UE 2)	→		180 200 OK	+	180	+	180	+	ACR	7	ACK	7			
CONNECT (UE 1)	+		200 OK ACK	←	200 OK 200 OK ACK	→ ← →	200 OK 200 OK	→							
DISC (UE1)	→		ACK ACK BYE	+	ACK BYE	←	ACK BYE	+							
DISC (UE2) REL (UE2) RLC (UE2)	←		BYE 200 OK BYE	←	BYE 200 OK BYE	÷	BYE 200 OK BYE	÷							
REL (UE1) RLC (UE1)	←		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+							

ISI_XXSSCFNR 08	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
T00 (clauses 6.1, 9.2.2, 9.2.5	(OENIB
TSS reference:	ISDN-SIP-ISDN/Supplementary_servi	
Configuration:	The user A and the user C and D are provided with CFNR	in network N1. The user B is in network N2 and is
	The user A and the user C are in netw	ork N1. The user B is in network N2 and is provided
		resentation of forwarded to URI to originating user in
		number is released to the diverted-to user" = No,
		the call has been forwarded" = no); Served user
		n of diversion (forwarding or deflection) = Yes. User C
	is point-to-multipoint.	g
Selection criteria:	Call forwarding by the network	
	Call forwarding not reply supported	
	CF Notifications supported	
Test purpose:		if unanswered, the call is forwarded to user C
		unication after sending the INVITE request, the
		ted to user shall be released according to the rules
		B].User A is notified of call diversion and not informed
		presentation not allowed - COLR) and user C is not
	informed of the forwarding number (us	
	User B is not notified of call diversion.	
ISDN Parameter values:	I.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and preco	ndition
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

ISDN		М	GCF		I-CSCF	5	S-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→						1			
0=101 (0=1)												1			
					100 Trying	+						1			
						† <u> </u>	INVITE	→				1			
							100 Trying	+				1			
							INVITE	÷				1			
							100 Trying	→				1			
							100 Trying		INVITE	→					
							-		IINVIIL	_	INVITE	→			
									180	+	180	÷			
							180	→	100	_	160	_			
							180	7							-
ALEBERIO (LEA)		+	400		400	_	180								
ALERTING (UE1)			180	Ψ,	180	+	404					-			
NOTIFY (UE 1)	+		181	Ψ	181	+	181	+							
					INVITE	+	INVITE	+							
					100 Trying	→									
			INVITE	+											
			100 Trying	→											
SETUP (UE 2)	+														
ALERTING	→		180	→	180	→	180	→							
(UE 2)							CANCEL	+							
						-	CANCEL					-			
							CANCEL	→			0411051	_			
											CANCEL	→			
											487	+			
											Request				
											terminated	_			
									487 Request	+					
									terminated			_			
							487 Request	→							
							terminated								
							ACK	+							
									ACK	1	ACK	→			
			180	+	180	+	180	+							
CONNECT (UE 2)	→		200 OK	→											
\			İ		200 OK	→	200 OK	→				t		1	
			İ		200 OK	+	200 OK	+				t		1	
CONNECT (UE 1)	+		200 OK	+											
(011)	+		ACK	→	ACK	→	ACK	→				t		-	
	+++		ACK	+	ACK	+	ACK	-				1		1	
DISC (UE1)	→		BYE	-	AUN	F	AUN				-	1	-	1	
DISC (UE I)	7		DIE	7	BYE	→	BYE	→				₩		1	
	+		 			+	BYE	7				₩		1	
DIOC (UEO)			D)/E		BYE	_	DIE		ļ		-			1	
DISC (UE2)	÷		BYE	+		!						↓		1	
REL (UE2)	→		200 OK BYE	1	L	Ļ.	L					↓		ļ	
RLC (UE2)	+		ļ		200 OK BYE	→	200 OK BYE	→				<u> </u>			
					200 OK BYE	+	200 OK BYE	+				<u> </u>			
	1 / T		200 OK BYE	+	1	1			1	_			1	1	
REL (UE1) RLC (UE1)	+		200 OK BIL	_	<u> </u>										

Clauses 6.1, 9.2.2, 9.2.5 TSS reference: ISDN-SIP-ISDN/Supplementary_services/CFNR Configuration: The user B is in network N2 and is provided with CFNR, Served user come retention on invocation of diversion (forwarding or deflection) = No [Clear of served user on invocation of call diversion]. User C is point-to-multipoint. Selection criteria: Call forwarding by the network Call forwarding unconditional supported user C is user determined user busy Test purpose: To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determined uses: ISDN Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE → INV	call to the
The user B is in network N2 and is provided with CFNR, Served user com retention on invocation of diversion (forwarding or deflection) = No [Clear served user on invocation of call diversion]. User C is point-to-multipoint. Selection criteria: Call forwarding by the network Call forwarding unconditional supported user C is user determined user busy Test purpose: To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determine ISDN Parameter values: ISDN Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SETUP (UE 1)	call to the
retention on invocation of diversion (forwarding or deflection) = No [Clear of served user on invocation of call diversion]. User C is point-to-multipoint. Call forwarding by the network Call forwarding unconditional supported user C is user determined user busy Test purpose: To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determine ISDN Parameter Values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-F SETUP (UE 1) I NIVITE INVITE I	call to the
Selection criteria: Call forwarding by the network Call forwarding unconditional supported user C is user determined user busy To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determine. ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE → INVI	d user busy.
Call forwarding unconditional supported user C is user determined user busy To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determine ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-f SETUP (UE 1) → INVITE →	d user busy.
user C is user determined user busy Test purpose:	d user busy.
Test purpose: To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is user determine BC = PIXIT Values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE →	d user busy.
User A calls user B, the call is forwarded to user C who is user determined BC = PIXIT Values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-F SETUP (UE 1) → INVITE →	d user busy.
ISDN Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-F SETUP (UE 1) → INVITE	
SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) SETUP (UE 1) > INVITE > INV	
PIXIT for supported header:	
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-F SETUP (UE 1) → INVITE →	
Comments:	
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-F SETUP (UE 1) → INVITE → INVI	
SETUP (UE 1) → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE ← INVITE ← INVITE → INVIT	
100 Trying ← INVITE → INVITE	B UE-C
100 Trying ← INVITE → INVITE	- + +
INVITE	
100 Trying ← INVITE ← INVITE → INVITE	
100 Trying → INVITE → I	
INVITE INVITE	
180 ← 180 ← ALERTING ← 180 ← 180 ← 181 ← 181 ←	
ALERTING ← 180 ← 180 ← 180 ← 181 ← 181 ←	
181 ←	
181 🗲	
	- - - - - - - - - -
NOTIFY	
(UE 1) CANCEL	
CANCEL →	
CANCEL → 487 ←	
Request	
487 Request terminated terminated	
487 Request → terminated terminated	
ACK ←	
ACK →	
INVITE INVITE	
100 Trying → 100 Trying →	
INVII	
SETUP (UE 2) ←	
RLC (UE 2) → 486 Busy here → 486 Busy here → 486 Busy	
DISC (UE 1)	
REL (UE1) → ACK → ACK → ACK → ACK ← ACK ← ACK ← ACK ←	

ISI_XXSSCI	FNR	10	ETS	SI EN	reference N 300 207- s 6.1, 9.2.2	1 [i.	5],		E		N referen I TS 124 6				
TSS reference	:				DN/Supple			ices/	/CFNR						
Configuration:			The use	r B is n on i	in networ	k N2	2 and is pr	ovide	ed with CFI rding or de						
Selection criter	ria:		Call forw CFNR si	ardir uppo	ng by the r rted work deter			ISV/							
Test purpose:			To verify	that	a call is re	elea	sed correc	tly if	CFNR was to user C w				etermine	d use	er busy.
ISDN Paramet values:			BC = PI												-
SIP Parameter	r valı	ues:	Dial strin	ng pa	rameters of	optic	ns=PIXIT								
			Case a) Case b) Case c)	no 1 Supp Supp	oorted: 100 oorted: 100) rel		onditi	ion						
0			a = line (b = line (m = line	(PIXI	T)										
Comments: ISDN		MC	GCF	ı	-CSCF		S-CSCF		AS	F	P-CSCF		UE-B	L	IE-C
														Ľ	
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+	INVITE	→							
	+						100 Trying INVITE	↑						-	
							100 Trying	→	INVITE	→					
											INVITE	→			
	-						180	→	180	+	180	4			
ALERTING		+	180	+	180	+	180	+							
					181	+	181	+							
NOTIFY (UE 1)	+		181	+											
							CANCEL CANCEL	+							
							07111022				CANCEL 487 Request terminated	→			
									487 Request terminated	+	terminateu				
							487 Request terminated ACK	→							
						L	ACK	_	ACK	→					
	4				INVITE	+	INVITE	+			ACK	→			
	ᆂ				100 Trying	→	100 Trying	→							
			INVITE 100 Trying	+ +											
	<u>t</u>														
B100 (117 11			486 Busy here	→	486 Busy here	→	486 Busy here	→							
, ,	←		486 Busy here ACK	↓	486 Busy here ACK	←	486 Busy here ACK	+ +						_	
(==-/			ACK	+	ACK	+	ACK	+							

ISI_XXSS(CFN	IR 11	ET: cla	SI EI uses	reference N 300 207- s 6.1, 9.2.2	1 [i. , 9.2	5], 2.5			_	N refere I TS 124				
TSS reference	ce:				DN/Supple										
Configuration	า:								ed with CFI						
			Served (user	communica	atior	n retention	n on i	invocation of	of di	version (forv	warding o	r defl	ection)
			= Yes. L	lser (C is point-t	o-m	ultipoint.								-
Selection crit	eria	:	Call forw	/ardii	ng by the n	etw	ork								
			Call forw	/ardi	ng uncondi	tion	al support	ed							
			user C is	s use	er determin	ed ι	user busy								
Test purpose	:		User A c	alls	user B, the	cal	l is forwar	ded t	to user C w	ho i	s user de	ete	rmined us	er bu	ISV.
			The forw	/ardi	ng user Us	er E	3 continue	s to a	alert.						
ISDN Param	eter			BC = PIXIT											
values:	0.0.														
SIP Paramet	er v	alues.	Dial strin	na na	rameters o	ntic	ns=PIXIT								
i aramot	J. V		2101 0111	.9 PC		77.10									
			PIXIT fo	r sur	ported hea	der	:								
			Case a)				•								
					ported: 100) rel									
					ported: 100			onditi	ion						
			0 4.00 0,	-			aa p. 00								
			a = line	PIXI	T)										
			b = line												
			m = line	`	,										
Comments:				(1 12)	,										
ISDN		M	GCF	ı	-CSCF	٩	S-CSCF		AS	Р	-CSCF	1	UE-B	1	IE-C
10211					1		000.		T					Ť	1
SETUP (UE 1)	→		INVITE	→	INVITE	1									
					100 Trying	+									
					100 117g		INVITE	→							
					1		100 Trying INVITE	1				-			
							100 Trying	→ ·							
							Ĺ		INVITE	→	INVITE	→			
					-		180	→	180	+	180	+		-	
ALERTING		+	180	+	180	+	180	+							
SETUP (UE 2)	+		INVITE	+	INVITE	+	INVITE	+				F			
RLC (UE 2)	7		486 Busy	-	486 Busy	→	486 Busy	→	1			1		1	
,			here		here		here					1			
			ACK	+	ACK	+	ACK	+	200 OK	+	200 OK	+		-	
							200 OK	→	200 010	È	200 010	Ė			
CONNECT (UE 1)	+		200 OK	+	200 OK	+	200 OK	+							
(UE I)			ACK	→	ACK	→	ACK	→				1		1	
			·				ACK	+							
DISC (UE1)	→		BYE	→	BYE	→	BYE	→	ACK	→	ACK	→			
DIOO (OL1)	Ĺ		DIL		DIL	Ĺ	BYE	+				L			
									BYE	→	BYE	→			
									200 OK BYE	+	200 OK BYE	+			
							200 OK BYE	→							
REL (UE1) RLC (UE1)	↓ ↑		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	1			-		1	
KLC (UE1)	7						l .		l		1	1	l	1	

ISI_XXSS(CFN	R 12		ET cla	ISDN refe SI EN 300 auses 6.1,	207 9.2	7-1 [i.5], .2, 9.2.5						ence to: 4 604 [4		
TSS reference			ISDN-SI	P-IS	DN/Supple	mei	ntary_serv	ices/	/CFNR						
Configuration	1:		retentior multipoir	n on i nt.	invocation	of d	iversion (fo		ed with CFI ording or de						
Selection crit	eria		CFNR s	uppo s net	work deter	min	ed user bu								
Test purpose	:				user B, the				to user C walert.	ho i	s netwo i	k d	etermine	d use	er busy.
ISDN Parame	eter		BC = PI	XIT											
SIP Paramet	er v	alues:	Dial strir	ng pa	rameters o	ptic	ns=PIXIT								
			Case a) Case b)	no 1 Supp Supp (PIXI (PIXI	ported: 100 ported: 100 T) T)) rel		onditi	ion						
Comments:	-		<u> </u>							_					
ISDN		M	GCF	Į.	-CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	L	JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+									
					100 Trying		INVITE	→							
							100 Trying	+							
							INVITE 100 Trying	+							
							100 Trying		INVITE	→	INVITE	→			
							400		180	+	180	+			
ALERTING		+	180	+	180	+	180 180	}				-		+	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					INVITE	÷	INVITE	+							
			INVITE	Ψ,	100.5	Ę	100.0								
			486 Busy here	→	486 Busy here	1	486 Busy here	→							
			ACK	+	ACK	+	ACK	+				L			
							000 011		200 OK	+	200 OK	+			
CONNECT	+		200 OK	+	200 OK	+	200 OK 200 OK	→		 		<u> </u>		+	-
(UE 1)															
DISC (UE1)	→		BYE	→	BYE	→	BYE	→						1	
							BYE	+	BYE	→	BYE	→		+	
									200 OK BYE	÷	200 OK BYE	÷			
DEL (UE4)	+		200 OK BYE	+	200 OK BYE	_	200 OK BYE 200 OK BYE	<u>→</u>		<u> </u>		1		1	
REL (UE1) RLC (UE1)	7		ZUU UN BYE	_	ZUU UN BYE	_	ZUU UN BYE					├			1

ISII_XXSSCFNR 13	ISDN reference to: ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	ISDN-SIP-ISDN-ISDN/Supplementary_service	es/CFNR
Configuration:	The user A and the user C are in network N1. with CFNR. User D forwards the call to back to	The user B is in network N2 and is provided
Selection criteria:	Call forwarding by the network CFNR supported	
Test purpose:	Ensure that when user A calls user B, the call User D forwards the call to back to user B. En	
ISDN Parameter	BC = PIXIT	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.2.2.6.2 CFNR - ISS

ISS_XXSS	CFN	NR 01		ETS	SDN refer SI EN 300 uses 6.1,	207	-1 [i.5]				NGN refe ETSI TS 1				
TSS reference	e:		ISDN-SI				ary_servic	es/CF	NR						
Configuration			The use	r B is	provided	with	CFNR retention			of di	version (fo	orwa	arding or	defle	ection)
Selection crit	eria	:	CFNR st	uppo											
Test purpose			procedu Ensure t is perfor	res. hat ii med	n the activ	/e ca	alls user B Il state (Natesting Quantity	10) the	voice tra	nsf					
ISDN Parame	eter		BC = PI	XII											
values: SIP Paramet	er v	alues:	Dial strin	ng pa	rameters	optic	ns=PIXIT								
			Case a) Case b) Case c) a = line (no 1 Supp Supp (PIXI)	oorted: 10 oorted: 10 T)	0 rel		onditio	า						
			b = line (
			m = line	(PIX	IT)										
Comments: ISDN		M	GCF	I-	CSCF	S	-CSCF		AS	F	-CSCF		UE-B	U	JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+	IND/ITE								
	-						INVITE 100 Trying	}							
							INVITE	+							
							100 Trying	<u>→</u>	INVITE	→					
											INVITE	→			
							180	→	180	4	180	4			
		_					180	+							
ALERTING		+	180	+	180	+	181	+							-
					181	+									
NOTIFY (UE 1)	4		181	+											
(== -/	\Box						CANCEL	+							
							CANCEL	<u>→</u>	487 Request terminated	+	487 Request terminated	+			
	\Box						487 Request terminated	→	tommatou						
	口						ACK	+							
	\vdash								ACK	→	ACK	→			
	Ш						INVITE	+		Ų					
	\vdash								100 Trying	<u>→</u>			INVITE	→	
										_			100 Trying	+	
	\pm						180	→	180	4			180	+	
ALERTING	+		180	+	180	+	180	+					200 OK	+	
	\Box^{\dagger}								200 OK	+			200 UK		
	F				200 OK	+	200 OK 200 OK	→							$\perp = =$
CONNECT	+		200 OK	+											
	H		ACK	→	ACK	→	ACK ACK	→	ļ				<u> </u>		+
	\Box						AUIT	`	ACK	→			ACK	→	
DISC (UE1)	→		BYE	<u>→</u>	BYE	→	BYE	→							
	\Box				OIL.		BYE	+							
	+								BYE	→			BYE 200 OK	+ +	1
	Ш												BYE		
									200 OK BYE	+			1		
DEL (LIE4)	+		200 OK BYE	+	200 OK	+	200 OK BYE 200 OK BYE	→							
REL (UE1)			200 ON BIE		BYE		200 OR BIE								
RLC (UE1)	→														

ISS_XXSS	CFN	NR 02		ET	ISDN refer SI EN 300 auses 6.1,	207	7-1 [i.5],				_		erence to: 24 604 [4		
TSS referen	ce:		ISDN-SI		P/Supplem			es/C	FNR						
Configuratio			The use URI to o diverted forwarde	r B is rigina to us ed" =	s provided vating user in ser" = Yes, Yes, Server or deflection	with n di "se ed u	CFNR ("S version no rved user user comm	Serve tifica rece	ed user allo ation" = Yes ives notific	s, "d atio	iverting n n that the	un ca	nber is rele Ill has bee	ease n	ded to d to the
Selection cri	teria	:	Call forw	/ardir /ardir	ng by the nang unconditions support	etw tion	ork	ed							
Test purpose			Ensure t call dive no TIR) allowed)	Ensure that when user A calls user B, the call is forwarded to user C, user A is notified call diversion and informed of the diverted-to number (user C has presentation allowed no TIR) and user C is informed of the forwarding number (user B has presentation allowed). User B is notified of call diversion. BC = PIXIT Dial string parameters options=PIXIT											
ISDN Param															
SIP Parame	ter v	alues:	PIXIT for supported header:												
			PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)												
			b = line	PIXI	T)										
Comments: ISDN		M	GCF	I	-CSCF	5	S-CSCF		AS	P	-CSCF		UE-B	Į	JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	_	INVITE 100 Trying	→							
							INVITE	ŕ							
							100 Trying	→	INVITE	→					
									180	+	INVITE 180	→			
							180	→	100		100				
ALERTING		+	180	+	180	+	180	+							
ALERTING			160	-	180	_	181	+							
NOTIFY	⊢		181	+	181	+									
(UE 1)	_		101				CANCEL	+							
							CANCEL	→	487 Request terminated	+	CANCEL 487 Request terminated	+			
							487 Request terminated ACK	→							
							ACK		ACK	→					
	F						INVITE	+	MESSAGE	→	ACK	→			
							114411				MESSAGE	→			
	+								INVITE 100 Trying	→		-	INVITE	→	
									180	+			100 Trying 180	+	
ALERTING	+		180	+	180	+	180 180	<u>→</u>							-
									200 OK	+			200 OK	+	
	+				200 OK	+	200 OK 200 OK	<u>→</u>				1			-
CONNECT	+		200 OK ACK	←	ACK	→	ACK	→							
DISC (UE1)	→		BYE	→			ACK	+	ACK	→			ACK	→	
, ,					BYE	→	BYE	→							
	╆┪						BYE		BYE	→		E	BYE	→	
									200 OK BYE	+			200 OK BYE	+	
REL (UE1) RLC (UE1)	+		200 OK BYE	+	200 OK BYE	+	200 OK BYE 200 OK BYE	→							
\ >= ./						<u> </u>									

ISS_XXSSCF	NR 03		ET	SDN refer SI EN 300 auses 6.1,	207	7-1 [i.5]						rence to: 24 604 [45		
TSS reference:		ISDN-SI		P/Supplem			es/C	FNR						
Configuration:		The use URI to o the divers forwards	r B is rigina ted-t ed" =	provided ating user o user" = I	with in di ^o No, '	CFNR ("S version no 'served us er commu	Serve otifica ser re	ed user allo ation" = Yes eceives not tion retenti	s, "d ifica	liverting n tion that t	um the	nber is rele call has b	ease een	led to d to
Selection criteria	a:	Call forw	ardir ardir	ng by the ring unconditions suppor	etw	ork	ed							
Test purpose:		Ensure to call dive no TIR)	hat w rsion and ι	hen user and inform	A ca ned ot in	of the dive formed of	erted the	call is forw -to number forwarding rsion.	· (us	er C has	pre	esentation	allov	ved -
ISDN Parameter	r	BC = PI	KIT											
values: SIP Parameter v	values:	Dial strir	ng pa	rameters o	ptio	ns=PIXIT								
		Case a) Case b)	no 1 Supp Supp	oorted: 100 oorted: 100) rel		onditi	on						
		b = line m = line	PIXI	T)										
Comments: ISDN	N//	GCF		CSCF	٥ ا	-CSCF		AS	Ь	-CSCF		UE-B	1 1	E-C
וועטו	IVI	GOF	1-	OOOF	<u> </u>	-0301		۸٥	P	-000F		OE-B	U	L-U
SETUP (UE 1) →		INVITE	→	INVITE 100 Trying	→	INVITE	→							
ALERTING	+	180	+	180	+	100 Trying INVITE 100 Trying 180 180	÷ ÷ ÷	INVITE 180		INVITE 180	→ ←			
NOTIFY (UE 1)		181	+	181	+	181	_							
(OL 1)						CANCEL CANCEL	←	487 Request terminated	+	CANCEL 487 Request terminated	→			
						487 Request terminated ACK	→	401/						
								ACK	→	ACK	→			
						INVITE	+	INVITE 100 Trying	→			INVITE 100 Trying	→	
ALERTING ←		180	+	180	+	180 180	}	180	+			180	+	
CONNECT •		200 OK	+	200 OK	+	200 OK 200 OK	}	200 OK	+			200 OK	+	
		ACK	→	ACK	→	ACK ACK	}	ACK	→			ACK	→	
DISC (UE1) →		BYE	→	BYE	→	BYE BYE	→	BYE	→			BYE 200 OK BYE	→	
REL (UE1) ← RLC (UE1) →		200 OK BYE	+	200 OK BYE	+	200 OK BYE 200 OK BYE	}	200 OK BYE	+			200 ON DIL		

ISS_XXSS(CFN	NR 04			SDN refe	renc	e to:				NGN re	efe	rence to:		
_					SI EN 30						ETSI TS	12	24 604 [45]	
TSS reference	Δ.		ISDN-SI		uses 6.1		ary_servic	<u>مد/۲</u>	FNR						
Configuration			User B is	s pro	vided with	CFI	NR ("Serve	ed us	ser allows t	he r	resentat	ion	of forward	ded t	o URI
Comigaration	•		to origina	ating	user in di	versi	on notifica	ation	" = No, "div	ertir	ng numbe	er is	s released	to th	ne
			diverted-	to us	ser" = No,	"ser	ved user r	ecei	ves notifica	tion	that the	cal	l has beer	1	
								ınica	tion retenti	on c	n invoca	tior	of divers	ion	
Selection crite					r deflection										
Selection crite	eria		CFNR s		ng by the	netw	OFK								
					ns suppo	rted									
Test purpose:							ılls user B	, the	call is forw	arde	ed to use	r C	, user A is	noti	fied of
									rted-to nun			r C	is not info	rme	d of
									ntation not	allov	wed).				
ICDN Davage	. 4		BC = PI		notified o	t call	diversion								
ISDN Parame values:	eter		BC = PL	XII											
SIP Paramete	er v	alues:	Dial strir	ng pa	rameters	optic	ns=PIXIT								
				٠.		•									
					ported he	ader	:								
			Case a)			ام م									
					orted: 10		and preco	nditi	ion						
			Jase c)	Jupp	onicu. 10	0 161	and prece	<i>n</i> ruiti	011						
			a = line	(PIXI	T)										
			b = line	PIXI	T)										
			m = line	(PIX	IT)										
Comments:		R 4	 	- 1	0005		CCCE		A.C.	_	0005		וור ף		IF C
ISDN		IVI	GCF	I-	CSCF	5	-CSCF		AS I	P	-CSCF	-	UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE 100 Trying	→									
					100 Trying		INVITE	→							
							100 Trying INVITE	+							
							100 Trying	→	INVITE	→					
											INVITE	→			
							180	→	180	+	180	+			
ALERTING		+	180	+	180	+	180	+							
ALERTING			180		180		CANCEL	+							
							CANCEL	→	487 Request	+	CANCEL 487	→			
									terminated		Request terminated				
							487 Request	→			terminateu				
							terminated ACK	+				1_	1		
									ACK	→	ACK	→			
							INVITE	+	U		7.010	Ĺ			
									INVITE 100 Trying	+		-	INVITE	→	
									180	+			100 Trying 180	+	
							180	→	100	_			100	7	
ALERTING	+		180	+	180	+	180	+					200 OK	+	
							200 014	→	200 OK	+					
					200 OK	+	200 OK 200 OK	+				L			
CONNECT	+		200 OK ACK	←	ACK	→	ACK	→							
			AON		AUN		ACK	+							
DISC (UE1)	→		BYE	→			-		ACK	→		1	ACK	→	
, ,					BYE	→	BYE	→							
							BYE	7	BYE	→			BYE	→	
		-							200 OK BYE	+		H	200 OK BYE	+	
DEL (UEA)	_		200 01/ 51/5		200 014		200 OK BYE	→							
REL (UE1)	+		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+							
RLC (UE1)	→														

ISS_XXSS	CFN	NR 05		ET	ISDN refe SI EN 300 auses 6.1	0 207	7-1 [i.5],				NGN re ETSI TS		ence to: 1 604 [45]	
TSS reference							ary_servic								
Configuration			diversion	n (for	warding c	r def	lection) =		l user comr	nun	ication ret	enti	ion on inv	voca	tion of
Selection crite	eria	:	Call forw	ardir uppo	ng by the rted	netw	ork	<i></i>							
- ,			CF Notif	icatio	ns suppo	rted		.,	-				1 1.		
Test purpose	:		The dive	rting icatio	user acco	epts ward	the comm	unica rted	nanswered ation after s to user sha	send	ding the IN	VIT	ΓE reque:	st, th	ie
ISDN Parame values:	eter		BC = PI	ΧIΤ											
SIP Paramete	er v	alues:	Dial strir	ng pa	rameters	optic	ns=PIXIT								
			Case a) Case b)	no 1 Supp Supp (PIXI)	oorted: 10 oorted: 10 T) T)	0 rel		onditi	ion						
Comments:															
ISDN		M	GCF	l-	CSCF	S	-CSCF		AS	F	P-CSCF		UE-B	U	JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	4	INVITE	→							
							100 Trying INVITE	4							
							100 Trying	1							
									INVITE	→	INVITE	→			
									180	+	180	↑ ↓			
							180	→							
ALERTING		+	180	+	180	+	180	+							1
, LEITHING		•	100				181	+							
NOTIFY	+		181	+	181	+									1
(UE 1)	Ľ		101												
									INVITE 100 Trying	→			INVITE	_	
	H								100 Trying	~			100 Trying	→	-
									180	+			180	+	
ALERTING	+		180	+	180	+	180 180	→							1
	È						CANCEL	+							
							CANCEL	→	487 Request terminated	+	CANCEL 487 Request terminated	+			
			_				487 Request terminated ACK	+							
		_					AON		ACK	→					
	H										ACK	→	200 OK	+	
									200 OK	+			200 UK	_	
					202.014	,	200 OK	→							
CONNECT	+		200 OK	+	200 OK	+	200 OK	+	1				1		1
			ACK	→	ACK	→	ACK	→							
	Н						ACK	+	ACK	→			ACK	→	
DISC (UE1)	→		BYE	→					7.01	Ĺ			7.01		
	H				BYE	→	BYE	}							
							BYE		BYE	→			BYE	→	
													200 OK	+	
	H								200 OK BYE	+			BYE		
DEL (UEA)	_		200 OK DVC	+	200 014	-	200 OK BYE	→							
REL (UE1)	+		200 OK BYE		200 OK BYE	+	200 OK BYE	_	<u></u>						<u> </u>
RLC (UE1)	→														

ISS_XXSSCFNR 06	ISDN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	ISDN-SIP-SIP/Supplementary_services/CFNR	
Configuration:	The user B is provided with CFNR ("Served us URI to originating user in diversion notification the diverted-to user" = Yes, "served user receiforwarded" = Yes, Served user communication (forwarding or deflection) = Yes).	" = Yes, "diverting number is released to ives notification that the call has been
Selection criteria:	Call forwarding by the network CFNR supported CF Notifications supported	
Test purpose:	Ensure that when user A calls user B, if unans The diverting user accepts the communication communication path towards the diverted to use and procedures in IETF RFC 3261 [28]. User the diverted-to number and user C is informed presentation allowed). User B is notified of cal	a after sending the INVITE request, the ser shall be released according to the rules A is notified of call diversion and informed of I of the forwarding number (user B has
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

ISDN		N	IGCF	I	-CSCF	S	-CSCF	Α	\S	F	-CSCF		UE-B	U	E-(
05TUD (UE 1)			D 0 475		15.0 (17.5										
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+	INVITE		-					-	
					-)					-		
					-		100 Trying	+					-		
					-		INVITE						-		
					-		100 Trying		INVITE	→			-		
					-				INVITE	7	INVITE	→	-		
			+				-		180	+	180	+		-	
			+				180	→	180		180	_		-	
			+				180	- 7	_					-	
ALERTING		+	180	+	180	+	100		_					-	
ALEKTING			100	_	100	_	181	+	+						
			+		181	+	101		_					-	
NOTIFY	+		181	+	101	_	 		+	_			-		
(UE 1)	~		101	~	I								I		
(02 1)	+		+		-		+ +		INVITE	→				\vdash	
	+				 				100	+	 		INVITE	→	
					1				Trying	\			"**		
	+				<u> </u>		 		MESSA	→					
					1				GE	١			1		
											MESSAGE	→			
													100 Trying	+	
									180	+			180	+	
	1						180	→	.00				.00		
	1		180	+	180	+	180	+							
			.00		.00	<u> </u>	CANCEL	÷	+						
	1						CANCEL	-			CANCEL	→			
	1						07.11.022		487	+	487 Request	+			
									Request	_	terminated	_			
									terminat						
									ed						
							487 Request	→							
							terminated								
							ACK	+							
									ACK	→					
											ACK	†			
													200 OK	+	
								-	200 OK	+					
							200 OK	→							
					200 OK	4	200 OK	+							
CONNECT	+		200 OK	+											
			ACK	→	ACK	1	ACK	→							
	\perp				1		ACK	+		<u> </u>			ļ	لــِــا	
					ļ		1		ACK	→			ACK	→	
DISC (UE1)	→		BYE	→											
					BYE	1	BYE	→							
	\perp				1		BYE	+		<u> </u>			ļ	لــِــا	
									BYE	→			BYE	→	
													200 OK BYE	+	
	1]						1		200 OK	+			_	l T	
	\perp				1				BYE				ļ		
	لب						200 OK BYE	→					ļ		
REL (UE1)	+		200 OK BYE	+	200 OK BYE	Ψ	200 OK BYE	+							
RLC (UE1)	→														

ISS_XXSS	CFI	IR 07		ET	ISDN refe SI EN 300 auses 6.1,	207	7-1 [i.5],						rence to: 24 604 [45]	
TSS reference	ce:		ISDN-SI	P-SII	P/Supplem	nenta	ary_servic	es/C	FNR						
Configuration			The use URI to o the divers forwards	r B is rigina rted-t ed" =	provided ating user to user" = `	with in di Yes, ed us	CFNR ("S version no "served u ser commu	Serve otifica iser i	ed user allo ation" = Yes receives no ation retenti	s, "d tific	liverting n ation that	um the	nber is rele e call has	ease beer	d to
Selection crit	teria	:	Call forw	/ardir uppo	ng by the r	nétw									
Test purpose	9:		Ensure the diversity of	that verting nication cedurated-t	when user user acce on path towers in IETF to number	A ca epts ward RF and	the comm Is the dive C 3261 [2 user C is	unica rted 8]. U infor	nanswered ation after s to user sha ser A is no med of the	sence all be tified forv	ding the IN e released d of call d varding n	VVI d a live	ITE reque eccording tersion and	st, th o the infor	e rules med of
ISDN Param values:	eter		BC = PI		allowed). (<u> </u>	D IS HOLI	IOUITE	ed of call di	vers	SIOI I.				
SIP Paramet	ter v	alues:	PIXIT fo Case a) Case b)	r sup no 1 Supp Supp (PIXI (PIXI	ported: 100 ported: 100 T) T)	ader O rel	:		ion						
Comments:															
ISDN		M	GCF	Į.	-CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	IE-C
SETUP (UE 1)	→		INVITE	→	INVITE 100 Trying	→	INVITE	→							
ALERTING		+	180	+	180	÷	100 Trying INVITE 100 Trying 180 180	+ + + +	INVITE 180	→	INVITE 180	→ ←			
					181	+	181	+							
NOTIFY (UE 1)	+		181	+	101				INVITE 100 Trying MESSAGE	→ ← →	MESSAGE	→	INVITE 100 Trying	→	
			180	+	180	+	180 180 CANCEL CANCEL	+ + +	180 487 Request	+	CANCEL 487	→	180	+	
							487 Request terminated	→	terminated		Request terminated				
	+						ACK	+	ACK	→		\vdash			
									200 OK	+	ACK	→	200 OK	+	
						-	000 011	•							1
CONNECT	+		200 OK ACK	+	200 OK ACK	÷	200 OK 200 OK ACK ACK	→ + +							
CONNECT DISC (UE1)	+						200 OK ACK	÷	ACK	→			ACK	→	
			ACK	→	ACK	→	200 OK ACK ACK BYE	+ + +		→ →			ACK BYE 200 OK BYE	→	

ISS_XXSS	CFI	NR 08			ISDN refe TSI EN 30 auses 6.1	0 20	7-1 [i.5],				NGN re ETSI TS		ence to: 1 604 [45]	
TSS reference	e:		ISDN-S	IP-SI	IP/Supplei	ment	ary_servic	es/C	CFNR						
Configuration			The use	r B i	s provided	with	CFNR ("S	Serv	ed user all	ows	the prese	ntat	ion of for	ward	led to
· ·			URI to c	rigin	ating user	r in di	iversion no	tific	ation" = Ye	es, "	diverting n	umb	oer is rele	ease	d to
									eceives no						
									ation retent						
					or deflection										
Selection crit	eria	ı:			ing by the										
			CFNR s			- • • •									
					ons suppo	orted									
Test purpose	:						alls user B	. if u	nanswered	d. th	e call is fo	rwa	rded to u	ser ()
	•								ation after						
									to user sh						
							C 3261 [2		3001 011	h	. J. J. J. J. J. J. J. J. J. J. J. J. J.	40	u	JC	
									ormed of th	ne d	iverted-to	ույտ	ber and	user	Cis
									ser B has p						
					all diversio		3	(- J				,. 000	0	
ISDN Parame	eter	,	BC = PI												
values:				1											
SIP Paramete	er v	alues.	Dial etri	na na	arametere	ontic	ns=PIXIT								
on rainet	∪ı v	aidos.	יטים אונים	y Po		oput	,,,o-i i/\iI								
			PIXIT fo	rsur	pported he	aher									
			Case a)			Jauel	•								
					ported: 10)() r ₌									
							and preco	ndit	ion						
			Case ()	Sup	porteu. 10	,U 161	and piece	niull							
			a = line	/DIV	IT)										
			b = line												
			m = line												
Comments:			III = IIIIe	(ГІХ	XII <i>)</i>										
ISDN		N.A.	GCF	ı	-CSCF	0	-CSCF		AS		P-CSCF		UE-B	11	E-C
		101				٦	3301		,	- -	0001			U	
SETUP (UE 1)	→		INVITE	→	INVITE	→									
				1	100 Trying	+	INVITE	→			1		 		
							100 Trying	+							
					1	-	INVITE 100 Trying	<u>+</u>					1		
				1			100 Hyling	7	INVITE	→			†		
											INVITE	→			
						-	180	→	180	+	180	+			
							180	+							
ALERTING		+	180	+	180	+	404	L							
				 	181	+	181	+					 		
NOTIFY (UE 1)	+		181	+						I.					
	-			1	-				INVITE 100 Trying	→			INVITE	→	
				L	<u>L</u>	L			100 Hyllig	Ť			100 Trying	+	
							4		180	+			180	+	
ALERTING	+		180	+	180	+	180 180	→							
ALLICINO	È		100	È	100	Ė	CANCEL	+							
		-					CANCEL	→	407.5	_	CANCEL	→			
									487 Request terminated	+	487 Request terminated	+			
							487 Request	→							
	-			1	-		terminated ACK	+					1		
	t				<u> </u>		AUN		ACK	→					
											ACK	→	000 014		
	1					1			200 OK	+			200 OK	+	
							200 OK	→		Ĺ					
CONNECT	+		200 OK	-	200 OK	+	200 OK	+							
CONNECT	-		ACK	←	ACK	→	ACK	→							
							ACK	+		Ļ					
	→		BYE	→	1	-	1		ACK	→			ACK	→	
DISC (LIE4)	_		DIC	7	BYE	→	BYE	→							
DISC (UE1)	Ť		t				BYE	+							
DISC (UE1)	Ĺ			1											1
DISC (UE1)									BYE	→			BYE 200 OK	→	
DISC (UE1)										→			200 OK BYE	+	
DISC (UE1)							200 04 045		BYE 200 OK BYE	→			200 OK		
DISC (UE1)	·		200 OK BYE	+	200 OK BYE	+	200 OK BYE 200 OK BYE	}					200 OK		

ISS_XXSS	CFI	NR 09		ET	ISDN refe SI EN 300 auses 6.1	0 207	7-1 [i.5],						rence to: 24 604 [45		
TSS reference				P-SII	P/Suppler	nenta	ary_servic								
Configuration	n:		User B is to original diverted forwards	s pro ating -to us ed" =	vided with user in di ser" = No, no) Serve	CFI versi ser d us	NR ("Serve ion notifica ved user r ser commu	ed us ation ecei	ser allows t " = No "dive ves notifica tion retenti	ertin ition	g numbe that the	r is call	released I has beer	to th า	
Selection crit	eria	:	Call forw	vardir uppo		netw									
T4					ns suppo			:		41					
Test purpose	:		The dive commun and prod User A is is not inf	erting nication cedures notification	user according path to res in IET if if ied of called of the feed	epts ward F RF II div orwa	the comm Is the dive C 3261 [2 ersion and	unica rted 8]. d not ber (nanswered ation after s to user sha informed c (user B has	sence all be	ding the II e release e diverted	۷۷۱ d a d-to	TE reque ccording to number a	st, the to the and u	e rules
ISDN Parame	eter	,	BC = PI		riotilica c	i can	aiversion								
values: SIP Paramet					rameters	optic	ns=PIXIT								
			Case a) Case b)	no 10 Supp	oorted: 10	0 rel		onditi	ion						
0			a = line b = line m = line	(PIXI	T)										
Comments: ISDN		N/A	<u>I</u> GCF	L	CSCF	9	-CSCF		AS		-CSCF		UE-B		IE-C
		171							1.0		0001			Ŭ	
SETUP (UE 1)	->		INVITE	→	INVITE 100 Trying	} +	INVITE 100 Trying INVITE 100 Trying	+ + + +	INVITE 180	→ ←	INVITE 180	→			
ALERTING		+	180	+	180	+	180	Ψ							
									INVITE 100 Trying 180	+			INVITE 100 Trying 180	+ +	
ALERTING	Ļ		400		400		180	→							
ALEKTING	+		180	+	180	+	180 CANCEL	+							
							CANCEL	→	487 Request terminated	+	CANCEL 487 Request terminated	→			
							487 Request terminated	→							
	L						ACK	+	ACK	→		F			
											ACK	→	200 OK	+	
							000.5:1		200 OK	+			200 010	È	
	L				200 OK	+	200 OK 200 OK	1 4				L			
CONNECT	+		200 OK ACK	←	ACK	→	ACK ACK	→	101	ACK → ACK →					
DISC (UE1)	→		BYE	→	BYE	→	BYE BYE	→	ACK	-			ACK	7	
									BYE	→			BYE 200 OK BVE	→	
									200 OK BYE	+			200 OK BYE	+	
REL (UE1)	+		200 OK BYE	+	200 OK	+	200 OK BYE 200 OK BYE	→							
RLC (UE1)	→				BYE					<u> </u>		<u> </u>			
NLO (UE1)	17				l		1		1		1	1	l	1	l .

ISS_XXSS(CFI	NR 10			ISDN re TSI EN 3 lauses 6.	00 20	7-1 [i.5],						erence to 24 604 [4		
TSS reference	э:		ISDN-S	IP-S	IP/Supple	ment	tary_servi	ces/0	CFNR						
Configuration:									led with CF	NR	Served u	ise	r commur	nicatio	on
			retentio	n on	invocation	n of c	diversion (forwa	arding or d	efled	ction) = N	o [(Clear call	to th	е
			served	user	on invoca	tion (of call dive	ersio	n], Served	use	commur	nica	ation rete	ntion	when
			forward	ing is	s rejected	at fo	rwarded-to	o use	er = No act	on a	at the forv	var	ding user	·).	
Selection crite	ria	:			ing by the									,	
							supporte	d							
Test purpose:									f CFNR wa	s n	ot succe	ssf	ul.		
									to user C v					ser b	usv.
ISDN Parame	ter	values.	BC = P		<u></u>		10 1011101							00. 2	,.
SIP Paramete					aramatara	onti	ons=PIXIT	-							
Sii Talamete	i v	aiues.	Diai Sili	ng p	arameters	Opti	0113-1 1/11								
			DIVIT f	or elli	pported h	aada	r.								
			Case a			caue	1.								
					ported: 1	00 ro	ı								
							ı I and prec	ondi	tion						
			Case C	σuρ	portea. It	JU IE	i and pied	oriul	uon						
			o – lina	line (PIXIT)											
				line (PIXIT) = line (PIXIT)											
0 1			m = ime) (PI)	(11)										
Comments:					000=		0005		10	_	0005	_			F 6
ISDN		MG	CF	I-	CSCF	S	-CSCF		AS	Р	-CSCF	<u> </u>	UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→						\vdash			
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \															
					100 Trying	+	INVITE	→	1						
							100 Trying	+							
							INVITE	+							
							100 Trying	→	INVITE	→					
									INVIIL		INVITE	→			
									180	+	180	+			
							180 180	}	-					1	
ALERTING		+	180	+	180	+	100	•							
							CANCEL	+							
							CANCEL	→	-		CANCEL	→			
											487	+		1	
											Request terminated				
									487 Request terminated	+	terminated				
							487 Request	→							
+							terminated ACK	+						1	
							,,,,,,,		ACK	→					
							INI) //TE				ACK	→			
	-						INVITE	+	INVITE	→		\vdash			
													INVITE	→	
							400	-2	486	+			486	+	
DISC # 17	+		486	+	486	+	486 486	<u>→</u>					ACK	→	
REL	→		ACK	`	ACK	÷	ACK	→							
RLC	+					-	ACK	+	A C17				-		
l l									ACK	→				1	

ISS_XXSS(IR 11		ET cla	SDN refe SI EN 300 uses 6.1,) 207 , 9.2.:	'-1 [i.5], 2, 9.2.5				_		rence to: 24 604 [4		
TSS reference			ISDN-SIF	P-SIP	P/Supplem	nenta	ry_service	s/CF	NR						
Configuration	1:		retention	on ir		of div	and is pro ersion (fo ersion.								
Selection crite	eria	:	Call forw	ardin	g by the r	etwo	rk								
Test purpose):		To verify User A ca busy.	that alls u	a call is re	eleas	ed correct is forward							d use	r
ISDN Parame values:			BC = PIX												
SIP Paramete	er v	alues:	PIXIT for Case a) (Case b) (Case c) (a = line (supp no 10 Supp Supp	oorted hea 00 rel orted: 100 orted: 100	ader:	ns=PIXIT and precor	nditio	on						
			b = line (m = line												
Comments:															
ISDN		М	GCF	I-	CSCF	S	-CSCF		AS	F	P-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+	INVITE 100 Trying INVITE	→							
							100 Trying	→	INVITE	→					
									180	+	INVITE 180	→			
							180	→							
ALERTING		+	180	+	180	+	180	+		1					
							CANCEL CANCEL	+		-					
							OANOLL				CANCEL	→			
											487 Request terminated	+			
							487 Request terminated	→							
							ACK	+			ACK	→			
-	-		-	-	-		INVITE	+	INVITE	→					
													INVITE	→	
}	-		-	1	-		486	→	486	+			486	+	
DISC # 17	÷		486	+	486	+	486	+							
REL RLC	→		ACK	→	ACK	→	ACK ACK	<u>→</u>	1			-		<u> </u>	
	È						,	*	ACK	→					
			l		l				1				ACK	→	

ISS_XXSS(CFN	IR 12		ET:	SDN refe SI EN 30 uses 6.1	0 207	'-1 [i.5],						rence to 24 604 [4		
TSS reference	e:		ISDN-SIF				ry_service	s/CF	NR						
Configuration	1:		The user	B is	in networ	k N2	and is pro	vide	d with CFN ding or def				communi	ication	n
Selection crit	eria	i	Call forward	ardin	g on no r	eply s	supported								
Test purpose):		forwardin	ig use			is forward inues to al		user C wh	no is	user de	terr	mined use	er bus	y. The
ISDN Paramovalues:	eter	•	BC = PIX	ΊΤ											
SIP Paramet	er v	alues	: Dial string	g par	ameters	optior	ns=PIXIT								
			PIXIT for Case a) r Case b) S Case c) S	no 10 Suppo Suppo	0 rel orted: 10 orted: 10	0 rel	and precor	nditic	on						
			b = line (l	PIXIT)										
Comments:			m = line (PIAI	1)										
ISDN			MGCF	-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
							INVITE	→							
							INVITE		INVITE	→					
											INVITE	→			
									180	+	180	+			
							180	→	160	_					
							180	+							
ALERTING		+	180	+	180	+	-								
			100		181	+	181	+							
NOTIFY (UE 1)	4		181	+											
(OL 1)							INVITE	+							
									INVITE	→			INVITE		
									486	+			486	+	
							486	→			ACK	→			
-	+					1	ACK	+	ACK	→		1	ACK	→	
									200 OK	÷	200 OK	+	,,,,,,,	Ť	
	lacksquare				200 OK	+	200 OK 200 OK	→			ACK	\			
CONNECT	+		200 OK	+	200 OK	<u> </u>	200 UK								
			ACK	→	ACK	→	ACK	→							
-	1					<u> </u>	ACK	+	ACK	→					
DISC (UE1)	→		BYE	→					7.010	Ľ					
			<u> </u>		BYE	→	D)/E								
	\vdash						BYE BYE	<u>→</u>	-					-	
									BYE	→	BYE	→			
]		200 OK BYE	+			
	T					 			200 OK BYE	+	DIE				
					000 011		200 OK BYE	→							
REL (UE1)	+		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+							
RLC (UE1)	→		200 OK DIL			<u> </u>			1						
				•		•	<u>.</u>		•			•			

TSS reference: ISDN-SIP-SIP/Supplementary_services/CFNR Configuration: The user B is in network N2 and is provided with CFNR. Served user communic retention on invocation of diversion (forwarding or deflection) = Yes. Selection criteria: Call forwarding by the network Call forwarding on no reply supported Test purpose: User A calls user B, the call is forwarded to user C who is network determined The forwarding user User B continues to alert. ISDN Parameter values: BC = PIXIT BC = PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1)	S_XXSSCFN	IR 13		ET:	SDN refe SI EN 30 uses 6.1	0 207	'-1 [i.5],						rence to 24 604 [4		
retention on invocation of diversion (forwarding or deflection) = Yes. Selection criteria: Call forwarding by the network Call forwarding on no reply supported User A calls user B, the call is forwarded to user C who is network determined The forwarding user User B continues to alert. ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1)			ISDN-SIF	P-SIP	/Supplen	nenta	ry_service	s/CF	NR						
Selection criteria: Call forwarding by the network Call forwarding on no reply supported Test purpose: User A calls user B, the call is forwarded to user C who is network determined The forwarding user User B continues to alert. BC = PIXIT SIDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1)	nfiguration:		The user	B is	in networ	k N2	and is pro	vide	d with CFN	R. S	Served us	ser	commun	icatio	n
Call forwarding on no reply supported	_		retention	on in	vocation	of div	version (fo	rwar	ding or def	lecti	on) = Ye	s.			
Call forwarding on no reply supported	ection criteria	<u></u>	Call forwa	ardin	g by the r	netwo	rk								
Test purpose: User A calls user B, the call is forwarded to user C who is network determined The forwarding user User B continues to alert. BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT BC = PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) BC = PIXIT BC = PIXIT Comments: ISDN															
The forwarding user User B continues to alert.	st purpose:		User A ca	alls u	ser B, the	e call	is forward	ed to	user C wh	no is	network	c de	etermined	user	busy.
SDN Parameter values: Dial string parameters options=PIXIT			The forwa	ardin	g user Us	ser B	continues	to al	ert.						,
Values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) I → INVITE INVITE NNVITE NNVITE ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B SETUP (UE 1) I → INVITE INVITE NNVITE	N Parameter	<u></u>													
PIXIT for supported header:	ues:														
PIXIT for supported header:	Parameter v	/alues:	Dial string	g par	ameters	optior	ns=PIXIT								
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE			,	01											
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP (UE 1) → INVITE			PIXIT for	supp	orted he	ader:									
Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) MGCF															
Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B SETUP (UE 1) → INVITE → I						0 rel									
a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) m = line (PIXIT) line (PIXIT) m = line (PIXIT) nivite → linvite						and precor	nditio	n							
b = line (PIXIT) m = line (PIXIT) Comments: ISDN															
b = line (PIXIT) m = line (PIXIT) Comments: ISDN			a = line (PIXIT	7)										
m = line (PIXIT) Comments:															
SETUP (UE 1) →															
ISDN MGCF	mments:		111 – 11110 ((1 17 (1	• /										
SETUP (UE 1) → INVITE		M	GCF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UF-B	T	JE-C
INVITE I			T .				1		T	•	000.		<u> </u>	 	
INVITE I	TUP (UE 1) →		INVITE	→	INVITE	→	15.075							1	
INVITE INVITE			_									-		+	
ALERTING 180 +									INVITE	→					
180															<u> </u>
180									180	+	180	_		+	
ALERTING															
ALERTING 180 181 181					180	4	180	+				-		+	
NOTIFY (UE 1) INVITE INVITE INVITE ACK ACK ACK ACK ACK ACK ACK AC	ALERTING	+	180	+	100										
(UE 1)	NOTIFY		404	,	181	+	181	+						1	
INVITE			181]					1	
A86	, ,						INVITE	+							
486		1	1									1		+	1
ACK							486							\pm	
200 OK → AC							ACK	+	200 014	_	200 014	_		ullet	
CONNECT ← 200 OK ← 200 OK ← ACK → A		1					200 OK	→	200 OK	-				+-	1
ACK					200 OK	+						Ė			
ACK ← ACK →	CONNECT +	<u> </u>			VCh		VCK							+	
DISC (UE1) → BYE		 	AUN	7	AUN	+ -				1		1		+-	
BYE → BYE → BYE → BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE ← BYE → 200 OK BYE →									ACK	→					
BYE → BYE ← BYE → BYE → BYE → BYE → BYE → 200 OK BYE ← 200 OK BYE ←	DISC (UE1)	1	BYE	→	RVE	-				 		<u> </u>		+	1
BYE ← BYE → BYE → 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE → 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE ← 200 OK BYE → 200 OK BYE ←		<u> </u>	1		DIL	- 	BYE	→		t		1		+-	
200 OK BYE → 200 OK BYE ← 200 OK BYE →								+	D. C		D) / E	Ļ		1	
200 OK BYE → STATE OF THE STAT		 	-			1			RAF	→				+-	
200 OK BYE →												Ĺ		Ш_	
							200 OK BYE		200 OK BYE	+				ullet	
200 OK ← 200 OK BYE ←					200 OK	+	200 OK BYE	-	1			1		+-	
BYE				<u> </u>										Д	<u> </u>
REL (UE1)		<u> </u>	200 OK BYE	+					ļ	<u> </u>		1		+-	

ISSI_XXSSCFNR 14	ISDN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	clauses 6.1, 9.2.2, 9.2.5 ISDN-SIP-ISDN-ISDN/Supplementary_services	 s/CENR
Configuration:	The user A and the user D are in network N1. Tuser B is provided with CFNR. User D forwards	The user B and C are in network N2, and
Selection criteria:	Call forwarding by the network Call forwarding on no reply supported	
Test purpose:	Ensure that when user A calls user B, the call is User D forwards the call to back to user B. Ens	
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.2.2.7 CFNL

ISI_XXS			(ETSI claus	ON refere EN 300 2 ses 6.1, 9	07-1 .2.2,	[i.5], 9.2.5				GN refere SI TS 124	ence to: 604 [45]						
TSS refere			ISDN-	-SIP-	ISDN/Sup	plen	nentary_se	ervic	es/ CFNL									
Configurati	on:						C are in n er C is poir				er B is in r	network N2 a	and is	i				
Selection c	rite	ria:			rding by th ported	ne ne	etwork		·									
Test purpo	se:		Ensur	e tha	at in the a	ctive	calls user call state orrectly (e.	(N10) the voice	tran	isfer on th	ser C. ne media an	d B-					
ISDN Para	me	ter	BC =	PIXI	Γ													
SIP Param	ete	r values:																
Comments			+															
ISDN	•	MGC)E	I_	CSCF	9	-CSCF		AS	ГР	-CSCF	UE-B	11	E-C				
IODIN		IVIO)	- 1-														
SETUP (UE 1)	→		INVITE	→	→ INVITE →													
					100 Trying													
							100 Trying	+										
							INVITE	+ +										
							100 Trying 181	+										
					181	+												
NOTIFY (UE 1)	4		181	+			INVITE	+										
					INVITE	+	100 Trying	→					1					
					100 Trying	→												
			INVITE	+														
SETUP (UE 2)	+	11	00 Trying	→						-								
ALERTING (UE 2)	→		180	→														
					180	→	180	→										
ALERTING (UE 1)	+		180	+	180	+	180	+										
CONNECT	4		200 OK	→														
(UE 2)	Ľ		200 OK						<u> </u>									
					200 OK	→	200 OK	→										
CONNECT	+		200 OK	+	200 OK	+	200 OK	+		1			1					
(UE 1)	Ĺ		ACK	→	ACK	→	ACK	→		-								
			ACK	+	ACK	+	ACK	+										
DISC (UE1)	→		BYE	→	BYE	→	BYE	→										
DISC (UE2) REL (UE2)	+	20	BYE 0 OK BYE	←	BYE	+	BYE	+		-								
RLC (UE2)	÷	20	OOKBIL	200 OK → 200 OK BYE →														
DEL (UEA)			0 01/ 5)/5		200 OK BYE	+	200 OK BYE	+										
REL (UE1) RLC (UE1)	↓ ↑	20	0 OK BYE	+			-			1			+					
INLO (OL I)					<u> </u>		<u> </u>		L	٠—	L							

ISI_XXSS	CFI	NL 02	ET	SIEN	reference N 300 207 S 6.1, 9.2.	'-1 [i.	.5],			_	N refere				
TSS referen	ce:		ISDN-SI	P-ISI	DN/Suppl	eme	ntary_ser\	/ices	/CFNL						
Configuratio									N1. The ι	ıser l	B is provi	ded	with CFI	٧L	
									orwarded						ersion
			notificati	on" =	Yes. "div	∕ertir	na number	is re	eleased to	the o	diverted-to	o us	ser" = Yes	s). Us	ser C is
			point-to-				3							,	
Selection cri	teri	a:			ng by the	netw	/ork								
			CFNL st	Iodar	rted										
					ons suppo	rted									
Test purpos	e:						alls user B	. the	call is for	ward	ed to use	r C.	user A is	s noti	fied of
. cot parpoo	٠.		call dive	rsion	and infor	med	of the div	ertec	d-to numbe	er (us	ser C has	nre	sentation	allo	wed -
									orwarding						
			allowed)				ionnoa oi		or war amig		DOI (400)		.ao p. 000	· ···	···
ISDN Param	ete	r	BC = PI												
values:	.010	•		1											
SIP Parame	ter	values.													
Comments:	toi	vaiacs.													
ISDN		MC	GCF	I-CSCF S-CSCF AS P-CSCF UE-B UE-C											
IODIN		IVIC	301	1-	<u> </u>		T			- 1	-0301		OL-D		L-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Truin a	+									
					100 Trying	-	INVITE	→							
							100 Trying	+							
							INVITE	+							
							100 Trying 181	+							
					181	+									
NOTIFY (UE 1)	+		181	+			INVITE	+							
(011)							100 Trying	→							
					INVITE	Ψ,									
			INVITE	+	100 Trying	→				-					
			100 Trying	→											
SETUP (UE 2)	+		400	→											
ALERTING (UE 2)	7		180	7											
\ - /					180	→	180	→							
ALERTING	+		180	+	180	+	180	+							
(UE 1)	1		100	`											
00111507			222 014												
CONNECT (UE 2)	>		200 OK												
` ′					200 OK	→	200 OK	→							
CONNECT	+		200 OK	+	200 OK	+	200 OK	+				\vdash		 	
(UE 1)	Ĺ														
			ACK	→	ACK	→	ACK	→				П			
DISC (UE1)	→		ACK BYE	4	ACK	4	ACK	+		-		\vdash			
2.00 (021)	Ĺ		J.L		BYE	→	BYE	→							
DISC (UES)	L		DVE	_	BYE	+	BYE	+				Щ			
DISC (UE2) REL (UE2)	←		BYE 200 OK BYE	<u>+</u>	 							H		1	
RLC (UE2)	+				200 OK	→	200 OK BYE	→							
	1				BYE 200 OK	+	200 OK BYE	+		-		\vdash		1	
	L				BYE		200 ON DIE	L		\perp		Ll		<u></u>	<u> </u>
REL (UE1)	+		200 OK BYE	+								П			
RLC (UE1)	→				I						<u> </u>			<u> </u>	<u> </u>

ISI_XXSS	CFN	NL 03		ET	ISDN refe SI EN 30 auses 6.1	0 20	7-1 [i.5],					_		erence to 24 604 [4		
TSS reference	ce:		ISDN-SI				ntary_serv	ices	/CFN	L						
Configuration			The user with CFN diversion	r A a NL (" n not	nd the us Served us	er C ser al = Yes	are in neto lows the p s, "divertin	vork rese	N1. ntati	The u	forw	arded to l	UR	I to origina	ating	user in
Selection crit	eria	:	Call forw CFNL su	ardir Ippoi	ng by the	netw										
Test purpose):		call dive	rsion - CO	and not i	nforn ıser (alls user B ned of the C is not inf	dive	rted-	to nur	nbei	r (user C	has	presenta	ation	
ISDN Param values:	eter		BC = PI	ΧIΤ												
SIP Paramet	er v	alues:														
Comments:																
ISDN		MC	GCF	I-CSCF S-CSCF AS P-CSCF UE-B UE-C											JE-C	
SETUP (UE 1)	→		INVITE	TE → INVITE →												
					100 Trying	+										
							INVITE 100 Trying	1								
							INVITE	+								
							100 Trying	→								
					181	+	181	4								
NOTIFY (UE 1)	+		181	+			INVITE	+								
					INVITE	+	100 Trying	→								
					100 Trying	→										
	1		INVITE 100 Trying	+												
SETUP (UE 2)	+		100 Hyllig													
ALERTING (UE 2)	→		180	→	400		400									
					180 180	→	180 180	→								
ALERTING (UE 1)	+		180	+												
CONNECT (UE 2)	→		200 OK	→												
(02.2)					200 OK	→	200 OK	→								
CONNECT (UE 1)	+		200 OK	+	200 OK	+	200 OK	+								
(32.1)			ACK	→	ACK	→	ACK	→								
DISC (UE1)	→		ACK BYE	+	ACK	+	ACK	+	}		-				-	
DIGG (GL1)	Ĺ		DIL		BYE BYE	→	BYE BYE	→								
DISC (UE2)	÷		BYE	÷												
REL (UE2) RLC (UE2)	→		200 OK BYE	<u>→</u>	200 OK BYE	→	200 OK BYE	→								
					200 OK BYE	+	200 OK BYE	+								
REL (UE1) RLC (UE1)	←		200 OK BYE	+												

ISI_XXSSC	CFN		ETS clau	I EN	reference 300 207- 6.1, 9.2.2	·1 [i.{ 2, 9.2	5			_	N referei I TS 124					
TSS reference	e:		ISDN-SIP	-ISD	N/Supple	men	tary_servi	ces/C	CFNL							
Configuration	า:		with CFN The user presentat	L. B is ion c	in network	k N2 ed to	and is pro URI to ori	vide gina	N1. The us d with CFN ting user in d-to user"	IL (":	Served us ersion no	ser tific	allows the	e No,		
Selection crit	eria		Call forwa CFNL sup CF Notific	ardin oport cation	g by the n ed ns suppor	etwo ted	ork									
Test purpose	:		call divers	sion a	and not in	form	ed of the c	livert	call is forwa ted-to num n not allow	ber						
ISDN Parame	eter		BC = PIX	ΙΤ	•											
values:																
SIP Paramet	er v	alues:														
Comments:	<u> </u>															
ISDN		M	GCF	I-CSCF S-CSCF AS P-CSCF UE-B UE-												
IODIN		IVI	1													
SETUP (UE 1)	→		INVITE	→	INVITE	H										
					100 Trying	+										
							INVITE 100 Trying	+ +				₩				
							INVITE	+								
							100 Trying	→								
							INVITE	+								
					INVITE	+	100 Trying	→								
					100 Trying	→										
			INVITE	+												
SETUP (UE 2)	+		100 Trying	→						-						
ALERTING (UE 2)	→		180	→												
(022)					180	→	180	→								
AL EDTING	+		400	+	180	4	180	+								
ALERTING (UE 1)	-		180													
CONNECT (UE 2)	→		200 OK	→												
					200 OK	→	200 OK	+								
CONNECT (UE 1)	+		200 OK	+	200 OK	-	200 OK	-								
(/			ACK	→	ACK	→	ACK	→								
DIOC (UEA)	ĻŢ		ACK	+	ACK	+	ACK	+				Щ				
DISC (UE1)	→		BYE	→	BYE	→	BYE	→		+		₩		-		
	+				BYE	÷	BYE	+		1		H				
DISC (UE2)	+		BYE	÷								П				
REL (UE2) RLC (UE2)	→		200 OK BYE	→	200 OK	→	200 OK BYE	→				\forall				
					BYE 200 OK BYE	+	200 OK BYE	+				$ \cdot $				
REL (UE1)	+		200 OK BYE	+	DIL							Ħ				
RLC (UE1)	→															

ISI_XXSS	CFN	IL 05		ET cla	ISDN refe SI EN 300 auses 6.1,	207 9.2.	7-1 [i.5], 2, 9.2.5				NGN re ETSI TS	ference 124 604				
TSS reference	ce:				DN/Supple											
Configuration	n:		The use	r B is	in networ	k N2	and is pr	ovide	ed with Cl	FNL.	User C is	point-to-	multip	oint.		
Selection crit	teria	:	CFNL su	ıppoı	ng by the r rted r determin											
Test purpose	e:				a call is reuser B, the								l user	busy.		
ISDN Param	eter		BC = PI	XIT	*											
values:																
SIP Paramet	er v	alues:														
Comments:	. J. V															
ISDN		MC	GCF	I-CSCF S-CSCF AS P-CSCF UE-B UE-C												
102.1		111			I .	Ŭ	1		7.0	+ •	T .	1022				
SETUP (UE 1)	→		INVITE	→	INVITE	→										
					400 T i	+										
		-			100 Trying	_	INVITE	→		-	-	H				
							100 Trying	+						_		
							INVITE	+								
							100 Trying	→								
							181	+								
					181	+					1			_		
NOTIFY (UE 1)	+		181	4			INVITE	4								
							100 Trying	1								
					INVITE	+										
					100 Trying	→										
			INVITE	+												
			100 Trying	→												
SETUP (UE 2)	+	ļ							ļ		1					
RLC (UE 2)	→		486 Busy here	→	486 Busy here	→	486 Busy here	→								
DISC (UE 1)	+		486 Busy here	+	486 Busy here	+	486 Busy here	+								
REL	→	İ	ACK	→	ACK	→	ACK	→				l l		_		
RLC	+		ACK	+	ACK	+	ACK	+								

ISI_XXSS	CFN	IL 06		ET cla	ISDN refe SI EN 300 luses 6.1,	207 9.2.	7-1 [i.5], 2, 9.2.5					eference to 124 604 [4	-	
TSS referen	ce:				DN/Supple									
Configuration	n:		The use	r B is	in networ	k N2	and is pr	ovide	ed with C	FNL.	User C is	point-to-mi	ultipoi	nt.
Selection cri	teria	:	CFNL su	ıoqqı	ng by the r ted work deter			ısy						
Test purpose	e:		User A o	alls (a call is re user B, the							ful. k determine	ed use	er
ISDN Param values:	eter		BC = PI	XIT										
SIP Paramet	ter v	alues:												
Comments														
ISDN		МС	SCF	Į-	CSCF	S	-CSCF		AS	F	-CSCF	UE-B	l	JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→								
					100 Trying	+								
					-		INVITE	→						
							100 Trying INVITE	+		-			-	
							100 Trying	→		-				
							181	+						
					181	+								
NOTIFY (UE 1)	+		181	+			INVITE	+						
					INVITE	+	100 Trying	→		_				
	+				100 Trying	-	-			+			+	
	+		INVITE	+	100 Trying	ŕ				-	†		+	
			100 Trying	→			1				İ		1	
			486 Busy here	→	486 Busy here	→	486 Busy here	→						
DISC (UE 1)	+		486 Busy here	+	486 Busy here	+	486 Busy here	+						
REL	→		ACK	1	ACK	→	ACK	→						
RLC	+		ACK	4	ACK	+	ACK	+						

ISS_XXS		NL 07		cl	ISDN ref ISI EN 30 auses 6.	00 20 1, 9.2	07-1 [i.5], 2.2, 9.2.5					eference to: 124 604 [45				
TSS referen			ISDN-S	SIP-S	IP/Supple	men	tary_servi	ces/	CFNL							
Configuration					s provide											
Selection cr	iteria	a:	Call for CFNL s		ing by the orted	net	work									
Test purpos	e:					r A c	calls user E	3, the	e call is for	ward	ded to use	er C.				
ISDN Param		r values:						-								
SIP Parame																
Comments:																
ISDN		MG	CF	I-	CSCF	S	-CSCF		AS	Р	-CSCF	UE-B	П	E-C		
IODIV		1010	01	-	0001		1		1		0001	1 02 0				
SETUP	→		INVITE	→	→ INVITE →											
					100 Trying											
					100 Trying		INVITE	→								
							100 Trying	+								
							INVITE	+								
							100 Trying	→								
					181	+	181	+								
NOTIFY	+		181	+	181	_	+		INVITE	→		INVITE	→			
NOTILI	+		101	•			+		IIIVIIL			100 Trying	÷			
							†		100 Trying	+			_			
									180	+		180	+			
							180	→								
					180	+	180	+								
ALERTING	+		180	+					222.014	,		222.014	,			
	-						200 OK	→	200 OK	+		200 OK	+			
	+	-					200 OK 200 OK									
	+ +	-			200 OK	+	200 OK	_								
CONNECT	+		200 OK	+			†									
			ACK	→	ACK	→	ACK	→								
							ACK	+								
	\perp								ACK	→		ACK	→			
DISC (UE1)	→		BYE	→	DVE	→	1					_				
	+				BYE	7	BYE	→	-	-				-		
	+						BYE	7	1			+				
	+						DIL		BYE	→		BYE	→			
	1 1											200 OK BYE	+			
							<u> </u>		200 OK BYE	+						
•							200 OK BYE	→								
					200 OK BYE	+	200 OK BYE	+								
REL (UE1)	+	20	00 OK BYE	+	DIE		+					-		-		
RLC (UE1)	→	20	JO OK DIL	•			 		†			_				

ISS_XXS	SSC	FNL 08			ISDN re							eference to					
							07-1 [i.5], .2.2, 9.2.5				E15115	124 604 [4	၁၂				
TSS refere	ence):	ISDN-				ntary_service	s/CF	NL								
Configurat			The us	ser B	is provide	ed wit	th CFNL ("Se	ervec	user allov	vs tl	he present	tation of forv	var	ded to URI			
			to orig	inatir	ng user in	dive	sion notificat	ion"	= Yes, "div	/erti	ng numbe	r is released	d to	the			
					user" = Y												
Selection of	rite	ria:	Call fo	rwar	ding by th	e net	work										
			CFNL														
					tions sup												
Test purpo	se:						calls user B,										
							d of the diver										
						forme	ed of the forw	vardi	ng numbei	' (us	ser B has	presentation	all	owed).			
ISDN Para	me	er	BC = F	PIXIT	•												
values:																	
SIP Param	ete	r values:															
Comments	s:						-										
ISDN		MG	CF	I-CSCF S-CSCF AS P-CSCF UE-B UE-C													
SETUP	+		INVITE	→ INVITE → INVITE →													
SETUP	17		INVITE														
					100 Trying	+											
							INVITE 100 Trying	→									
							INVITE	+									
							100 Trying 181	→									
					181	+	101	_									
NOTIFY	+		181	+					INVITE	→		INVITE	→				
									100 Trying	+		100 Trying	+				
									180	+		180	+				
					180	+	180 180	+									
ALERTING	+		180	+			.00										
							200 OK	→	200 OK	+		200 OK	+				
							200 OK	+									
CONNECT	_		200 OK	+	200 OK	+											
CONNECT	4		200 OK ACK	-	ACK	→	ACK	→									
							ACK	+									
DISC (UE1)	→		BYE	→					ACK	→		ACK	→				
Bicc (CE1)	Ť		DIL		BYE	→											
	H				<u> </u>		BYE BYE	→			1						
	\vdash						DIE	+	BYE	→		BYE	→				
												200 OK BYE	+				
					 			+	200 OK BYE	+		BIE					
					222 011	,	200 OK BYE	→									
					200 OK BYE	+	200 OK BYE	+									
REL (UE1)	+	2	00 OK BYE	+													
RLC (UE1)	→									<u> </u>							

ISS_XXS		NL 09		c	lauses 6	.1, 9	07-1 [i.5], .2.2, 9.2.5				_	reference to S 124 604 [4				
TSS referer							ntary_servi									
Configuration	on:		User B	is pr	ovided wi	ith Cl	FNL ("Serv	/ed ι	user allows	the	presenta	tion of forwa	rded	to URI		
J			to origi	natin	g user in	diver	sion notific	catio	n" = Yes, "	dive	rting num	ber is releas	ed to	the		
					user" = N				,		J					
Selection cr	iteria	•			ling by the		work									
OCICCIIOTI CI	itoria	•	CFNL :			5 1101	WOIK									
					tions supp	orto	٨									
+ ,											1 14					
Test purpos	se:											er C, user A				
												has present		n not		
								rme	d of the for	ward	ding numb	oer (user B h	as			
			presen	tatio	not allov	ved).										
ISDN Paran	neter	values:	BC = F	TIXI					_							
SIP Parame																
Comments:																
ISDN	1	MG	CE	ı	I-CSCF S-CSCF AS P-CSCF UE-B U											
ISDIN		IVIG	CF	-	I-CSCF S-CSCF AS P-CSCF UE-B											
SETUP	→		INVITE	→	INVITE	→	1									
					100 Trying	+	INVITE	→								
							100 Trying	7								
							INVITE	÷								
							100 Trying	→								
					181	+	181	+								
NOTIFY	+		181	+	101	_			INVITE	→		INVITE	→			
												100 Trying	+			
									100 Trying	+		400	+			
							180	→	180	_		180	_			
					180	+	180	+								
ALERTING	+		180	+												
	-						200 OK	→	200 OK	+		200 OK	+			
							200 OK	+								
					200 OK	+										
CONNECT	+		200 OK	+ 1	101/		ACK									
	+		ACK	→	ACK	→	ACK ACK	}	-	1						
	+						7.01		ACK	→		ACK	→			
DISC (UE1)	→		BYE	→												
					BYE	→	BYE	→		1						
	+	-					BYE	7		!						
									BYE	→		BYE	→			
									000 6:15::-	Ļ		200 OK BYE	+			
	+	+					200 OK BYE	→	200 OK BYE	+						
	+	+			200 OK	+	200 OK BYE	+		1						
					BYE											
REL (UE1) RLC (UE1)	+	20	00 OK BYE	+						ļ						
KLC (UE1)	7	J			<u> </u>				I	<u> </u>				ļ		

ISS_XXSS	SCFN	NL 10		ET	ISDN refe SI EN 30 auses 6.1	0 207	7-1 [i.5],			E		erence to: 24 604 [45]			
TSS referenc	e:		ISDN-S				tary_servi	ces/	CFNL						
Configuration			The use	er A	and the u	ser C	are in ne	twork	κ N1. The ι	ıser	B is in ne	twork N2 an	d is		
J			provide	d wit	th CFNL.										
			The use	er B	is in netw	ork N	l2 and is p	rovio	ded with Cl	FNL	("Served	user allows	the		
												otification" =	= No,		
			"divertir	าg ทเ	umber is r	eleas	sed to the	dive	rted-to use	r" =	No).				
Selection crite	eria:		Call for	ward	ling by the	e net	work								
			CFNL s												
					ions supp										
Test purpose:	:											r C, user A i			
				liversion and not informed of the diverted-to number and user C is not inform											
				forwarding number (user B has presentation not allowed).											
ISDN Parame			BC = P												
SIP Paramete	er va	lues:													
Comments:															
ISDN		MG	GCF	I-CSCF S-CSCF AS P-CSCF UE-B U											
SETUP	→		INVITE	→	INVITE	→									
CETOI			1144112												
					100 Trying	+	INVITE	→							
							100 Trying	7							
							INVITE	ŕ							
	\dashv						100 Trying	<u>→</u>	INVITE	→		INVITE	→		
												100 Trying	+		
	+								100 Trying 180	+		180	+		
							180	→	100	Ì		100	,		
ALERTING	+		180	+	180	+	180	+							
ALEKTING	+		100						200 OK	+		200 OK	+		
							200 OK	→							
	-				200 OK	+	200 OK	+							
CONNECT	+		200 OK	+											
	+		ACK	→	ACK	→	ACK ACK	}							
	\dashv						ACK		ACK	→		ACK	→		
DISC (UE1)	→		BYE	→	D) (E										
	+	+			BYE	→	BYE	→				+			
	\pm						BYE	÷							
	\dashv								BYE	→		BYE 200 OK BYE	→		
	+	+							200 OK BYE	+		200 OR BYE			
	\Box				000 014		200 OK BYE	→							
					200 OK BYE	+	200 OK BYE	+							
REL (UE1)	+	2	200 OK BYE	+											
RLC (UE1)	→				L										

ISS_XXS	SCF	NL 11		С	ISDN ref TSI EN 30 lauses 6.	00 20 1, 9.2	07-1 [i.5], 2.2, 9.2.5					eference to 5 124 604 [4	-	
TSS referer	nce:						tary_servi							
Configuration	on:		The us	er B	is in netwo	ork N	I2 and is p	rovi	ded with C	FNL				
Selection co	riteri	a:	CFNL:	suppo										
Test purpos	se:		User A	calls	at a call is user B, tl	relea he ca	ased corre all is forwa	ctly rded	if CFNL w to user C	as n who	ot succe is user o	ssful . letermined u	ıser b	usy.
ISDN Parar	nete	r values:	BC = F	TIXI										
SIP Parame	eter	values:												
Comments:														
ISDN		MG	CF	I-	CSCF	S	-CSCF		AS	Р	-CSCF	UE-B	L	IE-C
SETUP	→		INVITE	→	INVITE	→				-				
					100 Trying	+								
							INVITE	→						
							100 Trying	+					1	
							INVITE	+					<u> </u>	
							100 Trying 181	↑ ↓					1	
					181	+	INVITE	_		→			1	
NOTIFY	T+		181	+	101		IIIVIIL					INVITE	→	
	1								486	+		486	+	
							486	→				ACK	→	
					486	+	486	+						
DISC # 17	+		486	+										
REL	→		ACK	→										
RLC	+			1	ACK	→	101/							
	\perp			ļ			ACK ACK	↑ ↓		-			-	
	+			<u> </u>			ACK	-	ACK	→				
L				l	ll		1		ACK		1	<u> </u>	1	l

TSS reference: ISDN-SIP-SIP/Supplementary_services/CFNL Configuration: The user B is in network N2 and is provided with CFNL Selection criteria: Call forwarding by the network Call forwarding unconditional supported Test purpose: To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: BC = PIXIT SIP Parameter values: Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP	ISS_XXS	SSC	FNL 12				00 2	nce to: 07-1 [i.5], .2.2, 9.2.5					eference to: 5 124 604 [4	_	
Selection criteria: Call forwarding by the network Call forwarding unconditional supported To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: BC = PIXIT SIP Parameter values: Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP	TSS referer	nce:		ISDN	-SIP	-SIP/Supp	oleme	entary_ser	vices	s/CFNL					
Call forwarding unconditional supported Test purpose: To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: SIP Parameter values: Comments: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP INVITE INVIT	Configuration	on:		The ι	ıser E	3 is in net	work	N2 and is	prov	vided wi	th CFN	IL.			
To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: SIP Parameter values: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP INVITE	Selection cr	riteria	a:	Call f	orwa	rding by t	he ne	etwork							
To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: SIP Parameter values: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP INVITE				Call f	orwa	rding unc	ondit	ional supp	orte	d					
User A calls user B, the call is forwarded to user C who is network determined user busy. ISDN Parameter values: SIP Parameter values: ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C SETUP I INVITE INVIT	Test purpos	se:									L was	not succ	essful.		
SDN Parameter values: BC = PIXIT														ined	user
SDN Parameter values: BC = PIXIT				1_											
SIP Parameter values: Comments: ISDN	ISDN Parar	nete	r values.			Т									
Comments: ISDN				DO =	1 1/(1	<u>'</u>									
ISDN MGCF I-CSCF S-CSCF AS P-CSCF UE-B UE-C			values.												
SETUP → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE → INVITE ← INV			MCC	_		CCCE		CCCE		۸۵		CCCE	IIE D	1 11	
100 Trying	ISDIN		IVIGC	Г	1-	CSCF	3	-CSCF		AS	F	7-USUF	UE-B	UI	E-U
INVITE →	SETUP	→	IN	NVITE	→	INVITE	→								
INVITE →						400 To do o									
100 Trying						100 Trying		INIVITE						+	
INVITE ←														 	
INVITE →									+						
DISC # 17 ← 486 ← 486 ← 1								100 Trying	→						
A86								INVITE			→				
DISC # 17										486	+				
DISC # 17								486							
REL → ACK → ACK → ACK → ACK → ACK → ACK → ACK → ACK ←						486	+	486	+						
RLC					_										
ACK → ACK ←				ACK	→	1011		ļ						\vdash	
ACK ←	RLC	+			<u> </u>	ACK	→	401	_					├	
7.6.1		+										-		} 	
$oldsymbol{I}$		+			 			AUN	_	ACK	→		 	+	

6.2.2.8 CD

6.2.2.8.1 Call Deflection-ISI

ISI_XXSSCD 01			ISDN reference to: ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5							NGN reference to: ETSI TS 124 604 [45]						
TSS reference		ISDN-SIP-ISDN/Supplementary_services/CD- Immediate response														
Configuration:			The user A and the user C are in network N1. The user B is in network N2 and is provided with CD ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = No). User C is point-to-multipoint.													
Selection crit	a:	User B has activated the CALL DEFLECTION service														
Test purpose:			Ensure that when user A calls user B, the call is deflected to user C, user A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is informed of the forwarding number (user B has presentation allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).													
ISDN Parameter			BC = PIXIT													
values:			Dial string parameters options=PIXIT													
Comments:			PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)													
			GCF I-CSCF S-CSCF						AS	P-CSCF UE-B UE-C					IE-C	
SETUP (UE 1) →				INVITE → INVITE		→										
SETUP (OE 1)			IIIVIIL	7	INVITE	7	INVITE INVITE	→	INVITE	→	INVITE	→				
									302	+	302	+				
							302	→	002	È						
							ACK	+	ACK	→	ACK	→				
					181	+	181	+								
NOTIFY (UE 1)	+		181	+	INVITE	+	INVITE	+								
SETUP (UE 2)	+		INVITE	+												
ALERTING (UE 2)	→		180	→						İ						
(UE 2)	H				180	→	180	→								
ALERTING (UE 1)	+		180	+	180	+	180	+								
CONNECT	→		200 OK	→												
(UE 2)					200 OK	→	200 OK	→								
CONNECT	+		200 OK	+	200 OK	+	200 OK	+								
(UE 1)			ACK	→	ACK	→	ACK	→								
DISC (UE1)	→		ACK BYE	+	ACK	+	ACK	+						\vdash		
DIGG (GL1)	Ĺ		DIL		BYE	→	BYE	→								
DISC (UE2)	+		BYE	+	BYE	+	BYE	+						-		
REL (UE2)	→		200 OK BYE	→	000 011		000 011 511									
RLC (UE2)	+				200 OK BYE 200 OK	→	200 OK BYE 200 OK BYE	→								
REL (UE1)	+		200 OK BYE	+	BYE											
RLC (UE1)	÷			•								L				

ISI_XXSSCD	02		I	SDN refe	renc	e to:				NGN re	efer	ence to:		
				SI EN 300						ETSI TS	12	4 604 [45]	
TCC reference:		ICDN CID		uses 6.1		•		D Immoo	lioto	*****				
TSS reference: Configuration:						ary_service in netwo						N2 and i	s nrc	vided
Cornigulation.						s the prese								
		diversion	notifi	cation" =	Yes,	"diverting	num	ber is rele	ased	to the d	iver	ted-to use	er" =	No,
				eceives n	otifica	ation that t	he c	all has be	en foi	rwarded'	' = r	no). User	C is _l	point-
Calaatian anitania		to-multipo		علد المحدم الما	- 01	U DEELE	OTIO	NI samias						
Selection criteria Test purpose:	1:					LL DEFLE s user B, t				to usor (·	cor A ic n	otifio	d of
rest purpose.		call divers												
		allowed -												•
		presentati								Ū		•		
						state (N10			nsfer	on the r	ned	ia and B-	chan	nels is
ISDN Parameter		performed BC = PIX		rectly (e.g	j. tesi	ting QoS p	aran	neters).						
values:		DC = PIXI	11											
SIP Parameter v	/alues:	Dial string	nara	ameters o	option	s=PIXIT								
			, ,		•									
		PIXIT for			ader:									
		Case a) n												
		Case b) S				ınd precor	ditio	^						
		Case c) 3	uppc	nteu. Tuc) IEI a	ilia precoi	iditio	11						
		a = line (F	PIXIT)										
		b = line (F												
		m = line (PIXIT)										
Comments: ISDN		IGCF	1.	CSCF		-CSCF		AS	П	-CSCF	1	UE-B		E-C
	IV					-0307		AS	F.	-CSCF	Н	UE-B	U	<u> </u>
SETUP (UE 1) →		INVITE	→	INVITE	→	INVITE	→							
						INVITE	+	IND OTE						
								INVITE	→	INVITE	→			
								302	+	302	+			
						302	→		Ì					
						ACK	+	ACK	→	ACK	→			
				181	+	181	+							
NOTIFY (181	+	101	-	INVITE	+							
(UE 1)				INVITE	+									
SETUP (UE 2)		INVITE	+						+					
ALERTING →		180	→											
(UE 2)				180	→	180	→				Ш			
ALERTING +		180	+	180	+	180	+				+			
(UE 1) CONNECT →	 	200 OK	→		<u> </u>				+		\vdash			
(UE 2)		200 010		000 011		000 014								
				200 OK 200 OK	→ +	200 OK 200 OK	→							
CONNECT (UE 1)		200 OK	+											
\== '/		ACK	→	ACK	→	ACK	→							
DISC (UE1) →		ACK BYE	←	ACK	+	ACK	+							
				BYE BYE	→	BYE BYE	}				+			
DISC (UE2)		BYE	+	215		212	_							
REL (UE2) → RLC (UE2) ←		200 OK BYE	7	200 OK	→	200 OK BYE	→				+			
	<u> </u>			BYE 200 OK	+	200 OK BYE	+		+		+			
1	1	1			1 -	_00 01 D1 L	-	ı			1		1	1
REL (UE1)		200 OK BYE	+	BYE					+		+			

ISI_XXSSCD 03		IS	SDN refe	renc	e to:				NGN re	efer	ence to:		
_			SI EN 300						ETSI TS	12	4 604 [45]	
T00 (IODAL OID		uses 6.1,			10)D	1: - 4 -		_			
TSS reference: Configuration:	ISDN-SIP The user										otwork N	2 200	4 ic
Corniguration.	provided v			ı C aı	ilu D ale ii	HIEU	WOIK IN I.	i iie t	1261 D 12	1111	IELWOIK IN	z and	J 19
	The user	B is i	n network	k N2 a	and is pro	vided	with CD (("Ser	ved user	all	ows the p	reser	ntation
	of forward												
	released t							eceiv	es notific	catio	on that the	e call	has
Selection criteria:	been forw User B ha												
Test purpose:	Ensure th								to user (. u	ser A is n	otifie	d of
root parpood.	call divers												
	forwarding												
	Ensure th							nsfer	on the n	ned	lia and B-	chan	nels is
ISDN Parameter	performed BC = PIXI		rectly (e.g	j. test	ing QoS p	aram	neters).						
values:	DC = PIXI	11											
SIP Parameter values:	Dial string	para	ameters c	ption	s=PIXIT								
	PIXIT for			der:									
	Case a) n Case b) S			\ rol									
	Case c) S				nd precor	dition	า						
	0400 0, 0	ирро	71.00. 100	1010	ina procor	iditioi							
	a = line (F												
	b = line (F												
Commenter	m = line (l	PIXII)										
Comments:	IGCF	I-(CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
							7.10						
SETUP (UE 1) →	INVITE	→	INVITE	→	INVITE	→							
					INVITE	+	INVITE	→					
									INVITE	→			
							302	+	302	+			
					302 ACK	→							
				101	+	_	ACK	→	ACK	→			
			INVITE	181 ←	7								
SETUP (UE 2)	INVITE	+											
ALERTING →	180	→											
(OL 2)			180	→	180	→							
ALERTING ←	180	+	180	+	180	+							
(UE 1)				-				-		-			
CONNECT →	200 OK	→											
(UE 2)			200 OK	→	200 OK	→							
CONNECT (+	200 OK	+	200 OK	+	200 OK	+							
(UE 1)		· →	ACK	→	ACK	→				1			
	ACK												
DISC (UE1) →	ACK BYE	↓ ↑	ACK	+	ACK	+							
			BYE BYE	→	BYE BYE	→							
DISC (UE2)	BYE	+	טוכ		טונ	_				L			
REL (UE2) → RLC (UE2) ←	200 OK BYE	→	200 OK	→	200 OK BYE	→							
·			BYE 200 OK	+	200 OK BYE	+				1			
1 1			200 UK										i I
REL (UE1)	200 OK BYE	+	BYE		200 011212	Ì							

ISI_XXS		04		ET cla	SDN refe SI EN 30 luses 6.1	0 207 , 9.2.	7-1 [i.5], .2, 9.2.5				ETSI TS	12	rence to: 4 604 [45]	
TSS reference	e:								CD- Imme						
Configuration	า:		provided	l with	CD.				N1. The us		3 is in ne	two	rk N2 and	lis	
Selection crit	eria	:							ION servic						
Test purpose):		Ensure t	hat ir	n the activ	/e ca	Il state (N ²	10) tł	call is defle ne voice tra arameters)	ansfe	er on the	me			nnels
ICDN Daram	-4				correctly	(e.g.	lesting QC	o pa	ilameters)	. US	er C is po	JIIIL	-to-munip	JIIIL.	
ISDN Param	eter		BC = PI	XIII											
values:	0	aluaai	Dial atric		romotoro	ontio	no DIVIT								
SIP Paramet	er v	alues:	Diai strir	ig pa	rameters	optio	ns=PIXIT								
			Case a) Case b) Case c) a = line	no 10 Supp Supp (PIXI	oorted: 10 oorted: 10 T)	0 rel		onditi	on						
			b = line												
			m = line	(PIX	IT)										
Comments:															
ISDN		M	GCF	 -	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
OLTOT (OLT)			IIIVIIL		IIIVIIL		INVITE	→							
							INVITE	+	IND/ITE	→					
									INVITE	7	INVITE	→			
											302	+			
							000		302	+					
							302 ACK	<u>→</u>							
									ACK	→	ACK	→			
					404	+	181	+							
NOTIFY (UE 1)	+		181	+	181		INVITE	+							
			INVITE	+	INVITE	+									
SETUP (UE 2)	+														
ALERTING (UE 2)	+		180	→											
(UE 2)	1				180	→	180	→							
					180	+	180	+							
ALERTING (UE 1)	1		180	+											
CONNECT (UE 2)	→		200 OK	→											
	1				200 OK 200 OK	<u>→</u>	200 OK 200 OK	<u>→</u>							
			ACK	→	ACK	→	ACK	`							
			ACK	+	ACK	+	ACK	+							
CONNECT (UE 1)	+		200 OK	+											
DISC (UE1)	→		BYE	→								L			
	П				BYE	→	BYE	→							
DISC (UE2)	+		BYE	+	BYE	+	BYE	+		1		+			
REL (UE2)	→		200 OK BYE	<u>`</u>											
RLC (UE2)	+				200 OK BYE	→	200 OK BYE	→							
					200 OK BYE	+	200 OK BYE	+							
REL (UE1) RLC (UE1)	↓		200 OK BYE	+						1					
INLO (UE1)							i .		<u>I</u>	1	1	1		1	l .

ISI_XXSS	CD	05		ETS cla	SDN refer SI EN 300 uses 6.1,	207 9.2.2	-1 [i.5], 2, 9.2.5				ETSI TS	12	rence to: 24 604 [45		
TSS reference					N/Suppler										
Configuration					in network				d with CE). Use	r C is poi	nt-1	to-multipo	int.	
Selection crit	eria	:			ork detern										
_					tivated the										
Test purpose	: :				a call is rel										
					ser B, the	callı	s forward	ed to	o user C v	who is	user det	err	nined use	r bus	sy.
ISDN Parame	eter		BC = PIX	JT											
values:			D: 1				DIVIT								
SIP Paramet	ei v		PIXIT for Case a) r Case b) \$	supp no 10 Suppo Suppo PIXIT	ported head 0 rel orted: 100 orted: 100	der: rel		nditio	on						
	-		005		0005	_	0005		40		0005	1	115 5		IF 0
ISDN		IVI	GCF	1-	-CSCF	5	-CSCF		AS	P	-CSCF		UE-B	U	IE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
							INVITE INVITE	1			INVITE	→			
							IIIVIIL				100 Trying				
									000		302	+			
							302	→	302	+					
							ACK	+							
							181	+	ACK	→	ACK	→			
					181	+	101	_							
NOTIFY (UE 1)	+		181	+			INVITE	+							
			INVITE	+	INVITE	+						_		 	\vdash
SETUP (UE 2)	+		1144112									t		1	
RLC (UE 2)	→		486 Busy here	→	486 Busy here	→	486 Busy here	→							
DISC (UE 1)	+		486 Busy here	+	486 Busy here	+	486 Busy here	+							
REL	→	•	ACK	→	ACK	→	ACK	→							
RLC	+		ACK	+	ACK	+	ACK	+				Щ	<u> </u>	ĺ	

ISI_XXS		06		ET cla	ISDN refe SI EN 300 auses 6.1	207 , 9.2.	7-1 [i.5], .2, 9.2.5				ETSI TS	12	ence to: 4 604 [45]	
TSS referen			ISDN-S	IP-IS	DN/Suppl	eme	ntary_ser	vices/	/ CD- Imm	edia	te respor	nse			
Configuration			The use	er B is	in netwo	rk N2	2 and is p	rovide	ed with CI	D. Us	er C is p	oint	t-to-multip	oint.	
Selection cri	teria	:			work dete										
									ION servi						
Test purpose	э:		To verif	y that	a call is r	elea	sed corre	ctly if	CD was r	not si	uccessfu	l.			
				calls	user B, th	e cal	l is forwar	ded t	to user C	who	is netwo	rk c	determine	d use	er
			busy.												
ISDN Param			BC = P												
SIP Parame	ter v	alues:	Dial stri	ng pa	rameters	optic	ns=PIXIT	•							
			Case a)	no 1 Supp Supp (PIXI (PIXI	ported: 10 ported: 10 T) T)	0 rel		onditi	ion						
Comments:				,											
ISDN		MG	CF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
SETUP (UE I)	7		INVITE	7	INVITE	7	INVITE	→							
							INVITE	+							
									INVITE	→	INVITE	→			
											302	+			
						-	302	→	302	+					
							ACK	-							
							404		ACK	→	ACK	→			
					181	+	181	+							
NOTIFY (UE 1)	+		181	+			INVITE	+							
	+		INVITE	+	INVITE	+				-		+			
	+		INVIIE							+		H			
			486 Busy here	→	486 Busy here	→	486 Busy here	→							
DISC (UE 1)	+		486 Busy here	4	486 Busy here	+	486 Busy here	+							
REL	→		ACK	→	ACK	→	ACK	→							
RLC	+		ACK	+	ACK	+	ACK	+							

ISI_XX					ISDN re ETSI EN : clauses 6	300 20 5.1, 9.	07-1 [i.5] 2.2, 9.2.5	,			ETSI		ference 124 604				
TSS refere		:	ISDN-	-SIP-	ISDN/Sup	plem	entary_se	ervic	es/ CD- du	ring	alerting						
Configuration	on:								rk N1. The to-multipa		r B is in	netv	vork N2 a	and is	provided		
Selection c		ria:							CTION ser								
Test purpos						ser A	calls user	B, tl	ne call is d	eflec	ted durir	ig a	lerting to	user	C.		
ISDN Parai values:	met	er	BC =	PIXI	Γ												
SIP Param	ete	r value	s: Dial s	tring	paramete	rs opt	ions=PIX	ΊΤ									
			Case Case	a) no b) Si c) Si ne (P		100 re	el	econo	dition								
			m = liı														
Comments	:			I-CSCF S-CSCF AS P-CSCF UE-B UE-C													
ISDN		M	GCF														
SETUP (UE 1)	→		INVITE	→	INVITE	→								+			
					100 Trying	+								1			
					100 Trying		INVITE	→						+			
							100 Trying	+									
							INVITE 100 Trying	←						┿			
							100 Hyllig		INVITE	→				+			
									100 Trying	+							
									INVITE	→	INVITE	→		₩			
											180	+		+			
									180	+							
							180	→						<u> </u>			
ALERTING		+	180	+	180	+	180	+						\vdash			
ALLININO			100	_	100	_					302	+		+			
									302	+							
							302 ACK	→						+			
							ACK	_	ACK	→	ACK	→		+			
					181	+	181	+						1			
NOTIFY	+		181	+													
(UE 1)					INVITE	+	INVITE	+						+			
					100 Trying	→											
			INVITE	+													
SETUP (UE 2)	+		100 Trying	→										+			
ALERTING	→		180	→	180	→	180	→									
(UE 2) ALERTING (UE 1)	+		180	+	180	+	180	+									
CONNECT (UE 2)	>		200 OK	→	200 OK	→	200 OK	→						1			
CONNECT (UE 1)	+		200 OK	+	200 OK	+	200 OK	+									
			ACK	→	ACK	→	ACK	→						igspace			
DISC (UE1)	→		ACK BYE	←	ACK BYE	←	ACK BYE	+		1				+-			
DISC (UE2)	+		BYE	+	BYE	+	BYE	+		1				+-			
REL (UE2)	→		200 OK BYE	→	200 OK	→	200 OK	→						T			
RLC (UE2)	+				BYE		BYE			1				+-	 		
REL (UE1)	+		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+									
RLC (UE1)	→											<u> </u>		<u> </u>			

ISI_XX	(SS	CD	80			_		rence to					_	eferenc			
) 207-1 [, 9.2.2, 9				ETS	SI TS	5 124 60)4 [4	5]	
TSS refer	enc	e:		ISI	DN-S	IP-ISDN/	Supple	ementary	ser	vices/ CD-	duri	ng alertir	ng				
Configura				The pro original	e use ovide ginat ertec	er A and to d with CD ing user in d-to user"	he use ("Ser n dive = Yes	er C are i ved user rsion noti , "served	n net allov ficati use	work N1. Two the preson was the preson with the preson with the preson work work work work work work work neceives and the preson wo	The senta "div	user B is ation of for erting nu	in no orwa imbe	rded to er is rele	URI t ased	o to the	
Selection	crite	eria.								-multipoint LECTION :		ice					
Test purp										B, the call is			urinc	alerting	n to u	ser C	
root parp	000	-		use pre	er A i esent	s notified	of cal wed -	diversio	n and	d informed d user C is	of the	ne diverte	ed-to	numbe	r (use	er C has	
ISDN Par	ame	eter			= P												
values:	4		.1	D:-	-1 -4-		-1		DIVIT	_							
SIP Parar	nete	er va	alues:	Dia	ai stri	ng param	eters	options=	PIXII								
				Ca Ca Ca a = b =	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)												
Comment	s:																
ISDN			MGCF		I-	CSCF	S-(JSCF		AS	Р	-CSCF	1	JE-B		UE-C	
SETUP (UE 1)	→		INVIT	E	→	INVITE	→										
						100 Trying	+	INVITE 100 Trying INVITE 100 Trying 100 Trying	+ + + +	INVITE 100 Trying INVITE	÷ ÷ ÷	INVITE 180	→ ←				
ALERTING	}	+	180		+	180	+										
								302	→	302	+	302	+				
								ACK	+	ACK	→	ACK	→				
						181	+	181	+	AUI	Ĺ	AUN	Ĺ				
NOTIFY (UE 1)	+		181		+	INVITE	+	INVITE	+								
						100 Trying	→										
			INVIT		4										-		
SETUP	+														1		
(UE 2) ALERTING	→		180		→	180	→	180	→						1		
(UE 2) ALERTING	+		180		+	180	+	180	+		-						
(UE 1) CONNECT	→		200 C		→	200 OK	→	200 OK	→		-				-		
(UE 2) CONNECT	+		200 C		+	200 OK	-	200 OK	+								
(UE 1)			ACK		→	ACK	→	ACK	→						<u> </u>		
			ACK	(+	ACK	+	ACK	+								
DISC (UE1) DISC (UE2)	↑ ↓		BYE BYE		+	BYE BYE	→	BYE BYE	+		\vdash				<u> </u>		
REL (UE2)	→		200 OK		+	200 OK BYE	-	200 OK BYE	+								
RLC (UE2) REL (UE1)	4		200 OK	BYE	+	200 OK BYE	+	200 OK BYE	+								
RLC (UE1)	→																

ISI_X	XX	SSCD	09			ISDN ref TSI EN 30 auses 6.	00 207	7-1 [i.5]						ence to: 4 604 [45				
TSS refe	ere	nce:		ISE					_ser\	rices/ CD-	durii	ng alertin	g					
Configu	rati	on:		The pro orio dive	e use video ginati erted	r A and the d with CFI ng user in the user	ne use NR ("S n diver = No,	er C are in Served us sion noting served us	n net ser al fication user i	work N1. T lows the p on" = Yes, receives no nultipoint.	he ι rese "dive	iser B is ntation o erting nu	in n f foi mbe	rwarded t er is relea	to UF ased	RI to to the		
Selectio	n c	ritoria:								ECTION S	Δrvi	~ <u></u>						
Test pur				Ens use has	sure er A is s pres	that when s notified sentation	user of call not all	A calls us diversion lowed - C	ser B n and OLR	, the call is I not inforn) and user allowed).	def	lected du of the div	erte	ed-to num	nber	(user C		
ISDN Pa	araı	meter		BC	= PI	XIT												
values:																		
SIP Para			ues.	PIX Cas Cas Cas a = b =	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) I-CSCF S-CSCF AS P-CSCF UE-B UE-C													
Comme																		
SETUP (UE 1)	→	IVI	GCF INVIT	ГЕ)- →	INVITE	→	JSCF		AS	P	-CSCF		OE-B		UE-C		
ALERTIN		•	180		+	100 Trying	÷	INVITE 100 Trying INVITE 100 Trying 100 Trying	**************************************	INVITE 100 Trying INVITE	+ +	INVITE 180	→ ←					
ALLINING	G		100			160		302 ACK	→	302	+	302	+					
NOTIFY (UE 1)	+		181		+	181	+	181	+	ACK	→	ACK	→					
SETUP	+		INVIT		←	INVITE 100 Trying	+	INVITE	+									
(UE 2) ALERTING	→		180)	→	180	→	180	→									
(UE 2) ALERTING	+		180)	+	180	+	180	+									
(UE 1) CONNECT (UE 2)	→		200 (OK	→	200 OK	→	200 OK	→									
CONNECT (UE 1)	+		200 (OK	+	200 OK	+	200 OK	+									
/			ACI ACI		→	ACK ACK	→	ACK ACK	→									
DISC (UE1)	→		BYE		→	BYE	→	BYE	→									
DISC (UE2)	+		BYE		+	BYE	+	BYE	+									
REL (UE2)	→		200 OK	BYE	→	200 OK BYE	→	200 OK BYE	→									
RLC (UE2) REL (UE1) RLC (UE1)	+		200 OK	BYE	+	200 OK BYE	+	200 OK BYE	+									

ISI_XXS	SC	D 10				00 20	nce to: 07-1 [i.5], 2.2, 9.2.5				NGN refe TSI TS 1				
TSS reference	ce:		ISDN-S				entary_servi	ces/ C	D- during	alertir	าต				
Configuration							C and D are i					net	work N2	and is	
oormgarano.	•						alerting The							and io	
							N2 and is pro							esentati	on
							ginating user								
							user" = No,								
			been fo	rwai	ded" = no	o). Us	ser C is point	-to-m	ultipoint.						
Selection crit	teria	a:	User B	has	activated	the (CALL DEFLE	CTIO	N service						
Test purpose	e:		Ensure	that	when us	er A	calls user B,	the ca	all is deflec	ted d	uring ale	rtinç	to user	C, user	Α
			is notifi	ed o	f call dive	rsion	and not info	rmed	of the dive	rted-t	o numbe	r an	id user C	is not	
			informe	ed of	the forwa	arding	number (us	er B h	nas presen	tation	not allov	wed).		
ISDN Param	ete	r values	s: BC = P	IXIT											
SIP Paramet	ter v	/alues:	Dial str	ing p	arametei	rs opt	ions=PIXIT								
			PIXIT fo	or su	ipported I	heade	er:								
1			Case a												
					pported:										
			Case c) Sup	oported: 1	100 re	el and precor	ndition	1						
			a = line												
			b = line												
			m = line	e (Pl	XII)										
Comments:								ı						T	
ISDN		M	GCF	I-	CSCF	- ;	S-CSCF		AS	P-	CSCF		UE-B	UE-0	<u> </u>
SETUP (UE 1)	→		INVITE	→	INVITE	→								+	+
,															
					100 Trying	+	INVITE	→						+	-
							100 Trying	+							
							INVITE 100 Trying	←						-	-
							100 Trying		INVITE	→					
									100 Trying INVITE	←				-	-
									IIIVIIL	<u> </u>	INVITE	→		+	\vdash
									100		180	+			
							180	→	180	+				+	+
							180	+							
ALERTING		+	180	+	180	+					302	+		+	+
									302	+					
							302 ACK	→						-	1
									ACK	→	ACK	→			
NOTIFY	+		181	+	181	+	181	+		1		<u> </u>		+	\vdash
(UE 1)	Ĺ		101											<u> </u>	
	\vdash				INVITE 100 Trying	+ +	INVITE	+		1		<u> </u>		+	\vdash
			INVITE	+	100 Hymig	É									
SETUP (UE 2)	_		100 Trying	→											$+\Box$
ALERTING	←		180	→	180	→	180	→		1				+	\vdash
(UE 2)					400			L		ļ		<u> </u>		 	1
ALERTING (UE 1)	+		180	+	180	Ψ	180	+			<u> </u>	L			
CONNECT	→		200 OK	→	200 OK	→	200 OK	→							
(UE 2) CONNECT	+		200 OK	+	200 OK	+	200 OK	+		1		1		+	\vdash
(UE 1)	\sqcup		A C IZ	→	ACV.	→	ACI/	→		ļ		<u> </u>		 	1
	\vdash		ACK ACK	+	ACK ACK	+	ACK ACK	+		 		 		+	\vdash
DISC (UE1)	→		BYE	→	BYE	→	BYE	→						1	
DISC (UE2) REL (UE2)	←		BYE 200 OK BYE	←	BYE 200 OK	←	BYE 200 OK BYE	←				<u> </u>		+	1
, ,					BYE		200 01012							<u> </u>	
RLC (UE2) REL (UE1)	+		200 OK BYE	+	200 OK	+	200 OK BYE	+				 		+	\vdash
. ,			200 OK DIE	Ļ	BYE		200 OR BIL							<u> </u>	
RLC (UE1)	→														

6.2.2.8.2 CD-ISS

ISS_XXSSC	D 01	ETS	SI EN	reference 300 207 6.1, 9.2.2	-1 [i.			E		N refere I TS 124				
TSS reference:								D- Immedia		esponse				
Configuration:								response.						
Selection criteri Test purpose:	ia:							ON service call is defle		limmodia	to	rocponco	to us	or C
rest purpose.								e voice trai						
						ting QoS			.0.0	. 011 1110 1		aia aiia b	or iar	
ISDN Paramete	er	BC = PIX		, , ,				,						
values:														
SIP Parameter	values:	Dial string	g par	ameters o	option	ns=PIXIT								
		PIXIT for			ader:									
		Case a) r												
		Case b) S	Supp Supp	orted: 100 orted: 100) rel) rel a	and preco	nditic	n						
		a – lina (l	דועום	-\										
		a = line (l b = line (l												
		m = line (
Comments:			\	,										
ISDN	M	IGCF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	•	INVITE	→	INVITE	→									
				100 Trying	+	INVITE	→							
_						100 Trying INVITE	+							
						100 Trying	→							
								INVITE 100 Trying	→					
								100 Trying		INVITE	→			
										100 Trying 302	+			
						200	_	302	+					
						302 ACK	}							
						181	+	ACK	→	ACK	→			
				181	+	101								
NOTIFY (UE 1)	-	181	+											
						INVITE	+							
						100 Trying	→	INVITE	→			INVITE	→	
												100 Trying 180	+	
								180	+			100	`	
 				180	+	180 180	→							
ALERTING (UE 1)	-	180	+											
(UE 1)												200 OK	+	
 						200 OK	→	200 OK	+					
				000 5::		200 OK	÷							
CONNECT €	-	200 OK	+	200 OK	+									
		ACK	→	ACK	→	ACK ACK	→							
						ACK	+	ACK	→			ACK	→	
DISC →	<u> </u>	BYE	→	BYE	→									
				DIL		BYE	→							
+						BYE	+	BYE	→			BYE	→	
						200 OK BYE		200 OK BYE	+			200 OK BYE	+	
+				200 OK	+	200 OK BYE 200 OK BYE	→							
		1	I	BYE	1	1		i	1	İ	Ì	i	1	i l
REL €	-	200 OK BYE	+											

ISS_XXS	SCE	02		ı	SDN refe	renc	e to:				NGN re	efe	rence to:		
					SI EN 300 uses 6.1.						ETSI TS	12	24 604 [45	5]	
TSS reference	ce:		ISDN-SIF					s/ C	D- Immedia	ate r	esponse				
Configuration			The user	B is	provided	with (CD- Imme	diate	response	("Se	erved use	r a	llows the		
									ting user in			tific	cation" = \	∕es,	
Calaatian anit	:-								ed-to user":		es).				
Selection crit Test purpose									ON service call is defle		Limmedia	tο	raenonea	to us	er C
Test purpose	,.								med of the						
			presenta	tion a	allowed - r	no CO			C is inform						
					ion allowe			- \							
							state (N1 _ا state		e voice trai	nste	r on the r	nec	dia and B-	char	inels is
ISDN Param	eter		BC = PIX		rectly (e.ç	j. ies	ling Quo	Jaiai	neters).						
values:	0.0.														
SIP Paramet	er v	alues:	Dial string	g par	ameters o	ptior	ns=PIXIT								
			DIVIT (
			Case a) r		oorted hea	ader:									
					orted: 100) rel									
							and preco	nditic	n						
			- 15 7	חואוד	- \										
			a = line (b = line (
			m = line (
Comments:				`	•										
ISDN		M	GCF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
					100 Trying	+									
							INVITE 100 Trying	→							
							INVITE	+							
							100 Trying	→	INVITE	→					
									100 Trying	+	INVITE	→			
											100 Trying 302	+			
							200		302	+	002	Ì			
							302 ACK	→							
							181	+	ACK	→	ACK	→			
NOTIFY	+		181	+	181	+									
(UE 1)	,		101	`			INIVITE		MECCACE	_					
							INVITE 100 Trying	←	MESSAGE	→	MESSAGE	→			
									INVITE	→			INVITE 100 Trying	→	
									180	+			180	+	
					400	_	180	→	.00						
ALERTING	+		180	+	180	+	180	+							
(UE 1)	H											Ŀ	200 OK	+	
							200 OK	→	200 OK	+					
	Ħ				200 014	+	200 OK	+							
CONNECT	+		200 OK	+	200 OK										
			ACK	→	ACK	1	ACK ACK	+ +				L			
DISC	→		BYE	→					ACK	→			ACK	→	
2100	Ĺ		2,5		BYE	→	DVE								
							BYE BYE	→							
							<u> </u>		BYE 200 OK BYE	→	<u> </u>		BYE 200 OK BYE	→	
					200 OK	+	200 OK BYE 200 OK BYE	→					_		
DEI			300 OK BVC	L	BYE		200 010 01	_							
REL RLC	+		200 OK BYE	+											

ISS_XXS	SCI	03		ETS	SDN refe SI EN 300 uses 6.1,	207	·1 [i.5],						ence to: 4 604 [45]]	
TSS referen	CE.		ISDNI-SIE					26/ ∩	I D- Immedia	ate :	esponso				
Configuration			The user presentate	B is	provided of forward	with ed to	CD- Imme URI to or	diate igina	e response ting user in d-to user"	("Se div	erved use ersion no	er a	Illows the cation" = `	Yes,	
Selection cri	teria	a:							ON service						
Test purpose	e:		user A is presenta (user B h Ensure th	notif tion r as p nat in	ied of call not allowe resentation the active	dive d - C n not e call	rsion and OLR) and allowed).	not ir user 0) th	call is defle informed of C is not in e voice traineters).	the Iforn	diverted- ned of the	to i	number (u orwarding	iser (numl	C has ber
ISDN Param	ete	r	BC = PIX	ΊT											
values:															
SIP Parame	ter v	/alues:	Dial string	g par	ameters of	option	ns=PIXIT								
			Case a) r Case b) S	no 10 Supp Supp PIXIT PIXIT	orted: 100 orted: 100 「)) rel	and preco	nditic	on						
Comments:						_				_					
ISDN		IVI	GCF	I-	CSCF	S	-CSCF		AS	Р	-CSCF		UE-B	U	E-C
SETUP (UE 1)	→		INVITE	→	INVITE	→						<u> </u>			
					100 Trying	+									
							INVITE 100 Trying INVITE 100 Trying	+ + +	INVITE 100 Trying	→	INVITE 100 Trying	→			
											302	+			
							302	→	302	+					
							ACK	+							
							181	+	ACK	→	ACK	→			
					181	+	101	_				<u> </u>			
NOTIFY (UE 1)	+		181	+											
(UE 1)							INVITE	+						L	
							100 Trying	→	INVITE	→			INVITE 100 Trying 180	→ ← ←	
							100	-7	180	+					
					180	+	180 180	→						1	
ALERTING	+		180	+											
(UE 1)												\vdash	200 OK	+	
							200 014		200 OK	+					
	\vdash						200 OK 200 OK	→						1	
COMMEST	_		202.014	Z	200 OK	+									
CONNECT	4		200 OK ACK	←	ACK	→	ACK	→							1
							ACK	+	1011	L,			1011		
DISC	→		BYE	→	-		1		ACK	→		 	ACK	→	1
					BYE	→	5.75								
-					-		BYE BYE	→							
									BYE	→			BYE	→	
							200 OK BYE	→	200 OK BYE	+		_	200 OK BYE	+	
					200 OK	+	200 OK BYE	+							
REL	+		200 OK BYE	+	BYE										
RLC	→														

ISS_X	XS	SCD 04	4		ETSI EN	300	ence to: 207-1 [i.5 9.2.2, 9.2.						ference to 124 604 [
TSS refer	enc	e:	ISD	N-SIF	P-ISDN/Su	ppler	mentary_s	ervio	es/ CD- In	me	diate resp	oon	se		
Configura			The prov The use	user /ided user r allov	A and the with CD- I B is in net ws the pres	user mme work senta	C and Dadiate responds N2 and is	are in onse pro ward	n network N	N1	The user Immedia iginating	B is	s in netwo response (er in divers	("Ser	
Selection	crit	eria:	Use	r B ha		d the	CALL DE		CTION ser					,	
Test purp			C, u use Ens cha	iser A r C is ure th nnels	is notified not inform at in the a is perform	l of called of or other details.	all diversion of the forward the forward the forward the forward the following the fol	on ar ardin (N10	the call is one of the call is o	med usei trai	of the di B has p nsfer on t	ver res the	ted-to nun entation n	nber ot all	and
ISDN Par	am	eter	BC :	= PIX	IT										
values: SIP Parar	net	er valu	es: Dial	string	g paramet	ers o	ptions=PI	XIT							
			Cas Cas Cas a = b =	e a) r e b) S e c) S line (F line (F	supported to 100 rel Supported: Supported: PIXIT) PIXIT) PIXIT)	: 100		ecor	ndition						
Comment	S:		205		0005	_	0005			_	0005	1			·= 0
ISDN		M	GCF	I-	CSCF	S	-CSCF		AS	Ρ	-CSCF		UE-B		JE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
NOTIFY (UE 1)	+		181	÷	181	•	INVITE 100 Trying INVITE 100 Trying 302 ACK 181 INVITE	÷ ÷ ÷ ÷ ÷	INVITE 100 Trying 302 ACK	÷ ÷ ÷	INVITE 100 Trying 302 ACK	→ ← ←	INVITE	→	
													100 Trying	+	
	H		ļ						1	l			180	+	
	_								180	+					
					105	,	180	→	180	+		Н			
ALERTING	+		180	+	180	+	180 180	→	180	+					
ALERTING (UE 1)	+		180	+	180	+			180 200 OK	+			200 OK	+	
	+		180	+			180	+					200 OK	+	
(UE 1)					180 200 OK	+	180 200 OK	÷					200 OK	+	
	+		180 200 OK ACK	+ +			180 200 OK 200 OK ACK	÷ ÷ ÷					200 OK	+	
(UE 1)			200 OK	+	200 OK	+	180 200 OK 200 OK	÷	200 OK	+				÷	
(UE 1)			200 OK	+	200 OK ACK	÷	180 200 OK 200 OK ACK	÷ ÷ ÷					200 OK		
(UE 1) CONNECT	+		200 OK ACK	+	200 OK	+	200 OK 200 OK ACK ACK	÷ ÷ ÷	200 OK	+					
(UE 1) CONNECT	+		200 OK ACK	+	200 OK ACK	÷	180 200 OK 200 OK ACK	÷ + + + + + + + + + + + + + + + + + + +	200 OK ACK	÷			ACK	→	
(UE 1) CONNECT	+		200 OK ACK	+	200 OK ACK	÷	200 OK 200 OK 200 OK ACK ACK	÷ + + +	200 OK ACK BYE	+			ACK		
(UE 1) CONNECT	+		200 OK ACK	+	200 OK ACK BYE	÷	200 OK 200 OK ACK ACK BYE BYE 200 OK BYE	+ + + + +	200 OK ACK	÷			ACK	→ →	
(UE 1) CONNECT	+		200 OK ACK	+	200 OK ACK	÷	200 OK 200 OK ACK ACK BYE BYE	÷ ÷ ÷ ÷	200 OK ACK BYE	+			ACK	→ →	

ISS_XX					ETSI EN clauses	300 2 6.1, 9.	2.2, 9.2.	5			ETS	I TS	eference S 124 604		
TSS refer			ISDN	-SIP-	SIP/Supp	olemer	tary_ser	vices	/ CD- Imn	nedia	te respo	nse	1		
Configura					is in network N2 and is provided with CD- Immediate response										
Selection	crite	eria:			rding by t										
									CTION se						
Test purp	ose:		To ve	rify th	nat a call	is rele	ased cor	rectly	if CD- Im	medi	ate resp	ons	e was no	t su	ccessful.
						, the ca	all is forw	arde	d to user (C who	o is use	r de	termined	user	busy.
ISDN Para	ame	ter	BC =	PIXI	Γ										
values:															
SIP Parar	nete	er valu	es: Dial s	string	paramete	ers opt	ions=PI	(IT							
Comment			Case Case	a) no b) Si c) Si ne (Pl ne (Pl	IXIT)	100 re	el	econo	dition						
Comment	S:	B 4	005		0005	1 0	2005	I	^ ^		0005	1	D	1	LIE O
ISDN		IVI	GCF	I-	CSCF	5-0	CSCF		AS	Ρ.	-CSCF		UE-B	-	UE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
							INVITE INVITE	→				+			
							HVVIIL		INVITE	→					
									400	+	INVITE	→			
							180	→	180	_	180	_			
ALERTING	ì	+	180	+	180	+	180	+				Ļ			
									302	+	302	+			
							302	→							
						ACK + ACK + ACK +									
							181	+	ACK	7	ACK	7			
					181	+									
NOTIFY. (UE 1)	+		181	+											
(02 1)							INVITE	+							
	H								INVITE	→		+	INVITE	→	
				 		+	486	→	486	+		+	486 ACK	+	
					486	+	486	+							
DISC # 17 REL	←		486 ACK	←	ACK	→	ACK	→		+		+		<u> </u>	
RLC	+		ACK	 	AUN	+ -	ACK	+				+		1	
				ACK →											

ISS_	XX	SSCI	06		ETSI E	N 300	rence to 207-1 [i 9.2.2, 9.	.5],					eference 124 604		I
TSS refer	enc	e:		ISDN-S					ices/ CD- o	durin	g alerting	ב			
Configura									CALL DE						
Selection									LECTION						
Test purp	ose	:							B, the call			to u	ser C.		
ISDN Par			alues:	BC = F	PIXIT				· ·						
SIP Parar				Dial st	ring param	neters	options=	=PIXI	Т						
				Case a Case b	for suppor a) no 100 (b) Support c) Support	rel ed: 10	00 rel	d pre	condition						
				b = line	e (PIXIT) e (PIXIT) e (PIXIT)										
Comment	ts:														
ISDN			MGCF	I-	CSCF	S-	CSCF		AS	Р	-CSCF		UE-B		UE-C
SETUP (UE 1)	→		INVITE	→	INVITE	→									
(OL 1)					100 Trying	+									
							INVITE	→							
							INVITE	_	INVITE	→					
									180	+	INVITE 180	→			
							180	→	100		100	È			
ALERTING	}	+	180	+	180	+	180	+			302	+			
									302	+	302	Ì			
				-			302 ACK	→ +	-						
							ACK		ACK	→	ACK	→			
NOTIFY	+		181	+	181	+	181	+							
(UE 1)				-			INVITE	+							
									INVITE	→					
				-									INVITE 100 Trying	→	
									180	+			180	÷	
ALERTING	+		180	+	180	+	180 180	→	-						
ALEKTING	_		100	_	100	_	100		200 OK	+			200 OK	+	
CONNECT	+		200 OK	+	200 OK	+	200 OK 200 OK	→			· · · · · ·				
CONNECT	1		ACK	→	ACK	→	ACK	→	 	l -		1			
							ACK	+	401/				ACK		
DISC (UE1)	→		BYE	→					ACK	→			ACK	→	
					BYE	→	BYE	→							
	\vdash		-	_	-		BYE	+	BYE	→		-	BYE	→	
										ĺ			200 OK	÷	
	\vdash							1	200 OK BYE	+		-	BYE		
							200 OK	→							
REL (UE1)	+		200 OK B	/E ←	200 OK BYE	+	BYE 200 OK BYE	+							
RLC (UE1)	→				סוב		DIE					L			
					,		•	•	•						

ISS_X	XXS	SSCD	07			_		ence to:						eference		_
								207-1 [i.				EIS	115	124 604	[45	J
TSS refe	ron	20:	-	CDN	CI.			9.2.2, 9.2		ces/ CD- d	lurino	alorting				
			<u> </u>	SDIN.	-01	r D io pro	ppiem	entary_s	ervi	na clartina	uring	alerting	بالد :	ouro tha n		entation of
Configura	atioi	n:	f	orwa	rde	d to URI	to orig	inating u	ıser	in diversio	n not	ification" :	= Ye	es, "diver	ting	number is
									= Y	es, "serve	d use	r receives	s no	tification	that	the call
						n forward										
Selection	cri	teria:								LECTION						
Test purp	ose	e:														er C, user
										rmed of th						
			r	rese	nta	ition allow	/ed - n	o COLR) an	d user C is	s info	med of th	e fo	orwarding	, nur	nber (user
						esentatio	n allov	ved).								
ISDN Par	ram	eter va	alues: E	3C =	PI	KIT										
SIP Para	me	ter valu	ues: [Dial s	trin	ig parame	eters o	ptions=F	PIXI	Ī						
				PIXIT	foi	r supporte	ed hea	der:								
						no 100 re										
						Supporte		rel								
			là	Case	c)	Supporte	d: 100	rel and	pred	ondition						
			`		-,				۰.۰۰							
			ء	a = lin	ne ((PIXIT)										
						PIXIT)										
						(PIXIT)										
Commen	ts:		T.			/										
ISDN		M	IGCF		 - (CSCF	S-0	CSCF		AS	Р	-CSCF		UE-B		UE-C
SETUP	→		INVITE		>	INVITE	→									
(UE 1)	7		IINVIII		,											
						100 Trying	+	INVITE	→		-					
								INVITE	+							
										INVITE	→	INN OTE	_			
										180	+	INVITE 180	→			
		_						180	→			,,,				
ALERTING	3	+	180		Т	180	+	180	+		-	302	+			
										302	+	552	İ			
			1					302 ACK	→							
				_				ACK	-	ACK	→	ACK	→			
No.					_	181	+	181	+			·				
NOTIFY (UE 1)	+		181	1	Τ											
(02 1)								INVITE	+							
	H									INVITE MESSAGE	→ →					
										IVILOGAGE	± 7	MESSAGE	→			
														INVITE	→	
				_						180	+			100 Trying 180	+	
								180	→							
ALERTING	+		180		+	180	+	180	+	200 OK	+			200 OK	+	
								200 OK	→	200 OK	Ť			200 OK	_	
CONNECT	+	-	200 OI		+	200 OK	+	200 OK	+							
	\vdash		ACK	+)	ACK	→	ACK ACK	→		+					
									Ė	ACK	→			ACK	→	
DISC (UE1)	→		BYE		→	BYE	→	BYE	→		+					
						סוב		BYE	+							
										BYE	→			BYE	→	
														200 OK BYE	+	
										200 OK BYE	+					
								200 OK BYE	→							
REL (UE1)	+		200 OK E	YE	+	200 OK	+	200 OK	+							
RLC (UE1)	→			_		BYE		BYE			+					
	•		•													•

ISS_XX	SS	CD 08		ETSI	DN refere EN 300 2 ses 6.1, 9	207-1	[i.5],				_		ence to: 4 604 [45		
TSS reference	ce:		ISDN	I-SIP	-SIP/Supp	olemei	ntary_ser	vice	s/ CD- duri	ng a	lerting				
Configuration			The forwarelea	user I arded ised t	3 is provide to URI to	ded wi origir	th CD- du	ıring er in	alerting (": diversion n	Serv otific	ed user a	Yes	, "divertii	าg ทเ	
Selection crit	teria	a:	User	B ha	s activate	d the	CALL DE	FLE	CTION ser	vice					
Test purpose	e:		notifi C is	ed of not in	call diver formed of	sion a	nd not inf	orm		ivert	ed-to nu	mbe	r (user C	has	C, user A is TIR) and user l).
ISDN Param	ete	r values	s: BC =	: PIXI	Т										
SIP Paramet			Dial PIXI Case Case Case Case b = li	Γ for s e a) no e b) S e c) S ne (P ne (P		head	er: el		dition						
Comments:															
ISDN		M	GCF	I-	CSCF	S-(CSCF		AS	Р	-CSCF		UE-B		UE-C
OFTUD (UE 4)	_		IND/ITE	→	IND/ITE	→									
SETUP (UE 1)	→		INVITE	7	INVITE 100 Trying	+									
					, ,		INVITE	→							
							INVITE	+	INVITE	→					
									INVIIL		INVITE	→			
									180	+	180	+			
ALERTING		+	180	+	180	+	180 180	}							
ALLICINO		,	100		100	,	100				302	+			
							302	→	302	1					
							ACK	+							
									ACK	→	ACK	→			
NOTIFY (UE 1)	+		181	+	181	4	181	+							
	HĪ			<u> </u>			INVITE	+	INVITE	→					
									IIN VIII E			L	INVITE	→	
									400				100 Trying	+	-
			 	 			180	→	180	+		1	180	+	
ALERTING	+		180	+	180	+	180	+							
	\vdash			1			200 OK	→	200 OK	+		1	200 OK	+	
CONNECT	+		200 OK	+	200 OK	+	200 OK	+				L			
			ACK	→	ACK	→	ACK ACK	→							
DISC (UE1)	→		BYE	→					ACK	→		1	ACK	→	
DIOC (OL 1)	Ĺ		DIL	Ľ	BYE	→	BYE	→							
							BYE	+	D) (E				D) (5		-
									BYE	→			BYE 200 OK BYE	+	
									200 OK BYE	+					
							200 OK BYE	→							
REL (UE1)	+		200 OK BYE	+	200 OK BYE	+	200 OK BYE	+							
RLC (UE1)	→		1		I		1		1	1		1	I	1	

ISS_XXS	SC	D 09		ET	ISDN refe SI EN 30 auses 6.1	0 207	-1 [i.5],				_		rence to 24 604 [4		
TSS reference	:		ISDN-	SIP-S	SIP/Suppl	emen	tary serv	ices/	CD- during	g ale	erting				
Configuration:									alerting ("S			llow	s the pres	senta	ation of
Comigaration									iversion no						
									served use						
							user = r	NO, 8	served use	rrec	serves no	Junca	alion mai	ıne	call has
					rded" = no										
Selection crite	ria:								TION serv						
Test purpose:			Ensure	e that	when us	er A c	alls user	B, th	e call is de	flec	ted durin	g ale	erting to u	ıser	C, user A
									ned of the o						
									B has pre					.o. o	10 1101
ICDN Davage -		oluss:				arunig	HUHIDEI	lasei	ה nas pie	JUIT	auon no	anc	weaj.		
ISDN Paramet			BC = F												
SIP Paramete	r va	lues:	Dial st	ring p	parameter	s opti	ons=PIX	ΙT							
			PIXIT	for si	upported h	neade	r:								
					100 rel										
					pported: 1	100	J								
									•••						
			Case	c) Su	pported: 1	iuu re	i and pre	cond	ition						
			a = line	e (Pl	XIT)										
			b = line												
1			m = lin												
Co.m			111 = 111	10 (P)	A11)										
Comments:						_				-					
ISDN		M	GCF	l-	CSCF	S-0	CSCF		AS	l P	-CSCF		UE-B		UE-C
OFFLID (1) F (1)	1.5		IND//TE	→	IND/FTE										
SETUP (UE 1)	→		INVITE	7	INVITE 100 Trying	+									
					100 Hyllig	-	INVITE	→		 		1			
							INVITE	-							
									INVITE	→					
							ļ			Ļ	INVITE	→			
							180	→	180	+	180	+	_		
ALERTING		+	180	+	180	+	180	+				\vdash	 		
		-			. 50		1				302	+			
									302	+					
							302	→							
							ACK	+	ACK	→	ACK	→	 		
	T						INVITE	+	AUN	7	AUN	17	 		
	1								INVITE	→		1			
													INVITE	→	
									400	با			100 Trying	+	
	+						180	→	180	+		1-	180	+	
ALERTING	+		180	+	180	+	180	+				\vdash	 		
7.22.771110	Ť				.50	-			200 OK	+		1	200 OK	+	
							200 OK	→							
CONNECT	+		200 OK	+	200 OK	+	200 OK	+				lacksquare			
	+		ACK	→	ACK	→	ACK ACK	→		-		1-	1		
	1						ACK	-	ACK	→		1	ACK	→	
DISC (UE1)	→		BYE	→					7.010	Ľ		1	7.010	<u> </u>	
					BYE	→	BYE	→							
		-					BYE	+							
	1						<u> </u>		BYE	→		1	BYE	→	
										l			200 OK BYE	4	
	1						1		200 OK BYE	+		1	DIL		
	1						200 OK	→					<u> </u>		
	1						BYE								
REL (UE1)	+		200 OK BYE	+	200 OK	+	200 OK	+		l					
RLC (UE1)	→				BYE		BYE		-	<u> </u>		├-	-		
INLO (UE1)	17						1		l	L		1	<u> </u>		

ISS_XX	(SS	CD	10		(ETSI EN clauses	300 20 6.1, 9.	2.2, 9.2.	5			ET		referenc S 124 60		
TSS refere		-			N-SIP-SIP/Supplementary_services/ CD- during alerting user B is in network N2 and is provided with CD- during alerting											
Configurat					user B is in network N2 and is provided with CD- during alerting B has activated the CALL DEFLECTION service											
Selection			User E	3 has	activate	d the C	ALL DE	FLEC	TION se	rvice						
Test purpose:										if CD- du to user						ul. user busy.
ISDN Para	ame	eter		BC = I	PIXIT											
values:																
SIP Paran	nete	er va	ılues:	Dial st	ring p	paramete	rs opti	ons=PIX	ΙΤ							
				Case Case	a) no b) Su c) Su e (PI) e (PI)	100 rel pported: pported: XIT) XIT)	ported: 100 rel ported: 100 rel and precondition IT) IT)									
Comments	s·				(,										
ISDN			MGC	F	 - (CSCF	S-0	CSCF		AS	Р	-CSCF		UE-B		UE-C
SETUP (UE 1)	→		IN\	/ITE	→	INVITE	→									
								INVITE INVITE	+ +				_			
								INVITE	_	INVITE	→		1			
												INVITE	→			
								180	→	180	+	180	+			
ALERTING	i	+	1	80	+	180	+	180	+							
												302	+			
								302	→	302	+		-			
								ACK	+				1			
										ACK	→	ACK	→			
					181 ←											
NOTIFY.	+		1	81	+	181	+				+		1		+	
(UE 1)			'	٠.	`										1	
` ′								INVITE	+							
<u> </u>										INVITE	+		1			
<u> </u>	\vdash							486	→	486	+		+		+	
						486	+	486	+				+			
DISC # 17	+			86	+											
REL	→		Α	CK	→	ACK	→	ACK	→ (
RLC	+				ACK ← ACK →											

6.2.2.9 3PTY

ISI_XXSS3PTY01		ISDN reference		NGN refer	rence to:
	ETSI E	:N 300 188-1 [i.6	6], clause 9.2	ETSI EN 38	3 001 [49]
TSS reference:	ISDN-SIP-IS	SDN/Supplemen	tary_services/3PT\	/	
Selection criteria:	The user A	is in network N1	and is provided wit	th 3PTY. The user B is	in network N2 user
	C in the net	work N1.	•		
Test purpose:	Ensure that	user A can esta	blish a three-way c	onversation call with us	ser B and user C and
				the completion of the R	
			rformed from user		
ISDN Parameter	BC = PIXIT	procedure is pe	monned monn doci n	, t.	
	BC = FIXIT				
values:					
Comments:					
UE A (ISDN)	•		UE B (SIP)		UE C (ISDN)
SETUP(CRx)	→	→	INVITE		
ALERTING	+	+	180 Ringing		
CONNECT	+	+	200 OK		
		→	ACK		
HOLD(CRx)	→	→	INVITE(sendon		
		+	200 OK(recvon	ly)	
		→	ACK		
SETUP(CRy)	→			→	SETUP
ALERTING	+			+	ALERTING
CONNECT	+			+	CONNECT
FAC(3PTY_begin_invoke, C	Rx) →	→	INVITE(sendre	cv)	
FAC(3PTY_begin_ret_res, C	CRx)	+	200 OK(sendre		
		→	ACK	→	NOTIFY(conf est)
			arty conversation		
DISC(CRy)	→	→	INVITE(sendon		DISC
RELEASE	+	+	200 OK(recvon		RELEASE
REL COMP	→	→	ACK	→	REL COMP
RETRIEVE (CRx)	→	→	INVITE(sendre		
		+	200 OK(sendre	cv)	
		→ Conversation	ACK		
DISC(CRx)	→	-	BYE	+ +	
RELEASE	,	· · ·	200 OK	+ +	
REL COMP	→		200 010	+ +	

ISI_XXSS3PTY02	ISDN reference to: ETSI EN 300 188-1 [i.6],	NGN reference to: ETSI EN 383 001 [49]
	clause 9.2, figure A.2	
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/3PT	
Selection criteria:	The user A is in network N1 and is provided w C in the network N1.	vith 3PTY. The user B is in network N2 user
Test purpose:	Ensure that user A can establish a three-way and release the Active-Held connection (A-B). from user A.	
ISDN Parameter	BC = PIXIT	
values:		
Comments:	User A calls user B (with CRx). After initiating connection. User A is calling user C (with the CRy). The call when user A sends a FACILITY message for Begin3PTY invoke component the network shoundaining a facility IE with a Begin3PTY returneceive a NOTIFY message containing a Notification of "Conference established". The ton receipt of a DISCONNECT message from connection (CRx) the network shall clear the call by bridge the network is sending to the remover that the call clearing procedure is performed from	all (A-C) has an Active-Idle connection. CRx containing a facility IE with a all respond with a FACILITY message in result component for CRx. User C shall fication Indicator IE with a notification three-way bridge is established. the user A relating to the Active-Held call to user B. After the release of the three- te user C a NOTIFY message containing a cription of "Conference disconnected". The

ISI_XXSS3PTY03	ISDN reference to:	NGN reference to:
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/3PT	Υ
Selection criteria:	The user A is in network N1 and is provided w	rith 3PTY. The user B is in network N2 user
	C in the network N1.	
Test purpose:	Ensure that user A can establish a three-way	
	and user B sends disconnect during the Three	e-Party communication.
ISDN Parameter	BC = PIXIT	
values:		
Comments:		

ISI_XXSS3PTY04	ISDN reference to: ETSI EN 300 188-1 [i.6], clause 9.2	NGN reference to: Figure 2-9 of ITU-T Q.734.2 [15] - User C disconnects
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/3PT	Υ
Selection criteria:	The user A is in network N1 and is provided w C in the network N1.	rith 3PTY. The user B is in network N2 user
Test purpose:	Ensure that user A can establish a three-way and user C sends disconnect during the Three	
ISDN Parameter	BC = PIXIT	
values:		
Comments:		

ISI_XXSS3PTY05	ISDN reference to:	NGN reference to:
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]
TSS reference:	ISDN-SIP-ISDN/Supplementary_services/3PT	Υ
Selection criteria:	The user A is in network N1 and is provided w C in the network N1.	ith 3PTY. The user B is in network N2 user
Test purpose:	Ensure that user A can establish a three-way and release of both remote users, user C is re	
ISDN Parameter values:	BC = speech	
Comments:	User A calls user B (with CRx). After initiating connection. User A is calling user C (with the CRy). The call When user A sends a FACILITY message for Begin3PTY invoke component the network shoundaining a facility IE with a Begin3PTY returneceives a NOTIFY message containing a Not description of "Conference established". The ton receipt of a DISCONNECT message from connection (CRy) the network shall clear the connection (CRx) the network shall clear the connection (all (A-C) has an Active-Idle connection. CRx containing a facility IE with a all respond with a FACILITY message n result component for CRx. User C ification Indicator IE with a notification hree-way bridge is established. the user A relating to the Active-Idle call to user C with a DISCONNECT the user A relating to the Active-Held

ISI_XXSS3PTY06	ISDN reference to: ETSI EN 300 188-1 [i.6], clause 9.2	NGN reference to: ETSI EN 383 001 [49]				
TSS reference:	The user A is in network N1 and is provided w C in the network N1.	rith 3PTY. The user B is in network N2 user				
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user C in the network N1.					
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user B. The call clearing procedure is performed from user A					
ISDN Parameter values:	BC = speech					
Comments:	Active-Held connection; ii) release the three-way bridge; iii) return to the served user an End3PT FACILITY message using the CRx of send a NOTIFY message to the remais required containing a Notification in notification description of "Remote he send a NOTIFY message to the other indicator information element with a disconnected". When the served user receives a correctly end within a FACILITY message, the user shall act it is use the CR relating to the Active-Idle	all (A-C) has an Active-Idle connection. CRx containing a facility IE with a all respond with a FACILITY message in result component for CRx. User B an C fication Indicator IE with a notification three-way bridge is established. It is component to the network in a ing such an invoke component in a oth the Active-Idle connection and the "Y return result component, within a if the Active-Held connection; ote user with which private communication indicator information element with a old"; and, if remote user containing a Notification inotification description of "Conference coded End3PTY return result component, if connection, perform the Hold function; if connection, perform the Retrieve function. Therefore functions. On successful completion of DGE message is sent) the network shall that is not to be included in the private ator information element with a notification ompletion of the Retrieve function (i.e. int) the network shall send a NOTIFY is communication is desired, containing a a notification description of "Conference with a notification description of "Conference with a notification description of "Remote these circumstances.) is clause, the call state of the connections, inchanged. The auxiliary state of the lags from Call Held to Idle. The auxiliary le to Call Held.				

C in the network N1. Test purpose: Ensure that user A can establish a three-way conversation call with user B and us and create a private communication with user C. The call clearing procedure is perfrom user A. ISDN Parameter values: Comments: User A calls user B (with CRx). After initiating of call hold, the call A-B has an Acticonnection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. User A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C						
Selection criteria: The user A is in network N1 and is provided with 3PTY. The user B is in network N C in the network N1. Test purpose: Ensure that user A can establish a three-way conversation call with user B and us and create a private communication with user C. The call clearing procedure is perfrom user A. ISDN Parameter values: Comments: User A calls user B (with CRx). After initiating of call hold, the call A-B has an Acticonnection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. User A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C						
and create a private communication with user C. The call clearing procedure is perfrom user A. ISDN Parameter values: Comments: User A calls user B (with CRx). After initiating of call hold, the call A-B has an Acticonnection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. When user A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C	l2 user					
values: Comments: User A calls user B (with CRx). After initiating of call hold, the call A-B has an Acti connection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. When user A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C	and create a private communication with user C. The call clearing procedure is performed from user A.					
connection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. When user A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C	·					
description of "Conference established". The three-way bridge is established. If the remote user, for which a private communication is required, is identified at the served user by the CRy relating to the Active-Idle connection, the served user shat an End3PTY invoke component to the network in a FACILITY message with that the Connection guide and invoke component in a FACILITY message, the network shat in remove the three-way bridge from both the Active-Idle connection and the Active-Held connection; ii) release the three-way bridge; iii) return to the served user an End3PTY return result component, within a FACILITY message, using the CRy of the Active-Idle connection; iv) send a NOTIFY message to both remote users containing a Notification indicator information element with a notification description of "Conference disconnected"; and, in the same NOTIFY message as (iv), or in a subsequent NOTIFY message to both remote user does not support transmission on "Remote hold". If any intervening protocol between the network of the secure and the network of the remote user does not support transmission on notification descriptions in the same message, then this should be mapp that point to a message containing a single notification description of "Conference disconnected", and a subsequent message containing a nodescription of "Remote hold". When the served user receives a correctly encoded End3PTY return result component within a FACILITY message, the user shall accept the provided information and te further action. As a result of the procedures of this item of this clause, the call stat the auxiliary state of the connections, at both the network and the served user, are unchanged.	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user C in the network N1. Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user C. The call clearing procedure is performed from user A. BC = speech User A calls user B (with CRx). After initiating of call hold, the call A-B has an Active-Held connection. User A is calling user C (with the CRy). The call (A-C) has an Active-Idle connection. When user A sends a FACILITY message for CRx containing a facility IE with a Begin3PTY invoke component the network shall respond with a FACILITY message containing a facility IE with a Begin3PTY return result component for CRx. User C receives a NOTIFY message containing a Notification Indicator IE with a notification description of "Conference established". The three-way bridge is established. If the remote user, for which a private communication is required, is identified at the served user by the CRy relating to the Active-Idle connection, the served user shall send an End3PTY invoke component to the network in a FACILITY message with that CRy. On receiving such an invoke component in a FACILITY message, the network shall: i) remove the three-way bridge from both the Active-Idle connection and the Active-Held connection; ii) release the three-way bridge; iii) return to the served user an End3PTY return result component, within a FACILITY message, using the CRy of the Active-Idle connection; iv) send a NOTIFY message to both remote users containing a Notification indicator information element with a notification description of "Conference disconnected"; and, v) send to the remote user for which private communication is not required, either in the same NOTIFY message as (iv), or in a subsequent NOTIFY message, a Notification indicator information element with a notification description of "Remote hold". When the served user receives a correctly encoded End3PTY return result component, within a FACILITY m					

ISS_XXSS3PTY08	ISDN reference to:			NGN reference to:				
	ETSI EN	300 188-1 [i.6	6], clause 9.2	ETSI EN 38	83 001 [49]			
TSS reference:	SDN-SIP-SIP/Supplementary_services/3PTY							
Selection criteria:	The user A is	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user						
	C in the netwo	C in the network N2.						
Test purpose:	Ensure that us	Ensure that user A can establish a three-way conversation call with user B and user C and						
	release the Ac	tive-Idle conne	ection (A-C). After	the completion of the F	Retrieve function, the			
			rformed from user		·			
ISDN Parameter	BC = PIXIT							
values:								
Comments:								
UE A (ISDN)	1		UE B (SIP)		UE C (SIP)			
SETUP(CRx)	→	→	INVITE					
ALERTING	+	+	← 180 Ringing					
CONNECT	+	+	200 OK					
HOLD(CRx)	→	→	INVITE(sendor	nlv)				
, ,		+	200 OK(recvon	lý)				
SETUP(CRy)	→			→	INVITE			
ALERTING	+			· ·	180 Ringing			
CONNECT	+			+	200 OK			
FAC(3PTY begin invoke, 0	CRx)	→	INVITE(sendre	OV)				
DISC(3PTY_begin_ret_res,		÷	200 OK(sendre					
DIOC(OD.)			arty conversation		5)/5			
DISC(CRy)) +	→	INVITE(sendor		BYE			
RELEASE REL COMP	+		200 OK(recvon	ily) – –	200 OK			
RETRIVE	→	→	INVITE(sendre					
		+	200 OK(sendre	cv)				
DISC(CRx)	→	→	BYE					
RELEASE	(,	200 OK	 				
REL COMP	→							

ISS_XXSS3PTY09	ISDN reference to:	NGN reference to:			
	ETSI EN 300 188-1 [i.6],	ETSI EN 383 001 [49]			
	clause 9.2, figure A.2				
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY	,			
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user C in the network N2.				
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and release the Active-Held connection (A-B). The call clearing procedure is performed from user A.				
ISDN Parameter	BC = PIXIT				
values:					
Comments:					

ISS_XXSS3PTY10	ISDN reference to:	NGN reference to:					
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]					
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY	ISDN-SIP-SIP/Supplementary_services/3PTY					
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user C in the network N2.						
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and user B sends disconnect during the Three-Party communication.						
ISDN Parameter	BC = PIXIT						
values:							
Comments:							

ISS_XXSS3PTY11	ISDN reference to:	NGN reference to:				
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]				
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY					
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are network N2.					
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and user C sends disconnect during the Three-Party communication.					
ISDN Parameter	BC = PIXIT	•				
values:						
Comments:						

ISS_XXSS3PTY12	ISDN reference to: ETSI EN 300 188-1 [i.6], clause 9.2	NGN reference to: ETSI EN 383 001 [49]			
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY				
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user C in the network N2.				
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and release of both remote users, user C is released first.				
ISDN Parameter	BC = speech				
values:					
Comments:					

ISS_XXSS3PTY13	ISDN reference to:	NGN reference to:					
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]					
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY	ISDN-SIP-SIP/Supplementary_services/3PTY					
Selection criteria:	The user A is in network N1 and is provided w	The user A is in network N1 and is provided with 3PTY. The user B is in network N2 user					
	C in the network N2						
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user B. The call clearing procedure is performed from user A.						
ISDN Parameter	BC = speech						
values:							
Comments:							

ISS_XXSS3PTY14	ISDN reference to:	NGN reference to:				
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI EN 383 001 [49]				
TSS reference:	ISDN-SIP-SIP/Supplementary_services/3PTY					
Selection criteria:	The user A is in network N1 and is provided with 3PTY. The user B and user C are network N2.					
Test purpose:	Ensure that user A can establish a three-way conversation call with user B and user C and create a private communication with user C. The call clearing procedure is performed from user A.					
ISDN Parameter	BC = speech					
values:						
Comments:						

6.2.2.10 HOLD

IS_SPSSHOLD 01	ISDN reference to: ETSI EN 300 403-1 [i.3]				NGN reference to: ETSI EN 383 001 [49]	
T00 (ETSI EN 300 141-1 [i.7] ETSI TS 129 163 [i.20]					
TSS reference:	ISDN-SIP/SS/HOLD/					
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams					
ISDN selection criteria:					supplementary service	
Test purpose:	Ensure that a party can put the other party on hold at any time after the call is answered and before call clearing has begun. Ensure that a party can retrieve the call previously put on hold. The calling party should be able to put the other party on hold					
	The calling party should					
	The called party should					
SIP Parameter values:	The called party should SDP: a=sendonly (put of		to retrieve th	e otner	party	
	a=sendrecv or omitt		eve the call)			
	o= <version incre<="" td=""><td>mented></td><td>,</td><td></td><td></td></version>	mented>	,			
ISDN Parameter values:						
Comments:						
	ISDN		MGCF		SIP	
	SETUP	→		→	INVITE	
	ALERT	+		+	180 Ringing	
	CONNECT	+		+	200 OK INVITE	
	HOLD	→		→	INVITE(sendonly)	
				+	200 OK INVITE(recvonly)	
					` '	
	RETRIEVE	→		→	INVITE(sendrecv)	
				+	200 OK INVITE(sendrecv)	
	NOTIFY(HOLD)	+		+	INVITE(sendonly)	
				→	200 OK INVITE(recvonly)	
	NOTIFY(RETRIEVE)	+		+	INVITE(sendrecv)	
	TOTAL TALLACT	1		→	200 OK INVITE(sendrecv)	
	1		l		200 OIT HATTE (Schulect)	

IS_SPSSHOLD 02	ISDN reference to:				NGN reference to:		
	ETSI EN 300 403-1 [i.3]				ETSI EN 383 001 [49]		
	ETSI EN 300 141-1 [i.7]				ETSI TS 129 163 [i.20]		
TSS reference:	ISDN-SIP/SS/HOLD/						
SIP selection criteria:	Support the temporarily	y stops se	ending one of	r more i	unicast media streams		
	Support the invocation	of the se	rvice in the a	lerting s	state		
ISDN selection criteria:	Support the generic no	tification	procedure fo	r HOLD	supplementary service		
Test purpose:	Ensure that a party car	n put the o	other party or	n hold ii	n the alerting state. Ensure that		
	the party can retrieve t	he call pre	eviously put	on hold			
	The calling party shoul	d be able	to put the ot	her part	ty on hold		
	The calling party shoul	d be able	to retrieve th	e other	party		
SIP Parameter values:	SDP: a=sendonly (put	on hold)					
	a=sendrecv or omit	ted (retrie	ve the call)				
	o= <version incre<="" td=""><td>emented></td><td></td><td></td><td></td></version>	emented>					
ISDN Parameter values:							
Comments:							
	ISDN		MGCF		SIP		
	SETUP	→		→	INVITE		
	ALERTING	+		+	180 Ringing		
	HOLD	HOLD → UPDATE(sendonly)					
				+	200 OK UPDATE(recevonly)		
	RETRIEVE	→		→	UPDATE(sendrecv)		
				-	200 OK UPDATE(sendrecv)		

IS_SPSSHOLD 03	ISDN reference to: ETSI EN 300 403-1 [i.3] ETSI EN 300 141-1 [i.7]				NGN reference to: ETSI EN 383 001 [49] ETSI TS 129 163 [i.20]		
TSS reference:	ISDN-SIP/SS/HOLD/						
SIP selection criteria:	Support the tempor	Support the temporarily stops sending one or more unicast media streams					
ISDN selection criteria:	Support the gener	ic notificat	tion procedu	ire for I	HOLD supplementary service		
Test purpose:	Ensure that a party can put the other party on hold after the calling user has provided all of the information necessary for processing the call. Ensure that the party can retrieve the call previously put on hold. The calling party should be able to put the other party on hold. The calling party should be able to retrieve the other party						
SIP Parameter values:	SDP: a=sendonly (put on hold) a=sendrecv or omitted (retrieve the call) o= <version incremented=""></version>						
ISDN Parameter values:							
Comments:							
	ISDN		MGCF		SIP		
	SETUP	→		→	INVITE		
	HOLD	→		→	UPDATE(sendonly)		
				+	200 OK UPDATE(recevonly)		
	RETRIEVE	→		→	UPDATE(sendrecv)		
				←	200 OK UPDATE(sendrecv)		
	ALERTING	←		←	180 Ringing		
	CONNECT	((200 OK INVITE		

IS_SPSSHOLD 04	ISDN reference to: ETSI EN 300 403-1 [i.3]				NGN reference to: ETSI EN 383 001 [49]		
	ETSI EN 300			ETSI TS 129 163 [i.20]			
TSS reference:	ISDN-SIP/SS/HOLD/	_					
SIP selection criteria:					unicast media streams n an UPDATE message		
ISDN selection criteria:					O supplementary service		
Test purpose:	Ensure that a party can put the other party on hold in the confirmed state using an UPDATE request. Ensure that the party can retrieve the call previously put on hold. The calling party should be able to put the other party on hold						
	The calling party shou			e othe	r party		
SIP Parameter values:	SDP: a=sendonly (put a=sendrecv or omit o= <version incre<="" td=""><td>ted (retri</td><td>eve the call)</td><td></td><td></td></version>	ted (retri	eve the call)				
ISDN Parameter values:	hold)				ndicator PROGRESS (put on ator PROGRESS (retrieve the call)		
Comments:					·		
	ISDN		MGCF		SIP		
	SETUP	→		→	INVITE		
	ALERTING	+		+	180 Ringing		
	CONNECT	+		+	200 OK INVITE		
	HOLD → UPDATE(sendonly)						
	€ 200 OK UPDATE(recevonly						
	RETRIEVE	→		→	UPDATE(sendrecv)		
				+	200 OK UPDATE(sendrecv)		

IS_SPSSHOLD 05	ISDN reference to: ETSI EN 300 403-1 [i,3]			NGN reference to: ETSI EN 383 001 [49]					
	_	ETSI EN 300 141-1 [i.7] ETSI TS 129 163 [i.20]							
TSS reference:	ISDN-SIP/SS/HOLD/								
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams								
ISDN selection criteria:	Support the gene	Support the generic notification procedure for HOLD supplementary service							
Test purpose:	answered and be	Ensure that a party can put the other party on hold at any time after the call is answered and before call clearing has begun. Ensure that a party can retrieve the call previously put on hold.							
	The calling party The called party s The calling party The called party s	should be a should be should be a	able to put the able to retriev able to retrieve	other pre the o	party on hold ther party				
SIP Parameter values:	SDP: a=sendonly a=sendrecv or o= <version< td=""><td>omitted (r</td><td>etrieve the ca</td><td>II)</td><td></td></version<>	omitted (r	etrieve the ca	II)					
ISDN Parameter values:									
Comments:									
	ISDN		MGCF		SIP				
	SETUP	→		→	INVITE				
	ALERTING	(+	180 Ringing				
	CONNECT	+		+	200 OK INVITE				
	HOLD	→		→	INVITE(sendonly)				
				+	200 OK INVITE(recvonly)				
	NOTIFY Remote HOLD	+		+	INVITE(inactive)				
				→	200 OK INVITE(inactive)				
	RETRIEVE	→		→ INVITE(recvonly)					
				-					
	NOTIFY Remote RETRIEVAL	+		+	★ INVITE(sendrecv)				
				→	200 OK INVITE(sendrecv)				

IS_SPSSHOLD 06	ISDN reference to: ETSI EN 300 403-1 [i.3], ETSI EN 300 141-1 [i.7]			NGN reference to: ETSI EN 383 001 [49], ETSI TS 129 163 [i.20]				
TSS reference:	ISDN-SIP/SS/HOLD/							
SIP selection criteria:	Support the temporarily st	tops send	ding one or r	nore un	icast media streams			
ISDN selection	Support the generic notific	cation pro	ocedure for l	HOLD s	upplementary service			
criteria:								
Test purpose:					any time after the call is answered y can retrieve the call previously			
	The calling party should be the called party should be the called party should be the calling party should be the calling party should be	e able to e able to	put the othe retrieve the	r party other party	on hold arty			
SIP Parameter values:	SDP: a=sendonly (put on a=sendrecv or omitted o= <version increme<="" td=""><td>hold) (retrieve</td><td></td><td></td><td><i>y</i></td></version>	hold) (retrieve			<i>y</i>			
ISDN Parameter values:								
Comments:								
	ISDN		MGCF		SIP			
	SETUP	→		→	INVITE			
	ALERTING	←		(180 Ringing			
	CONNECT	+		+	200 OK INVITE			
	HOLD	→		→	INVITE(sendonly)			
	11023			-	200 OK INVITE(recvonly)			
	NOTIFY- Remote HOLD	←		(INVITE(inactive)			
				→	200 OK INVITE(inactive)			
	NOTIFY - Remote RETRIEVAL							
				→	200 OK INVITE(sendonly)			
	RETRIEVE	→		→	INVITE(sendrecv)			
				(200 OK INVITE(sendrecv)			

6.2.2.11 CONF (Outgoing Call)

IS_SPSSCONF01	ISDN reference to: ETSI EN 300 403-1 [i.3], ETSI EN 300 185-1 [i.8]					NGN reference: TSI TS 124 605 [46], 29 163 [i.20], clause 7.4.14
TSS reference:	ISDN-SIP/SS/CONF/					
SIP selection criteria:						
ISDN selection criteria:	SUPPORT OF SERVICE CON					,
Test purpose:	Ensure that the SUT in the con	firmed	dialogı	ue can es	sta	blish a conference
SIP Parameter values:						
ISDN Parameter values:						
Comments:						
	ISDN		MG	CF		SIP
	SETUP	→		→	•	INVITE
	ALERTING	+		+		180 Ringing
	CONNECT	←		+	•	200 OK INVITE
			1			
	BeginCONF	→				
	DISC	BYE				
	RELEASE	+		+	•	200 OK BYE
	REL_COMP	→				

IS_SPSSCONF03	ISDN reference to: ETSI EN 300 403-1 [i.3] ETSI EN 300 185-1 [i.8]			NGN reference: ETSI TS 124 605 [46] ETSI TS 129 163 [i.20], clause 7.4.14			
TSS reference:	ISDN-SIP/SS/CONF/						
SIP selection criteria:							
ISDN selection criteria:	SUPPORT OF SERVICE CON						
Test purpose:	Ensure that the SUT in the cor isolate a party and reattach thi	s party			ablish a conference, can		
SIP Parameter values:	SDP: a= a_LINE_VA (table 5)	or a line	is omitte	d			
ISDN Parameter values:							
Comments:							
	ISDN		MGCF		SIP		
	SETUP	→			INVITE		
	ALERTING	←		+	180 Ringing		
	CONNECT	←		+	200 OK INVITE		
	BeginCONF	→					
	IsolatedCONF	→		→	INVITE(sendonly)		
				←	200 OK INVITE(recvonly		
				→	ACK		
	ReattachCONF	→		→	INVITE(sendrecv)		
				+	200 OK INVITE(sendrecv)		
				→	ACK		
	DISC	→		→	BYE		
	RELEASE	(+	200 OK BYE		
	REL_COMP	→					

IS_SPSSCONF05	ISDN reference to: ETSI EN 300 403-1 [i.3	01	NGN reference: ETSI TS 124 605 [46]					
	ETSI EN 300 405-1 [i.8	-	ETSI TS 124 605 [46] ETSI TS 124 605 [46], clause 7.4.1.1.1					
TSS reference:	ISDN-SIP/SS/CONF/	•	•	<u> </u>				
SIP selection criteria:	Conference event package su	pported						
ISDN selection criteria:								
Test purpose:	Upon the receipt of a conferen	Conference notification information is mapped into "conference established" Upon the receipt of a conference information document with the <conference-state-type> element active is set to 'true', the ISDN Network shall send a NOTIFY message conference established</conference-state-type>						
SIP Parameter values:	NOTIFY 1: <conference-state< td=""><td></td><td>esent</td><td></td></conference-state<>		esent					
ISDN Parameter values:	AddCONF							
Comments:								
	ISDN		MGCF	SIP				
	SETUP	→	→	INVITE				
	ALERTING	+	←					
	CONNECT	(←	200 OK INVITE				
		T	T =	T				
	NOTIFY(conference established)							
	→ 200 OK NOTIFY							
	REL	→	→					
	RLC	(←	200 OK BYE				

IS_SPSSCONF06	ISDN reference to: ETSI EN 300 403-1 [i.3] ETSI EN 300 185-1 [i.8]				NGN reference: ETSI TS 124 605 [46] ETSI TS 124 605 [46], clause 7.4.1.1.1				
TSS reference:	SDN-SIP/SS/CONF/								
SIP selection criteria:	Conference e	vent package su	pportec	t					
ISDN selection criteria:									
Test purpose:	Upon the received the element so 'on-hold' before served PSTN	Conference notification information is mapped into "other party added" Upon the receipt of a conference information document with the <endpoint-type> and the element status of endpoint-status-type is set to 'connected' and it was not set to 'on-hold' before and the Contact URI in the element entity is not the address of the served PSTN/ISDN participant, the ISDN Network shall send a NOTIFY message to other party added.</endpoint-type>							
SIP Parameter values:	NOTIFY 1:	<pre><conference-sta <active="">trueconnect</conference-sta></pre>	ctive> i /=endpo	· oint SIF					
ISDN Parameter values:	FACILITY(oth	ner party added)							
Comments:	,								
	Į;	SDN		MG	CF		SIP		
	SETUP		→		-	\	INVITE		
	ALERTING		+		€		180 Ringing		
	CONNECT		+		•		200 OK INVITE		
	NOTIFY(conf established)	erence	+		•		NOTIFY 1		
					3)	200 OK NOTIFY		
	NOTIFY (-				NOTIFY 0		
	NOTIFY (other	r party added)	+	-	•		NOTIFY 2		
				1	-	<u> </u>	200 OK NOTIFY		
	REL	REL → BYE							
	RLC		+	1	€	-	200 OK BYE		
	The connection	on to SIP2 is not	shown	in the r	nessage	flow	l.		

IS_SPSSCONF11	ISDN reference to: ETSI EN 300 403-1 [i.3] ETSI EN 300 185-1 [i.8]			NGN reference: ETSI TS 124 605 [46], clause 7.4.1.1.1					
TSS reference:	ISDN-SIP/SS/CONF/								
SIP selection criteria:	Conference event package suppor	rted							
ISDN selection criteria:									
Test purpose:	Conference notification information is mapped into "other party disconnected" Upon the receipt of a conference information document with the <endpoint-type> and the element status of endpoint-status-type is set to 'disconnected' and the element joining-method of joining-type is not set to 'focus-owner, the ISDN network shall send a NOTIFY message 'other party disconnected'.</endpoint-type>								
SIP Parameter values:	NOTIFY 3: <endpoint <status="" entity="en">disconnecte</endpoint>								
Comments:									
	ISDN		MG CF		SIP				
	SETUP	→		→	INVITE				
	ALERTING	←		+	180 Ringing				
	CONNECT	+		+	200 OK INVITE				
	NOTIFY(conference established)	+		+	NOTIFY 1				
				→	200 OK NOTIFY				
	NOTIFY(other party added)	-		←	NOTIFY 2				
				→	200 OK NOTIFY				
	NOTIFY(other party disconnected)	+		←	NOTIFY 3				
				→	200 OK NOTIFY				
	REL	→		→	BYE				
	RLC	←		+	200 OK BYE				
	The connection to SIP2 is not show	wn in the me	essage	e flow.					

IS_SPSSCONF12	ISDN reference t ETSI EN 300 403-1 ETSI EN 300 185-1	[i.3]	ETSI TS	NGN reference: 124 605 [46], clause 7.4.14	
TSS reference:	ISDN-SIP/SS/CONF/				
SIP selection criteria:	The temporarily stops sendin	g one or	more	unicast me	dia streams is not supported
ISDN selection criteria:	SUPPORT OF SERVICE CO	NFERE	NCE C	ALL, ADD-	ON (CONF)
Test purpose:	Ensure that the SUT on recei supplementary service, no m				
SIP Parameter values:					-
ISDN Parameter values:					
Comments:					
	ISDN		MG	CF	SIP
	SETUP	→		→	INVITE
	ALERTING	+		+	180 Ringing
	CONNECT	+		+	200 OK INVITE
	HOLD	→			
	BeginCONF	→			
	IsolatedCONF	→			
	ReattachCONF				
	REL	→		→	BYE
	RLC	←		←	200 OK BYE

IS_SPSSCONF13	ISDN reference to: ETSI EN 300 403-1 [i.3] ETSI EN 300 185-1 [i.8]			NGN reference: ETSI TS 124 605 [46], clause 7.4.1.1.1						
TSS reference:		SDN-SIP/SS/CONF/								
SIP selection criteria:	Conference event p	oackage not suppor	ted							
ISDN selection criteria:										
Test purpose:		a conference inform	mation o	document	DN the conference notification / is sent to the ISDN user.					
SIP Parameter values:	<acti< td=""><td colspan="7"><active>true</active> if present</td></acti<>	<active>true</active> if present								
ISDN Parameter values:										
Comments:										
	ISDN		MGC	F	SIP					
	SETUP	→		→	INVITE					
	ALERTING	+		+	180 Ringing					
	CONNECT	←		(200 OK INVITE					
				←	NOTIFY 1					
				→	200 OK NOTIFY					
				+	NOTIFY 2					
				→	200 OK NOTIFY					
	REL	REL → BYE								
	RLC	+		+	200 OK BYE					
	The connection to S	SIP2 is not shown in	n the m	essage flo	w					

IS_SPSSCONF14	ISDN reference to:		NGN reference:			
	ETSI EN 300 403-1 [i.:	3]	ETSI TS 124 605 [46], clause 7.4.1.1.1			
	ETSI EN 300 185-1 [i.8	8]				
TSS reference:	ISDN-SIP/SS/CONF/					
SIP selection criteria:						
ISDN selection criteria:						
Test purpose:	The referring of MGCF is not po					
	Ensure that a REFER request re					
	is rejected with . 403 Forbidden.	The CS -sit	e is not affed	cted.		
SIP Parameter values:	REFER: Request URI contained	ed the confe	rence URI			
	Refer-To contains the	URI of ISD	Nx, method=	invite		
	Referred-By contains	SIP or tel U	RI of SIPx			
ISDN Parameter values:	AddCONF					
Comments:						
	ISDN	MG	iCF	SIP		
	SETUP	→	→	INVITE		
	ALERTING	←	+	180 Ringing		
	CONNECT ← 200 OK INVITE					
			+	REFER		
			→	403 Forbidden		

6.3 Test purposes for SIP-ISDN

6.3.1 Basic Call

6.3.1.1 Test purposes for SIP-ISDN, Basic call, Successful 3,1 kHz audio

SI_AU_01	ISDN reference to: ETSI EN 300 403-1 [i.3],clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1			NGN reference to: ITU-T Q.1912.5 [51] clauses 6.1.1, 6.1.3 ETSI EN 383 001 [49], clauses 6.1.1, 6.1.3 ETSI TS 129 163 [i.20]			
TSS reference:	SIP-ISDN/Basic_call/Succes	sful/3,1 kHz audi	0				
Selection criteria:	INVITE received without an S			29 1	163 [i.20]		
Test purpose:	Ensure that call establishment without an SDP offer and relicorrectly.						
ISDN Parameter values:	SETUP = 3,1 kHz audio						
SIP Parameter values:	Dial string parameters option PIXIT for supported header:	is=PIXIT					
	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel a	and precondition					
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:		1	T T				
	ISDN		SUT		SIP		
	INVITE	→					
	183 Session Progress offer 1	←					
	PRACK answer 1	→					
	200 OK PRACK	←					
				→	SETUP		
	180 Ringing	-		(ALERT		
	PRACK	→					
	200 OK PRACK	(
	200 OK INVITE	((CON		
	ACK	→					
	BYE	-		(DISC		
	200 OK BYE	→		→	REL		

SI_AU_02	ISDN reference ETSI EN 300 403-1 [i.3 ETSI EN 300 899-1 [23], clause 5.2.1			NGN reference to: 912.5 [51], clauses 6.1.1, 6.1.3 383 001 [49], clauses 6.1.1, 6.1.3	
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio					
Selection criteria:	INVITE received without an SDP offer; not TS 129 163 [i.20]					
Test purpose:	Ensure that call establishment with an INVITE which does not contain an SDP offer and reliable provisional responses is not supported, is performed correctly.					
ISDN Parameter values:	SETUP = 3,1 kHz audio;					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:		T	1			
	ISDN		SUT		SIP	
	INVITE	→		<u> </u>		
	200 OK INVITE offer 1	-		→	SETUP	
	PRACK answer 1	→		+	CON	
	ACK answer 1	+				
	BYE	←		+	DISC	
	200 OK BYE → REL					

SI_AU_03	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clauses 6.1.2, 6.1.3 ETSI EN 383 001 [49], clauses 6.1.1, 6.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.1		
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio	0		
Selection criteria:	INVITE received with an SDP offer.			
Test purpose:	Ensure that call establishment with an INVITE which contains an SDP offer is performed correctly.			
ISDN Parameter	SETUP = 3,1 kHz audio;			
values:				
SIP Parameter values:	Dial string parameters options=PIXIT			
	PIXIT for supported header:			
	Case a) no 100 rel			
	Case b) Supported: 100 rel			
	Case c) Supported: 100 rel and precondition			
	a = line (PIXIT)			
	b = line (PIXIT)			
	m = line (PIXIT)			

Comments:						
	ISDN		SUT		SIP	
	A) Without SDP pre-condition					
	INVITE SDP	→		→	SETUP	
	100 Trying	+				
	180 Ringing	+		(ALERT	
	200 OK INVITE	+		+	CON	
	ACK	→				
	BYE	+		←	DISC	
	200 OK BYE	→		→	REL	
	B) ETSI TS 129 163 [i.20] (p	re-condit	ion and 100 rel)		
	INVITE SDP	→				
	100 Trying	+				
	183 Session Progress SDP	+				
	PRACK	→				
	200 OK PRACK	+				
	UPDATE	→				
	200 OK (UPDATE)	+				
				→	SETUP	
	180 Ringing	←		←	ALERT	
	PRACK	→				
	200 OK PRACK	+				
	200 OK INVITE	+		+	CON	
	ACK	→				
	BYE	+		+	DISC	
	200 OK BYE	→		→	REL	

SI_AU_04	ISDN reference to:	NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clause 6.1.3			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.1.3			
		ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio				
Selection criteria:					
Test purpose:	Ensure that call establishment and the mapping of the a = line b=line and m =line parameters defined in table 5 between INVITE message and the SETUP message is performed correctly. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).				
ISDN Parameter values:	SETUP = 3,1 kHz audio;				
SIP Parameter values:	Dial string parameters options=PIXIT				
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and precondition	on			
	a = line (PIXIT- table 5)				
	b = line (PIXIT - table 5)				
	m = line (PIXIT - table 5)				

Comments:							
	ISDN		SUT		SIP		
	A) Without SDP pre-condition						
	INVITE	→		→	SETUP		
	100 Trying	+					
	180 Ringing	+		←	ALERT		
	200 OK INVITE	+		←	CON		
	ACK	→					
	BYE	(+	DISC		
	200 OK BYE	→		→	REL		
	L) 5701 70 400 400 5 001	/ "					
	b) ETSI TS 129 163 [i.20]		ion met)				
	INVITE SDP	→					
	100 Trying						
	183 Session Progress SD PRACK	P ←		-			
	200 OK PRACK	- 7		-			
	UPDATE	→ ·					
	200 OK (UPDATE)	-					
	200 OK (UPDATE)						
				→	SETUP		
	180 Ringing	(+	ALERT		
	PRACK	→					
	200 OK PRACK	+					
	200 OK INVITE	+		+	CON		
	ACK	→					
	BYE	+		+	DISC		
	200 OK BYE	→ ·		→ -	REL		
	ZUU ON BTE	7		7	NEL		

ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.5 ETSI EN 383 001 [49], clause 6.5		
	ETSI TS 129 163 [i.20], clause 7.2.3.1		
ISDN = point to point Configuration: with DD P-Early-Media Header is supported	ll;		
Ensure that the SIP user receives a 183 Session Progress message when the ISDN User in call state U03 is sending a Call Proceeding message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Ensure that in the Call Delivered call state U4 the transfer of tone or announcement on the media channel is performed correctly. In case when the parameter in the SDP rtpmap: <dynamic-pt> is used the codecs in table 6 applies.</dynamic-pt>			
SETUP = 3,1 kHz audio;			
Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT - table 6) b = line (PIXIT - table 6)	1		
	ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1 SIP-ISDN/Basic_call/Successful/3,1 kHz auding ISDN = point to point Configuration: with DDP-Early-Media Header is supported Ensure that the SIP user receives a 183 Seasure in call state U03 is sending a Call Procall state (N10) the voice transfer on the me (e.g. testing QoS parameters). Ensure that in the Call Delivered call state U10 the media channel is performed correctly. In case when the parameter in the SDP rtpm table 6 applies. SETUP = 3,1 kHz audio; Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT- table 6)		

0 t					
Comments:	IODNI	1	CUT	I	OID
	ISDN		SUT		SIP
	a) Without SDP pre-condition		1		TOETUB
	INVITE	→		→	SETUP
	183 Session Progress	~		←	CALL PROCEEDING PI#8
	Including the P-Early-Media				
	Header	+		+	ALERT
	180 Ringing 200 OK INVITE	 		-	CON
		∀		~	CON
	ACK BYE	7		+	DISC
		∀			DISC
	200 OK BYE	7		→	REL
	b) FTCLTC 420 462 F 201 (=		4 \	<u> </u>	
	b) ETSI TS 129 163 [i.20] (pr	e-condition me	τ)		
	INVITE SDP	<u> </u>		ı	T
		→		1	
	100 Trying	~			
	102 Cassian Dragrass CDD	←			
	183 Session Progress SDP PRACK	→			
	200 OK PRACK				
	UPDATE	∀			
	200 OK (UPDATE)	 7			
	200 OK (UPDATE)				
			-	→	SETUP
	190 Binging	(7	ALERT
	180 Ringing PRACK	∀		_	ALERI
	200 OK PRACK	 7		-	
				+	CON
	200 OK INVITE ACK	→		~	CON
	ACK	7			
	BYE	+		_	DISC
		→		←	DISC
	200 OK BYE	7		フ	REL

SI_AU_05	ISDN reference to:	NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clause 6.5			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.5			
		ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kH	z audio			
Selection criteria:	ISDN = point to point Configuration: with				
Test purpose:	state U07 is sending an ALERTING methe voice transfer on the media and B-c parameters). Ensure that in the Call Delivered call stathe media channel is performed correctly	Ringing message when the ISDN User in call sage. Ensure that in the active call state (N10) hannels is performed correctly (e.g. testing QoS ate U4 the transfer of tone or announcement on y. rtpmap: <dynamic-pt> is used the codecs in</dynamic-pt>			
ISDN Parameter values:	SETUP = 3,1 kHz audio				
SIP Parameter values:	Dial string parameters options=PIXIT				
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and precond	dition			
	a = line (PIXIT - table 6)				
	b = line (PIXIT - table 6)				
	m = line (PIXIT - table 6)				

Comments:							
	ISDN		SUT		SIP		
	a) Without SDP pre-condition						
	INVITE	→		→	SETUP		
	100 Trying	(
	180 Ringing	+		+	ALERT		
	200 OK INVITE	+		←	CON		
	ACK	→					
	BYE	+		+	DISC		
	200 OK BYE	→		→	REL		
	b) ETSI TS 129 163 [i.20] (p	re-condition	on met)				
			,		T		
	INVITE SDP	→					
	100 Trying	-					
	183 Session Progress SDP	+					
	PRACK	→					
	200 OK PRACK	+					
	UPDATE	→					
	200 OK (UPDATE)	+					
				→	SETUP		
	180 Ringing	+		+	ALERT		
	PRACK	→					
	200 OK PRACK	+					
	200 OK INVITE	+		+	CON		
	ACK	→					
	BYE	←		+	DISC		
				→			
	200 OK BYE	→		7	REL		

SI_AU_05A	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.5 ETSI EN 383 001 [49], clause 6.5 ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio	0
Selection criteria:	ISDN = point to point Configuration: with DDI P-Early-Media Header is supported	
Test purpose:	Ensure that the SIP user receives a 180 Ringi state U07 is sending an ALERTING message. the voice transfer on the media and B-channe parameters). Ensure that in the Call Delivered call state U4 the media channel is performed correctly. In case when the parameter in the SDP rtpma table 6 applies.	Ensure that in the active call state (N10) Is is performed correctly (e.g. testing QoS the transfer of tone or announcement on
ISDN Parameter values:	SETUP = 3,1 kHz audio	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT- table 6) b = line (PIXIT - table 6) m = line (PIXIT - table 6)	
Comments:		

ISDN		SUT		SIP
a) Without SDP pre-condition	1	, , , ,		J
INVITE	→		→	SETUP
100 Trying	+			
180 Ringing	+		(ALERT
Including the P-Early-Media				
Header				
200 OK INVITE	+		-	CON
ACK	→			
BYE	(-	DISC
200 OK BYE	→		→	REL
b) ETSI TS 129 163 [i.20] (pr	e-condition met)		
INVITE SDP	→			
100 Trying	(
183 Session Progress SDP	+			
PRACK	→			
200 OK PRACK	+			
UPDATE	→			
200 OK (UPDATE)	+			
			→	SETUP
180 Ringing	+		←	ALERT PI#8
Including the P-Early-Media				
Header				
PRACK	→			
200 OK PRACK	(
200 OK INVITE	(←	CON
ACK	→			
BYE	+		←	DISC
200 OK BYE	→		→	REL

SI_AU_07	ISDN reference to:	NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clause 6.5			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.5			
		ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz a	iudio			
Selection criteria:					
Test purpose:	N09 is sending an ALERTING message. E early dialogue Ensure that in the active ca	ng message when the ISDN User in call state Ensure that the ringing tone can be heard in the Il state (N10) the transfer of tone or els is performed correctly (e.g. testing QoS			
ISDN Parameter values:	SETUP = 3,1 kHz audio;				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	on			
Comments:					

SIP		SUT		ISDN
a) Without SDP pre-condition				
INVITE	→		→	SETUP
100 Trying	+			
			←	CALL PROC
180 Ringing	+		←	ALERT
200 OK INVITE	+		(CON
ACK	→			
BYE	(<u>←</u>	DISC
200 OK BYE	→		→	REL
b) SDP pre-condition met	1 - 1			
INVITE SDP	→			
100 Trying	+			
183 Session Progress SDP	+			
PRACK	→			
200 OK (PRACK)	+			
UPDATE	→			
200 OK (UPDATE)	-			
			→	SETUP
			(CALL PROC
180 Ringing	+		←	ALERT
PRACK	→			
200 OK (PRACK)	+			
200 OK INVITE	+		(CON
ACK	→			
BYE	+		-	DISC
200 OK BYE	→		→	REL

SI_AU_08	ISDN reference to:	NGN reference to:				
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clause 6.5				
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.5				
		ETSI TS 129 163 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz aud	dio				
Selection criteria:	FAX G3					
Test purpose:	Ensure that call establishment and the mapp	ping of the defined SDP parameters for T.38				
	between INVITE message and the SETUP r	nessage is performed correctly. Ensure that				
	in the active call state (N10) the voice transfe	er on the media and B-channels is				
	performed correctly (e.g. testing QoS param	eters).				
ISDN Parameter	SETUP = 3,1 kHz audio					
values:	HLC = "Facsimile Group 2/3"					
SIP Parameter values:	Dial string parameters options=PIXIT					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line Based on T.38.					
	b = line AS: 64					
	m = line: VA_Transport ; T38 (table 4)					

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condition	n			
	INVITE	→		→	SETUP
	100 Trying	+			
				←	CALL PROC
	180 Ringing	+		←	ALERT
	200 OK INVITE	+		←	CON
	ACK	→			
	BYE	(-	DISC
	200 OK BYE	→		→	REL
	b) SDP pre-condition met	- I	l l		
	INVITE SDP	→			
	100 Trying	+			
	183 Session Progress SDP	+			
	PRACK	→			
	200 OK (PRACK)	+			
	UPDATE	→			
	200 OK (UPDATE)	+			
				→	SETUP
				←	CALL PROC
	180 Ringing	+		(ALERT
	200 OK INVITE	+		(CON
	ACK	→			
	BYE	((DISC
	200 OK BYE	→		→	REL

Table 4

Parameter transport protocol VA_Transport				
VA_Transport_1	udptl			
VA Transport 2	tcptl			

SI_AU_09	ISDN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clause 6.5
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.5
		ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz	audio
Selection criteria:	FAX G3-T.30	
Test purpose:	Ensure that call establishment and the m	napping of the defined SDP parameters INVITE
	message and the SETUP message is pe	rformed correctly. Ensure that in the active call
	state (N10) the voice transfer on the med	dia and B-channels is performed correctly (e.g.
	testing QoS parameters).	
ISDN Parameter	SETUP = 3,1 kHz audio;	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precond	ition
	,	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condition	n			
	INVITE	→		→	SETUP
	100 Trying	+			
				+	CALL PROC
	180 Ringing	+		←	ALERT
	200 OK INVITE	+		←	CON
	ACK	→			
	BYE	-		+	DISC
	200 OK BYE	→		→	REL
	b) SDP pre-condition met				
	INVITE SDP	→			
	100 Trying	-			
	183 Session Progress SDP	-			
	PRACK	→			
	200 OK (PRACK)	←			
	UPDATE	→			
	200 OK (UPDATE)	←			
				→	SETUP
	180 Ringing	+		←	ALERT
	200 OK INVITE	+		←	CON
	ACK	→			
	BYE	+		+	DISC
	200 OK BYE	→		→	REL

SI_AU_10	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.3.3	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.11 ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz a	udio			
Selection criteria:					
Test purpose:	Ensure that the call establishment and the call clearing procedure are performed correctly when the calling user clears after answering with a BYE message. The called user shall receive a DISCONNECT message indicating the Cause value # 16 "normal call clearing" with the progress indicator #8 or a Progress message with the progress indicator #8.				
ISDN Parameter	SETUP = 3,1 kHz audio;				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and preconditi	on			
	a = line (PIXIT)				
	b = line (PIXIT)				
	m = line (PIXIT)				

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condition	າ			•
	INVITE	→		}	SETUP
	100 Trying	←			
				(CALL PROC
	180 Ringing	+		(ALERT
	200 OK INVITE	+		(CON
	ACK	→			
	BYE	+		(DISC
	200 OK BYE	→)	REL
	b) SDP pre-condition met	•			
	INVITE SDP	→			
	100 Trying	+			
	183 Session Progress SDP	+			
	PRACK	→			
	200 OK (PRACK)	+			
	UPDATE	→			
	200 OK (UPDATE)	+			
)	SETUP
	180 Ringing	+		(ALERT
	200 OK INVITE	+		(CON
	ACK	→			
	BYE	→)	DISC
	200 OK BYE	+	•	(REL

SI_AU_11	ISDN reference to:	NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.3.3	ITU-T Q.1912.5 [51], clause 6.11			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.11			
		ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz au	dio			
Selection criteria:					
Test purpose:	Ensure that the call clearing procedure is performed correctly when the called user clears after answering with a DISCONNECT message indicating the Cause value # 16 "normal call clearing". The calling user shall receive a BYE message. A reason header field with value 16 is sent in case of ETSI EN 383 001 [49] and ETSI TS 129 163 [i.20], optional in ITU-T Q.1912.5 [51].				
ISDN Parameter values:	SETUP = 3,1 kHz audio;				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condition	ì			
	INVITE	→		→	SETUP
	100 Trying	+			
	180 Ringing	+		-	ALERT
	200 OK INVITE	+		+	CON
	ACK	→			
	BYE	(+	DISC
	200 OK BYE	→		→	REL
	b) SDP pre-condition met	•			
	INVITE SDP	→			
	183 Session Progress SDP	+			
	PRACK	→			
	200 OK (PRACK)	+			
	UPDATE	→			
	200 OK (UPDATE)	+			
				→	SETUP
	180 Ringing	+		←	ALERT
	PRACK	→			
	200 OK (PRACK)	+			
	200 OK INVITE	+		+	CON
	ACK	→			
	BYE	(+	DISC
	200 OK BYE	→		→	REL

Table 5

		m= line		B= line	A= line	BC parameter (see note 2)		HLC parameter	
	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<pre><modifier>:<bandwidth- value=""> (see note 3)</bandwidth-></modifier></pre>	rtpmap: <payload type=""> <encoding name="">/ <clock rate=""> [/<encoding parameters="">]</encoding></clock></encoding></payload>	Information Transport Capability	User Information Layer 1 Protocol Indicator	High Layer Characteristics Identification	
VA_01	audio	RTP/AVP	0	N/A or up to 64 kbit/s	N/A	"3,1 kHz audio"	"G.711 A-law "	Note 2	
VA_02	audio	RTP/AVP	Dynamic PT	I	rtpmap: <dynamic-pt> PCMU/8000</dynamic-pt>	"3,1 kHz audio"	"G.711 A-law "	Note 2	
VA_03	audio audio	RTP/AVP	8	N/A or up to 64 kbit/s	N/A	"3,1 kHz audio"	"G.711 A-law "	Note 2	
VA_04	audio	RTP/AVP	Dynamic PT		rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>	"3,1 kHz audio"	"G.711 A-law"	Note 2	

NOTE 1: In this table the codec G.711 is used only as an example. Other codec is possible.

NOTE 2: HLC normally absent in this case. It is possible for HLC to be present with the value "Telephony", although clause 6.3.1 in Recommendation ITU-T Q.939 [i.18] indicates that this would normally be accompanied by a value of "Speech" for the Information Transfer Capability element.

NOTE 3: https://doi.org/10.1001/journal.org/ value of "Speech" for the Information Transfer Capability element.

NOTE 3: https://doi.org/10.1001/journal.org/

Table 6: Values for test purposes SI_AU_04 and SI_AU_11

VARIABLE	PT	Encoding	media type	clock rate	channels
VA_01	0	PCMU	Α	8,000	1
VA_02	3	GSM	Α	8,000	1
VA_03	4	G723	Α	8,000	1
VA_04	5	DVI4	Α	8,000	1
VA_05	7	LPC	Α	8,000	1
VA_06	8	PCMA	Α	8,000	1
VA_07	9	G722	Α	8,000	1
VA_08	12	QCELP	Α	8,000	1
VA_09	13	CN	Α	8,000	1
VA_10	18	G729	Α	8,000	1
VA_11	Dyn	G726-40	Α	8,000	1
VA_12	Dyn	G726-32	Α	8,000	1
VA_13	Dyn	G726-24	Α	8,000	1
VA_14	Dyn	G726-16	Α	8,000	1
VA_15	Dyn	G729D	Α	8,000	1
VA_16	Dyn	G729E	Α	8,000	1
VA_17	Dyn	GSM-EFR	Α	8,000	1

SI_AU_12	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23,], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3 ETSI EN 383 001 [49], clause 6.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio	£ 3/
Selection criteria:	FAX - inband	
Test purpose:	Ensure that call establishment and the mappir kbit/s and m = RTP/AVP 8 for FAX - inband be message is performed correctly. Ensure that it transfer on the media and B-channels is performant parameters).	etween INVITE message and the SETUP n the active call state (N10) the data
ISDN Parameter	SETUP = 3,1 kHz audio;	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	
	a = line: PCMA/8000 or PCMU/8000 (PIXIT) b = line: 64 kbit/s m = line: = RTP/AVP 8 or 0 (PIXIT)	

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condition	n			
	INVITE	→		→	SETUP
	100 Trying	←			
	180 Ringing	+		←	ALERT
	200 OK INVITE	+		←	CON
	ACK	→			
	BYE	(-	DISC
	200 OK BYE	→		→	REL
	b) SDP pre-condition met				
	INVITE SDP	→			
	100 Trying	+			
	183 Session Progress SDP	+			
	PRACK	→			
	200 OK (PRACK)	+			
	UPDATE	→			
	200 OK (UPDATE)	+			
				→	SETUP
	180 Ringing	(←	ALERT
	PRACK	→			
	200 OK (PRACK)	+			
	200 OK INVITE	+		←	CON
	ACK	→			
	BYE	(+	-	DISC
	200 OK BYE	→		<u>→</u>	REL

SI_AU_13	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clauses 6.1.1, 6.1.3 ETSI EN 383 001 [49], clauses 6.1.1, 6.1.3
T00 /	010 10001/0 : 11/0	ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audi	
Selection criteria:	SIP Profile A or ITU-T Q.1912.5 [51] Profile B TS 129 163 [i.20]	with PI or ETSI EN 383 001 [49] or ETSI
Test purpose:	Ensure that call establishment upon receipt of performed correctly. During call establishment shall be included in the SETUP message sent description value #1 "call is not end-to-end ISI	t a Progress indicator information element to the called user with progress
ISDN Parameter values:	SETUP = 3,1 kHz audio;	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	

Comments:								
	SIP		SUT		ISDN			
	a) Without SDP pre-condition							
	INVITE	→		→	SETUP PI #1			
	100 Trying	+						
	180 Ringing	+		←	ALERT			
	200 OK INVITE	-		←	CON			
	ACK	→						
	BYE	-		←	DISC			
	200 OK BYE	→		<u>`</u>	REL			
	b) SDP pre-condition met	1 -	ı	<u> </u>	1,122			
	INVITE SDP	→		1				
	100 Trying	-						
	183 Session Progress SDP	+						
	PRACK	→						
	200 OK (PRACK)	(
	UPDATE	→						
	200 OK (UPDATE)	+						
	, , , , , , , , , , , , , , , , , , ,			→	SETUP PI #1			
	180 Ringing	(←	ALERT			
	PRACK	→						
	200 OK (PRACK)	(
	200 OK INVITE	-		+	CON			
	ACK	→						
	BYE	(←	DISC			
	200 OK BYE	→		→	REL			
	NOTE: The 183 Session Progress message with SDP answer should be sent only when the OBCI in the ALERTING is set to: inband info or appropriate pattern is now available.							

SI_AU_14	ISDN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3], clause 5.2.1	ITU-T Q.1912.5 [51], clauses 6.1.1, 6.1.3
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clauses 6.1.1,
		6.1.3
		ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz aud	io
Selection criteria:		
Test purpose:	During the session, the calling user decides session. This is accomplished by sending a redescription. This re-INVITE references the exist to modify an existing session instead of est 200 (OK) to accept the change. The requested In case when the parameter in the SDP rtpms table 6 applies.	e-INVITE containing a new media kisting dialog so that the IWU knows that it tablishing a new session. The IWU sends a or responds to the 200 (OK) with an ACK.
ISDN Parameter values:	SETUP = 3,1 kHz audio;	
ISDN Parameter values:	SETUP = 3,1 kHz audio;	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		_

SIP		SUT		ISDN
a) Without SDP pre-conditio	n	•		
INVITE	→		→	SETUP
180 Ringing	+		+	ALERTING
200 OK INVITE	←		+	CON
ACK	→			
RE-INVITE	→			
200 OK	+			
ACK	→			
		Communication		
BYE	+		+	DISC
200 OK BYE	→		→	REL
b) SDP pre-condition met				
INVITE	→			
183 Session Progress	+			
PRACK	→			
200 OK (PRACK)	+			
UPDATE	→			
200 OK (UPDATE)	+			
			→	SETUP
180 Ringing	+		+	ALERTING
PRACK	→			
200 OK (PRACK)	+			
200 OK INVITE	((CON
ACK	→			
		Communication		
BYE	+		(DISC
200 OK BYE	→		→	REL

SI_AU_15	ISDN reference to:	NGN reference to:				
	ETSI EN 300 403-1 [i.3], clause 5.3.3	ETSI TS 129 163 [i.20], clause 7.2.3.1				
	ETSI EN 300 899-1 [23], clause 3.1.1 ETSI TS 183 028 [i.19]					
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio	0				
Selection criteria:	Announcements controlled provided by the PS	STN/ISDN				
	Providing announcements to a user during the	e establishment of a communication				
	session					
Test purpose:	During the establishment of the communicatio	n the PSTN/ISDN provides an				
	announcement e.g. "The communication is for	warded" or "The user is not reachable".				
	Ensure that the transfer of tone or announcem	nent on the media is performed correctly.				
	The flow assume the use of the option-tag "10	Orel.				
ISDN Parameter	SETUP = 3,1 kHz audio;					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT					
	D1/47 ()					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						

SI_AU_16	ISDN reference to:	NGN reference to:				
	ETSI EN 300 403-1 [i.3], clause 5.3.3	ETSI TS 129 163 [i.20], clause 7.2.3.1				
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI TS 183 028 [i.19]				
TSS reference:	SIP-ISDN/Basic_call/Successful/3,1 kHz audio					
Selection criteria:	Announcements controlled provided by the PS					
	Providing announcements to a user during the	e establishment of a communication				
	session					
Test purpose:	During the establishment of the communicatio	n the PSTN/ISDN provides an				
	announcement e.g. "The communication is for					
	Ensure that the transfer of tone or announcem	nent on the media is performed correctly.				
	The flow assumes the use of the P-Early med	ia header.				
ISDN Parameter	SETUP = 3,1 kHz audio;					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						

SI_AU_17	ISDN refere			ference to: 163 [i.20], clause			
	ETSI EN 300		7.2.3.1.3A.1				
TSS reference:	SIP-ISDN/Basic_call/Su	uccessful/3,1 kHz aud	dio				
Selection criteria:	Basic_call; ETSI TS 129						
Test purpose:	Ensure that call establis						
	Ensure that the SIP use		nging message wher	the ISDN user			
	answers with an ALER						
	is performed correctly (e call state (N10) the	voice transfer on the	media and B-channels			
ISDN Parameter values:	BC=speech, no HLC	e.g. lesting Qos para	imeters).				
SIP Parameter values:	Dial string parameters of	ontions-PIXIT					
on raidincter values.	Diai string parameters t	phono-i ixii					
	TYPE_SDP= PIXIT;						
	PIXIT for supported hea	ader:					
	Case a) no 100 rel						
	Case b) Supported: 100						
	Case c) Supported: 100	rel and precondition	<u> </u>				
Comments:				1			
	INVITE	→	→	SETUP			
			(SETUP ACK			
	183 Session progress	(
	INFO	→	→	INFO			
	200 OK	+		0 11 11			
	183 Session progress		-	Call proceeding			
	180 Ringing ← ALERTING						
	ACK	200 OK INVITE ← CONN					
	AUN						
	BYE	>	→	DISC			
	200 OK BYE	(-	REL			

SI_AU_18	ISDN refere ETSI EN 300 4 ETSI EN 300 5	403-1 [i.3] 899-1 [23]	ETSI TS 129 1 7.2.3	erence to: 63 [i.20], clause 			
TSS reference:	SIP-ISDN/Basic_call/Su	uccessful/3,1 kHz aud	dio				
Selection criteria:	Basic_call; ETSI TS 129 one dialog used			•			
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. Ensure that the SIP user receives an 180 Ringing message when the ISDN user answers with an ALERTING message. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).						
ISDN Parameter values:	BC=speech, no HLC						
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
Comments:		1-		I			
	INVITE	→	→	SETUP			
	484	((SETUP ACK			
	INVITE	→	→	INFO			
	484	+					
	INVITE	→	→	INFO			
	183 Session progress	+	+	Call proceeding			
	180 Ringing	+	+	ALERTING			
	200 OK INVITE	+	(CONN			
	ACK	→					
	BYE	>	→	DISC			
	200 OK BYE	((REL			

SI_AU_19	ISDN reference to: NGN reference to: ETSI EN 300 403-1 [i.3], ETSI TS 129 163 [i.20], cla					
	ETSI EN 300 899-1 [23] 7.2.3.1.3A.1					
TSS reference:	SIP-ISDN/Basic_call/Suc	ccessful/3,1 kHz au	idio			
Selection criteria:	Basic_call; ETSI TS 129 Method; two dialogs use	d		·		
Test purpose:	Ensure that call establishment using overlap sending is performed correctly. Ensure that the SIP user receives a 180 Ringing message when the ISDN user answers with an ALERTING message. The sending of the 183 Session Progress is optional. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).					
ISDN Parameter values:	BC=speech, no HLC					
SIP Parameter values:	Dial string parameters options=PIXIT TYPE_SDP= PIXIT; PIXIT for supported header: Case a) no 100 rel					
	Case b) Supported: 100 Case c) Supported: 100		n			
Comments:	Case c) Supported. 100	rei and preconditio	II			
Comments.	INVITE csq 1	→	→	SETUP		
	INVITE COQ I		· · ·	SETUP ACK		
	INVITE csq2	→		OLIGI AGIK		
	HTTTE GOGE		→	INFO		
	484 csq 1	+				
	183 Session progress ← Call proceeding					
	180 Ringing csq2	+	+	ALERTING		
	200 OK INVITE	+	+	CONN		
	ACK	→				
	BYE	→	→	DISC		
	200 OK BYE	+	(REL		

6.3.1.2 Codec negotiation

SI_XX_CN_01	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.3.3 ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11 ETSI EN 383 001 [49], clause 6.11 ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-SIP/Basic_call/Codec negotiation	
Selection criteria:		
Test purpose:	session in the confirmed state. This is ac a new media description. This re-INVITE	
ISDN Parameter values:	SETUP = 3,1 kHz audio	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precond a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ition
Comments:	, ,	

SI_XX_CN_02	ISDN reference to:	NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.3.3	ITU-T Q.1912.5 [51], clause 6.11			
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI EN 383 001 [49], clause 6.11			
		ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN /Basic_call/Codec negotiation				
Selection criteria:					
Test purpose:	During the session, the calling user decides to change the characteristics of the media session. Ensure that the calling user can send UPDATE after completion of the initial INVITE transaction. The other party sends a 200 (OK) to accept the change. The requestor responds to the 200 (OK) with an ACK.				
ISDN Parameter	SETUP = 3,1 kHz audio				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT				
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and precondition	on			
	a = line (PIXIT)				
	b = line (PIXIT)				
	m = line (PIXIT)				
Comments:					

6.3.1.3 Test purposes for SIP-ISDN, Basic call, DTMF

SI_XX_DT_01	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1 ETSI EN 300 899-1 [23], clause 3.1.1		NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3 ETSI EN 383 001 [49], clause 6.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Succ	essful/3,1	kHz audio			
Selection criteria:	DTMF inband					
Test purpose:	in case when the SDP par	ents 0 thre	ough 15) can be trar		hat in the active call state d inband to the called user	
ISDN Parameter values:	SETUP = 3,1 kHz audio;					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition					
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT		ISDN	
	a) without SDP pre-condition			_		
	INVITE	→		→	SETUP	
	180 Ringing	+		+	ALERTING	
	200 OK INVITE	+		+	CON	
	ACK	→				
			Communication			
	BYE	←		←	BYE	
	200 OK BYE	→		→	200 OK BYE	
	b) SDP pre-condition met					
	IŃVITE	→				
	183 Session Progress	←				
	PRACK	→				
	200 OK (PRACK)	+				
	UPDATE	<u>`</u>				
	200 OK (UPDATE)	/				
	200 011 (01 0/112)			→	SETUP	
	180 Ringing	+		/	ALERTING	
	200 OK INVITE	-		+	CONN	
	ACK	→ ·		+	CONIN	
	AUN	7	Communication			
	DVE		Communication		DISC	
	BYE	((DISC	
	200 OK BYE	→		→	REL	

Table 6a

	Values for test purposes SI_XX_DT_01							
VARIABLE	PT	Encoding	media type	clock rate	channels			
VA_01	0	PCMU	Α	8,000	1			
VA_02	3	GSM	Α	8,000	1			
VA_03	8	PCMA	Α	8,000	1			
VA_04	dyn	GSM-EFR	Α	8,000	1			

SI_XX_DT_02	ISDN referenc ETSI EN 300 403-1 [i.3]		NGN reference to: Q.1912.5 [51], clause 6.1.3 ETSI EN 383 001 [49], clause 6.1.3			
	ETSI EN 300 899-1 [23]	, clause 3.1.1			83 001 [49], clause 6.1.3 9 163 [i.20], clause 7.2.3.1	
TSS reference:	SIP-ISDN/Basic_call/Succ	cessful/3,1 kHz				
Selection criteria:	DTMF with IETF RFC 283					
Test purpose:		vents 0 through	n 15) can be t	ransr	ure that in the active call state mitted as payload for DTMF n the SDP parameter in	
ISDN Parameter	SETUP = 3,1 kHz audio;					
values: SIP Parameter values:	Dial string parameters and	tions DIVIT				
of Farameter values.	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
_	m = line (PIXIT)					
Comments:	OID				10011	
	SIP		SUT		ISDN	
	a) Without SDP pre-condi			_	OFTUD	
	INVITE	→		→	SETUP	
	180 Ringing	+		(ALERTING	
	200 OK INVITE	+		+	CON	
	ACK	→				
			Communi cation			
	BYE	+		+	DISC	
	200 OK BYE	→		→	REL	
	b) SDP pre-condition met	•			•	
	IŃVITE	→				
	183 Session Progress	+				
	PRACK	→				
	200 OK (PRACK)	+				
	UPDATE	→				
	200 OK (UPDATE)	+				
				→	SETUP	
	180 Ringing	←		+		
	PRACK	→				
	200 OK (PRACK)	-				
	200 OK INVITE	(+	CONN	
	ACK	→				
			Communi cation			
	BYE	+		+	DISC	
	200 OK BYE	→		→	REL	

6.3.1.4 Test purposes for SIP-ISDN, Basic call, UDI

SI_UD_01	ISDN reference to:		NGN reference to:			
	ETSI EN 300 403-1 [i.3], clause 5.2.1			Q.1912.5 [51], clause 6.1.3		
	ETSI EN 300 899-1 [23],	clause	3.1.1			383 001 [49], clause 6.1.3
T00 (OID IODALID : IIIO		D.	ETSIT	S 12	9 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Succe	sstul/U	וט			
Selection criteria:			4	. (1)		
Test purpose:	Ensure that call establishme					
						transfer on the media and B-
ISDN Parameter	channels is performed corre SETUP = UDI;	ectly (e.	g. testing	QoS para	mete	ers).
values:	SETUP = UDI,					
SIP Parameter values:	Dial string parameters option	ne-DIY	TT			
SIF Farameter values.	Diai string parameters option	115=Γ1Λ	.1 1			
	PIXIT for supported header					
	Case a) no 100 rel	•				
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel		econdition	l		
	a = line : rtpmap: <dynamic-< td=""><td>PT> CL</td><td>.EARMOI</td><td>DE/8000</td><td></td><td></td></dynamic-<>	PT> CL	.EARMOI	DE/8000		
	b = line AS: 64					
	m = RTP/AVP					
Comments:						
	SIP		S	UT		ISDN
	a) Without SDP pre-condition	on				
	INVITE	→			→	SETUP
	180 Ringing	-			+	ALERTING
	200 OK INVITE	+			+	CON
	ACK	→				
			Comm	unication		
	BYE	←			+	BYE
	200 OK BYE	→			→	200 OK BYE
	b) SDP pre-condition met					
	INVITE	→				
	183 Session Progress	+				
	PRACK	→			1	
	200 OK (PRACK)	+			1	
	UPDATE	→			1	
	200 OK (UPDATE)	+			1	
					→	SETUP
	180 Ringing	-			+	ALERTING
	PRACK	→				
	200 OK (PRACK)	←			L	
	200 OK INVITE	+			←	CONN
	ACK	→				
			Comm	unication	<u> </u>	
	BYE	-			(DISC
	200 OK BYE	→			→	REL

SI UD 03	ISDN reference	to:			NO	GN reference to:	
01_02_00	ETSI EN 300 403-1 [i.3],		533	ITU-T Q.1912.5 [51], clause 6.11			
	ETSI EN 300 899-1 [23],					83 001 [49], clause 6.11	
		0.000	••••			9 163 [i.20], clause 7.2.3.1	
TSS reference:	SIP-ISDN/Basic_call/Succ	SIP-ISDN/Basic_call/Successful/UDI					
Selection criteria:							
Test purpose:	Ensure that the call establi	ishment	and the	call clearing	g pro	cedure are performed	
	correctly when the calling						
	The called user shall recei		CONNE	ECT messag	ge in	dicating the Cause value	
	# 16 "normal call clearing"						
				U4 the tran	sfer	of tone or announcement on	
IODNI Danamatan	the media channel is perfo	rmed co	rrectly.				
ISDN Parameter	SETUP = UDI;						
values:	Dial atria e na ra manta na anti	DIV	/IT				
SIP Parameter values:	Dial string parameters opti	ons=PIX	d I				
	PIXIT for supported heade	·r·					
	Case a) no 100 rel	·1.					
	Case b) Supported: 100 re	اد					
	Case c) Supported: 100 re	I and pre	econditio	on			
	Case of Cappentean less is	. aa p.		···			
	a = line : rtpmap: <dynamic< td=""><td>-PT> CL</td><td>EARM</td><td>ODE/8000</td><td></td><td></td></dynamic<>	-PT> CL	EARM	ODE/8000			
	b = line AS: 64						
	m = RTP/AVP						
Comments:							
	SIP			SUT		ISDN	
	a) Without SDP pre-condit						
	INVITE	→			→	SETUP	
	180 Ringing	+			←	ALERTING	
	200 OK INVITE	←			+	CON	
	ACK	→					
	RE-INVITE	→					
	200 OK	←					
	ACK	→					
	2) (2		Com	munication	-	7.00	
	BYE	+			<u>+</u>	DISC	
	200 OK BYE	→			→	REL	
	b) SDP pre-condition met						
	INVITE	→					
	183 Session Progress	-			-	+	
	PRACK	→			1		
	200 OK (PRACK) UPDATE	←			-		
	200 OK (UPDATE)	7			-		
	ZOU OR (UPDATE)	-			→	SETUP	
	180 Ringing	+			₹	ALERTING	
	200 OK INVITE	-			-	CONN	
	ACK	→			-	COMIN	
	ACIT	7	Com	munication			
	BYE	+	COIII	mumoalion	+	DISC	
	200 OK BYE	→			→	REL	
	ZOO OR DTE	7				IXLL	

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SI_UD_04	ISDN reference		NGN reference to:					
31_00_04	ETSI EN 300 403-1 [i.3], clause 5.3.3 ETSI EN 300 899-1 [23], clause 3.1.1		ETSI E	Q.1912.5 N 383 001	[51], clause 6.11 I [49], clause 6.11			
			ETSITS '	ETSITS 129 163 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Succ	SIP-ISDN/Basic_call/Successful/UDI						
Selection criteria:								
Test purpose:	Ensure that the call clearing procedure is performed correctly when the called user clears after answering with a DISCONNECT message indicating the Cause value # 16 "normal call clearing". The calling user shall receive a BYE message. A reason header field with value 16 is sent in case of ETSI EN 383 001 [49] and ETSI TS 129 163 [i.20], optional in ITU-T Q.1912.5 [51].							
ISDN Parameter	SETUP = UDI;							
values:	,							
SIP Parameter values:	Dial string parameters opti		(IT					
	PIXIT for supported header Case a) no 100 rel Case b) Supported: 100 recase c) Supported: 100 recase c) Supported: 100 recase c)	el	econditio	on				
	a = line : rtpmap: <dynamic-pt> CLEARMODE/8000 b = line AS: 64 m = RTP/AVP</dynamic-pt>							
Comments:								
	SIP			SUT		ISDN		
	a) Without SDP pre-condit	tion						
	INVITE	→			→	SETUP		
	180 Ringing	+			+	ALERTING		
	200 OK INVITE	←			+	CON		
	ACK	→						
			Com	munication				
	BYE	+			+	DISC		
	200 OK BYE	→			→	REL		
	b) SDP pre-condition met				1			
	INVITE	→						
	183 Session Progress	←						
	PRACK	→						
	200 OK (PRACK)	(
	UPDATE	→						
	200 OK (UPDATE)	+						
					→	SETUP		
	180 Ringing	+			+	ALERTING		
	PRACK	→						
	200 OK (PRACK)	+						
	200 OK INVITE	+			+	CONN		
	ACK	→						
			Com	munication				
	BYE	+			+	DISC		
	200 OK BYE	→			→	REL		

SI UD 05	ISDN reference to:			NGN reference to:			
	ETSI EN 300 403-1 [i.					2.5 [51], clauses 6.1.1, 6.1.3	
	ETSI EN 300 899-1 [23], clause 3.1.1 ETSI EN 383 001 [49], clause 6						
TSS reference:	SIP-ISDN/Basic_call/Suc						
Selection criteria:	SIP Profile A or ITU-T Q.						
Test purpose:						TE with sufficient digits, is	
						ndicator information element	
	shall be included in the S				alled	user with progress	
ICDN Doromotor	description value #1 "call	is not en	a-to-ena i	SDN"			
ISDN Parameter values:	SETUP = UDI						
SIP Parameter values:	Dial string parameters op	tions_DI	VIT				
SIF Farameter values.	Diai string parameters op)(IOH5=F1	A11				
	PIXIT for supported head	ler					
	Case a) no 100 rel	.01.					
	Case b) Supported: 100	rel					
	Case c) Supported: 100 i		econdition	l			
	a = line : rtpmap: <dynam< td=""><td>ic-PT> C</td><td>LEARMO</td><td>DE/8000</td><td></td><td></td></dynam<>	ic-PT> C	LEARMO	DE/8000			
	b = line AS: 64						
	m = RTP/AVP						
Comments:	SIP			JT		ISDN	
	INVITE	→	30	J I	→	SETUP PI #1	
	100 Trying	7			7	SETUP PI#I	
	100 Trying				+	CALL PROC	
	180 Ringing	+			+	ALERT	
	PRACK	→			<u> </u>	ALLINI	
	200 OK (PRACK)	-					
	200 011 (1 10 1011)						
	200 OK INVITE	+			+	CON	
	ACK	→					
			Commur	nication			
	BYE	+			(DISC	
	200 OK BYE	→			→	REL	
	NOTE: ETSI EN 383	001 [49] i	s not confe	orm to the	ETS	I ISDN basic standard	
	regarding UDI	(PI).					

SI_UD_06	ISDN reference to: ETSI EN 300 403-1 [i.3], clause 5.2.1	NGN reference to: ETSI EN 383 001 [49], clause 6.1.1				
	ETSI EN 300 899-1 [23], clause 3.1.1	ETSI TS 129 163 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Successful/UDI					
Selection criteria:	In case of UDI, the FCI is sent with "No interworking encountered" and "Originating access is ISDN"					
Test purpose:	Ensure that call establishment upon receipt of the first INVITE with sufficient digits, is performed correctly. During call establishment a Progress indicator information element shall not be included in the SETUP message.					
ISDN Parameter	SETUP = UDI					
values:						
SIP Parameter values:	Dial string parameters options=PIXIT					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line : rtpmap: <dynamic-pt> CLEARMODE/8000</dynamic-pt>					
	b = line AS: 64					
	m = RTP/AVP					

Comments:					
	SIP		SUT		ISDN
	a) Without SDP pre-condit	ion			
	INVITE	→		→	SETUP
	100 Trying	+			
				+	CALL PROC
	180 Ringing	+		+	ALERT
	200 OK INVITE	+		+	CON
	ACK	→			
			Communication		
	BYE	+		+	DISC
	200 OK BYE	→		→	REL
	b) SDP pre-condition met				
	INVITE	→			
	183 Session Progress	+			
	PRACK	→			
	200 OK (PRACK)	+			
	UPDATE	→			
	200 OK (UPDATE)	+			
				→	SETUP
	180 Ringing	+		+	ALERTING
	PRACK	→			
	200 OK (PRACK)	+			
	200 OK INVITE	+		+	CONN
	ACK	→			
			Communication		
	BYE	+		+	DISC
	200 OK BYE	→		→	REL

6.3.1.5 Test purposes for SIP-ISDN, Basic call, Unsuccessful

Unsuccessful

SI_XX_U01	ISDN reference to: ETSI EN 300 403-1 [i.3], clauses 5.1.4, G.1.1		ITU-T Q.19 ² ETSI EN 383	reference to: 2.5 [51], clause 6.11 001 [49], clause 6.11 63 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Unsuccess	ful						
Selection criteria:								
Test purpose:	Ensure that, when calling to unallocated number , the network initiate call clearing to the calling user with a Not Found message. If the Reason Header field is implemented the cause value #1 "unassigned number" should be mapped to the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)							
ISDN Parameter	SETUP = PIXIT							
values:								
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:	OID		OUT	IODN				
	SIP		SUT	ISDN				
	INVITE -							
	100 Trying ←							
		404 Not Found						
	ACK →							

SI_XX_U02	ISDN reference to: ETSI EN 300 403-1 [i.3],			GN reference to: 1912.5 [51], clause 6.11		
	clauses 5.1.4, G.1.1			83 001 [49], clause 6.11		
	,			9 163 [i.20], clause 7.2.3.1		
TSS reference:	SIP-ISDN/Basic_call/Unsuccessf	ul				
Selection criteria:						
Test purpose:	Ensure that the call will be released when there is no route to destination . The network initiates call clearing to the calling user with a 500 Server Internal Error. If the Reason Header field is implemented the cause value # 3 "no route to destination should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)					
ISDN Parameter	SETUP = PIXIT	<u> </u>				
values:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:	OID	1	OUT	10011		
	SIP		SUT	ISDN		
	INVITE →					
	100 Trying ←					
	500 Server Internal Error					
	ACK →					

SI_XX_U03	ISDN reference to: ETSI EN 300 403-1 [i.3 clauses 5.2.5.1, G.1.7	4,	ETSI E	Q.1 EN 3	6N reference to: 912.5 [51], clause 6.11 83 001 [49], clause 6.11 9 163 [i.20], clause 7.2.3.1	
TSS reference:	SIP-ISDN/Basic_call/Unsuccess	sful				
Selection criteria:						
Test purpose:	Ensure that, when the called user is user determined user busy the network initiate call clearing to the calling user with a 486 Busy Here message. If the Reason Header field is implemented the cause value # 17 should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)					
ISDN Parameter values:	SETUP = PIXIT					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].					
	SIP	ISDN				
	INVITE -			→	SETUP	
	100 Trying ←					
	486 Busy Here			→	REL_COMP #17	
	ACK -	•				

SI_XX_U04	ISDN reference to: ETSI EN 300 403-1 [i.3		ITU-T	Q.1	N reference to: 912.5 [51], clause 6.11				
	clauses 5.2.5.4, G.1.9	9			83 001 [49], clause 6.11				
TSS reference:	SIP-ISDN/Basic call/Unsucces	of. I	E13113	129	163 [i.20], clause 7.2.3.1				
Selection criteria:	SIP-ISDIN/Basic_call/Offsucces	Siui							
Test purpose:	Ensure that when there is no a	Ensure that when there is no answer from the called user ("no user responding"), the							
rest purpose.	network initiate call clearing to the calling user with a 480 Temporarily unavailable								
	message. If the Reason Header field is im the Reason Header field.	plemented	the cause va	alue	# 18 should be contained in				
	(According to ETSI TS 129 163 shall be added to the SIP final I		ETSI EN 383	001	[49] the Reason Header field				
ISDN Parameter	SFTUP = PIXIT	esponse)							
values:	SETOF = FIXIT								
SIP Parameter values:	Dial string parameters options=	:PIXIT							
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition								
	a = line (PIXIT)								
	b = line (PIXIT)								
	m = line (PIXIT)								
Comments:	In the Request-URI a sip: URI v								
	that URI is an E.164 number er IETF RFC 3966 [26].	ncoded as s	specified by th	ne te	elephone-subscriber rule of				
	SIP SUT ISDN								
	INVITE =	>		→	SETUP				
	100 Trying								
	480 Temporarily								
	unavailable								
	ACK =	>							

SI_XX_U05	ISDN reference to: ETSI EN 300 403-1 [i.3],	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11				
	clauses 5.2.5.4, G.1.9	ETSI EN 383 001 [49], clause 6.11				
	Claudes Claid I, Clilis	ETSI TS 129 163 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Unsuccessful	-				
Selection criteria:						
Test purpose:	Ensure that when there is no answer from the called user ("no answer from the user"), the ISDN network initiate call clearing to the calling user with a 480 Temporarily unavailable message.					
	If the Reason Header field is implemented the Reason Header field.	the cause value # 102 should be contained in				
	(According to ETSI TS 129 163 [i.20] and shall be added to the SIP final response)	ETSI EN 383 001 [49] the Reason Header field				
ISDN Parameter values:	SETUP = PIXIT					
SIP Parameter values:	Dial string parameters options=PIXIT					
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					

Comments:					
	SIP		SUT		ISDN
	INVITE	→		→	SETUP
	100 Trying	+			
	180 Ringing	(+	ALERTING
			ISUP T9		
			expired		
	480 Temporarily	(→	DISC #102
	unavailable				
				+	RELEASE
	ACK	→		→	REL COMP

SI_XX_U06	ISDN reference ETSI EN 300 403 clauses 5.2.5.4	3-1 [i.3], , G.1.9	ETSI	T Q.1912 EN 383	reference to: 2.5 [51], clause 6.11 001 [49], clause 6.11 i3 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/U							
Selection criteria:	Basic call; Reason Hea							
Test purpose:	SIP network initiate call send to the calling user	Ensure that when there is no answer from the called user (but user alerted) and if the SIP network initiate call clearing before the SCN release the call, the SIP network shall send to the calling user a 480 Temporarily unavailable message and the SCN network initiate call clearing to the calling user with a DISCONNECT message indicating cause						
ISDN Parameter	BC = PIXIT							
values:								
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:	IODNI		OUT	1	OID			
	ISDN	_	SUT		SIP			
	CALL PROCEEDING	SETUP ← INVITE CALL PROCEEDING → .						
	ALERTING	→		→	180 Ringing			
	DISC#20	+		+	480 temp. Unavailable			
	REL	+		+	ACK			

SI_XX_U07	ISDN reference to: NGN reference to:					
	ETSI EN 300 403-1 [i.3]	Ι,	ITU-T C	2.191	2.5 [51], clause 6.11	
	clauses 5.1.9, 5.3.2, G.1.	10	ETSI EN	1 383	001 [49], clause 6.11	
			ETSI TS 1	29 1	63 [i.20], clause 7.2.3.1	
TSS reference:	SIP-ISDN/Basic_call/Unsucce	ssful				
Selection criteria:						
Test purpose:	Ensure that when the called user rejects the call and responds with a RELEASE COMPLETE message indicating cause value # 21 "call rejected", the call will be released. The network initiates call clearing to the calling user with a 480 Temporarily unavailable message. If the Reason Header field is implemented the cause value # 21 should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field					
	shall be added to the SIP fina					
ISDN Parameter values:	SETUP = PIXIT	•				
SIP Parameter values:	Dial string parameters options	=PIXIT				
	PIXIT for supported header: Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel ar	nd preco	ndition			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP		SUT		ISDN	
	INVITE	→		→	SETUP	
	100 Trying	-				
	480 Temporarily	←		←	REL COMP # 21	
	unavailable					
	ACK	→				

SI_XX_U08	ISDN reference to: ETSI EN 300 403-1 [i.: clauses 5.2.5.4, G.1.		ITU-T Q.19 ETSI EN 38	N reference to: 912.5 [51], clause 6.11 33 001 [49], clause 6.11 163 [i.20], clause 7.2.3.1			
TSS reference:	SIP-ISDN/Basic_call/Unsucces	ssful					
Selection criteria:							
Test purpose:	Ensure that when the number is changed, the network initiate call clearing to the calling user with a 410 Gone message. If the Reason Header field is implemented the cause value # 22 ("number changed") should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)						
ISDN Parameter	SETUP = PIXIT						
values:							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	OID T	1	OUT	10001			
	SIP	_	SUT	ISDN			
	INVITE -						
		F					
	ACK -	→					

SI_XX_U09	ISDN reference to: ETSI EN 300 403-1 [i. clauses 5.2.5.4, G.1.	3],	ITU-T Q. ETSI EN :	GN reference to: 1912.5 [51], clause 6.11 383 001 [49], clause 6.11 9 163 [i.20], clause 7.2.3.1					
TSS reference:	SIP-ISDN/Basic_call/Unsucces	SIP-ISDN/Basic_call/Unsuccessful							
Selection criteria:									
Test purpose:	Ensure that when the destination is out of order , the network initiate call clearing to the calling user with a 502 Bad Gateway message. If the Reason Header field is implemented the cause value Cause Value No. 27 ("destination out of order") should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)								
ISDN Parameter	SETUP = PIXIT								
values:									
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)								
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].								
	SIP		SUT	ISDN					
		•	→	SETUP					
	100 Trying			DEL # 07					
		<u>+ </u>	(REL # 27					
	ACK -	•	→	RLC					

SI_XX_U10	ISDN reference to: ETSI EN 300 403-1 [i.3 clauses 5.1.9, 5.3.2, G.1		ITU-T (ETSI EN	Q.191 N 383	reference to: 12.5 [51], clause 6.11 3 001 [49], clause 6.11 63 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Unsuccess	sful			
Selection criteria:					
Test purpose:	Ensure that the call will be released when the called number is incomplete. The network initiates call clearing to the calling user according the CAUSE_VA interworking to SIP_MESSAGE_VA. If the Reason Header field is implemented the cause value should be contained in Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)				
ISDN Parameter	SETUP = PIXIT				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:	CIP		OUT		IODNI
	SIP INVITE 100 Trying		SUT	>	ISDN SETUP
	100 Trying ← SIP_MESSAGE_VA ←		+		
	ACK +				

	SI_XX_U10						
	SIP_MESSAGE_VA	CAUSE_VA PSTN cause (Destination number PIXIT)					
VA_1	404 Not Found	value # 1 "Unassigned (unallocated) number"					
VA_2	500 server internal error	value # 3 "No route to destination"					
VA_3	410 Gone	value # 22 "Number changed"					
VA_4	484 Address Incomplete	value# 28 "Invalid number format (incomplete number")					

SI_XX_U11	ISDN reference to ETSI EN 300 403-1 [i clauses 5.2.5.4, G.1	.3],	ITU-T Q.1 ETSI EN 3	GN reference to: 1912.5 [51], clause 6.11 83 001 [49], clause 6.11 9 163 [i.20], clause 7.2.3.1				
TSS reference:	SIP-ISDN/Basic_call/Unsucce	SIP-ISDN/Basic_call/Unsuccessful						
Selection criteria:								
Test purpose:	Ensure that when the call is released with Cause Value No. 31 ("normal unspecified"), the network initiate call clearing to the calling user with a 480 Temporarily unavailable message. If the Reason Header field is implemented the cause value # 31 should be contained in the Reason Header field. (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field shall be added to the SIP final response)							
ISDN Parameter	SETUP = PIXIT							
values:	SE101 -1 DUI							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:	OID		O. 17	1001				
	SIP	_	SUT	ISDN				
	INVITE)	→	SETUP				
	100 Trying	(DELEASE #84				
	480 Temporarily unavailable	←	+	RELEASE #31				
	ACK	→	→	REL_COMP				

SI_XX_U12	ISDN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3], clause G.1.6	ITU-T Q.1912.5 [51], clause 6.11
		ETSI EN 383 001 [49], clause 6.11
		ETSI TS 129 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Unsuccessful	
Selection criteria:	Multipoint Configuration: for the called side)
Test purpose:	Ensure that when the calling user clears th	e call with a SIP_MESSAGE_VA before
	answer from called user.	
ISDN Parameter	SETUP = PIXIT	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	on
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	

Comments:					
	SIP		SUT		ISDN
	INVITE	→		→	SETUP
	100 Trying	+			
				+	CALL PROC
	180 Ringing	(+	ALERT
	SIP_MESSAGE_VA	→		→	DISC
	200 OK	+		+	REL
	487 Request terminated	+			
	ACK	→			

SIP_MESSAGE_VA: SI_XX_U12				
VA_1	CANCEL			
VA_2	BYE			

SI_XX_U13	ISDN reference to):		NGN reference to:					
	ETSI EN 300 403-1 [i.3], cla	ause G.1.6	ITU-T	Q.1912.5 [51], clause 6.11					
				N 383 001 [49], clause 6.11					
				129 163 [i.20], clause 7.2.3.1					
TSS reference:	SIP-ISDN/Basic_call/Unsucce	SIP-ISDN/Basic_call/Unsuccessful							
Selection criteria:	Point-to-point Configuration: for	or the called si	de						
Test purpose:	Ensure that the SUT in the Idle state on receipt of a INVITE message, sending out a SETUP message, having received a CALL PROCEEDING, on receipt of an RELEASE, where the cause value defined as CV_ISDN, the SUT immediately requests the disconnection of the internal bearer path. the SUT shall send the appropriate SIP status defined as SIP_FAILURE_VA The ISDN Cause Value field in the ISDN RELEASE message is mapped to the Reason header field if implemented According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field								
	shall be added to the SIP final								
ISDN Parameter	SETUP = PIXIT								
values:									
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)								
Comments:									
	SIP		SUT	ISDN					
	INVITE	→	-						
			+						
		+	+						
	ACK	→	+	REL COMP					

Values for test purposes SI_XX_U13						
←SIP Me	ssage	←DISC				
SIP_FAILURE_VA		Cause Indicators parameter				
CV_SIP		CV_ISDN .				
VA_1	486 Busy Here	Cause Value No. 17 ("user busy")				
	Cause Value No. 17					
VA_2	480 Temporarily unavailable	Cause Value No. 18 ("No user responding")				
	Cause Value No. 18					
VA_3	480 Temporarily unavailable	Cause Value No. 21 ("all rejected")				
	Cause Value No. 21					
VA_4	410 Gone	Cause Value No. 22 ("number changed")				
	Cause Value No. 23					
VA_5	502 Bad Gateway	Cause Value No. 27 ("destination out of order")				
	Cause Value No. 27					
VA_6	484 Address Incomplete	Cause Value No. 28 ("invalid number format (address				
	Cause Value No. 28	incomplete")				
VA_7	480 Temporarily unavailable	Cause Value No. 31 ("normal unspecified")				
	Cause Value No. 31	(Class default)				
VA_8	500 Server Internal Error	Cause Value in the Class 010 (resource unavailable,				
	Cause Value No. 47	Cause Value No. 38-47)				
		(47 is class default)				
VA_9	500 Server Internal Error	Cause Value No. 63 ("service option not available,				
	Cause Value No. 63	unspecified")				
		(Class default)				
VA_10	500 Server Internal Error	Cause Value No. 88 ("incompatible destination")				
	Cause Value No. 88					
VA_11	500 Server Internal Error	Cause Value No. 111 ("protocol error, unspecified")				
	Cause Value No. 111	(Class default)				

SI XX U14	ISDN reference to:	•	N.	GN reference to:				
31_77_014	ETSI EN 300 403-1 [i.3], cla	1912.5 [51], clause 6.11						
	L 131 LN 300 403-1 [1.3], Cla	use G. 1.0		383 001 [49], clause 6.11				
TSS reference:	SIP-ISDN/Basic_call/Unsucces	ETSLTS 129 163 [i.20], clause 7.2.3.1						
Selection criteria:	Point-to-point Configuration: for		de					
Test purpose:	Ensure that the SUT in the Idle			massage sending out a				
rest purpose.	SETUP message, having recei							
	DISCONNECT where the caus							
	requests the disconnection of the							
	SIP_FAILURE_VA message							
	The Cause Value field in the D	ISCONNECT	message is m	apped to the Reason header				
	field if implemented		J	• •				
	(According to ETSI TS 129 163	3 [i.20] and E	TSI EN 383 00	1 [49] the Reason Header field				
	shall be added to the SIP final	response)						
ISDN Parameter	SETUP = PIXIT							
values:								
SIP Parameter values:	Dial string parameters options=PIXIT							
	PIXIT for supported header:							
	Case a) no 100 rel							
	Case b) Supported: 100 rel							
	Case c) Supported: 100 rel and precondition							
	a line (DIVIT)							
	a = line (PIXIT)							
	b = line (PIXIT) m = line (PIXIT)							
Comments:								
Comments.	SIP SUT ISDN							
	INVITE → SETUP							
		<u>-</u>	7	ALERTING				
	· · · · · · · · · · · · · · · · · · ·	<u>-</u>	+	DISC				
		<u>-</u> ▶	→	REL				
	ACK 7 REL							

Values for test purposes SI_XX_U14						
←SIP Message		←DISC				
SIP_FAILURE_VA		Cause Indicators parameter				
CV_SIP		CV_ISDN				
VA_1	480 Temporarily unavailable Cause Value No. 21	Cause Value No. 21 ("all rejected")				
VA_2	502 Bad Gateway Cause Value No. 27	Cause Value No. 27 ("destination out of order")				
VA_3	480 Temporarily unavailable Cause Value No. 31	Cause Value No. 31 ("normal unspecified") (Class default)				
VA_4	500 Server Internal Error Cause Value No. 38	Cause Value No. 38 ("Network out of order")				
VA_5	500 Server Internal Error Cause Value No. 41	Cause Value No. 41 ("Temporary failure ")				
VA_6	500 Server Internal Error Cause Value No. 111	Cause Value No. 111 ("protocol error, unspecified") (Class default)				

SI_XX_U15	ISDN reference to: ETSI EN 300 403-1 [i.3], claus		ITU-T Q.1 ETSI EN 3	6N reference to: 912.5 [51], clause 6.11 83 001 [49], clause 6.11 9 163 [i.20], clause 7.2.3.1	
TSS reference:	SIP-ISDN/Basic_call/Unsuccess				
Selection criteria:	Point-to-point Configuration: for				
	Cause Value is mapped to the R				
Test purpose:	Ensure that the SUT in the Idle state on receipt of a INVITE message, sending out a SETUP message, having received a ALERTING message, having received a CONNECT", a 200 OK message is sent, on receipt of an DISCONNECT where the cause value defined as CV_ISDN, the SUT immediately requests the disconnection of the internal bearer path. the SUT shall send BYE message The Cause Value field in the DISCONNECT message is mapped to the Reason header field if implemented (According to ETSI TS 129 163 [i.20] and ETSI EN 383 001 [49] the Reason Header field				
	shall be added to the SIP final re	esponse)			
ISDN Parameter	SETUP = PIXIT				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	ISDN	
	INVITE →		→	SETUP	
	180 Ringing ←		+	ALERTING	
	200 OK INVITE ←		+	CONNECT	
	BYE ←		+	DISC	
	200 OK BYE →		→	REL	

Values for test purposes SI_XX_U15					
←SIP Message		←DISC			
SIP_FAILURE_VA		Cause Indicators parameter			
CV_SIP		CV_ISDN .			
VA_1	BYE	Cause Value No. 16			
	Cause Value No. 16				
VA_2	BYE	Cause Value No. 27 ("destination out of order")			
	Cause Value No. 27				
VA_3	BYE	Cause Value No. 31 ("normal unspecified")			
	Cause Value No. 31	(Class default)			
VA_4	BYE	Cause Value No. 38 ("Network out of order")			
	Cause Value No. 38				
VA_5	BYE	Cause Value No. 41 ("Temporary failure ")			
	Cause Value No. 41	, , ,			

SI_XX_U16	ISDN reference to ETSI EN 300 403-1 [i.3], cl		ETSI E	Q.19 N 38	N reference to: 12.5 [51], clause 6.11 3 001 [49], clause 6.11 163 [i.20], clause 7.2.3.1
TSS reference:	SIP-ISDN/Basic_call/Unsuc				
Selection criteria:	ISDN = point to point Config				
Test purpose:	Ensure that the call will be released with cause 102 (Recovery on timer expiry) 484 Address Incomplete on the SIP side after the expire of timer T 304 when called user is in call state U02 when the called number is incomplete.				
ISDN Parameter values:	SETUP = PIXIT		·		
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].				
	SIP		SUT		ISDN
	INVITE	→		<u> </u>	
	100 Trying ← → SETUP				
	← SETUP ACK				
				→	INFO SC (optional)
→			RELEASE # 102		
	484 Address Incomplete ← REL_COMP				
	ACK →				

SI_XX_U17	ISDN reference to	o:		NGN	reference to:	
	ETSI EN 300 403-1 [i.3], cl	ause G.1.			12.5 [51], clause 6.11	
					3 001 [49], clause 6.11	
TSS reference:	ETSI TS 129 163 [i.20], clause 7.2.3.1 SIP-ISDN/Basic call/Unsuccessful					
Selection criteria:	on reprivate and one and	2000141				
Test purpose:	During the session, the calling user decides to change the characteristics of the media session. This is accomplished by sending a re-INVITE containing a new media description. This re-INVITE references the existing dialog so that the other party knows that it is to modify an existing session instead of establishing a new session. Ensure that if the other party (the GW) does not accept the change, he sends an error response such as 488 (Not Acceptable Here), which also receives an ACK. The session remains in the active state.					
ISDN Parameter	SETUP = PIXIT					
values:						
SIP Parameter values:	Dial string parameters option	ns=PIXIT				
Comments:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments.	SIP	1	SUT		ISDN	
	INVITE	→		→	SETUP	
	180 Ringing	+		-	ALERTING	
	200 OK INVITE ← ←		CONN			
	ACK	→				
	Communication					
	RE-INVITE →					
	484 Not Acceptable Here	(1		
	ACK	→	`ammuniaatia:	+	_	
	BYE Communication BYE		+	Disconnect		
	200 OK BYE → Release					
	ZUU UK BYE → Release					

SI_XX_U18	ISDN reference to: ETSI EN 300 403-1 [i.3], clause G.1.6	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11 IETF RFC 3261 [28], clause 4			
TSS reference:	SIP-ISDN/Basic_call/Unsuccessful				
Selection criteria:					
Test purpose:	Ensure that upon receiving a 421 (Extension Required) response to an initial INVITE request in which the precondition mechanism was not used, including the "precondition" option tag in the Require header, the originating UE shall send a new INVITE request using the precondition mechanism, if the originating UE supports the precondition mechanism.				
ISDN Parameter	SETUP = PIXIT				
values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					

SI_XX_U19	ISDN reference to: ETSI EN 300 403-1 [i.3], clause G.1.6	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11 IETF RFC 3261 [28], clause 4					
TSS reference:	SIP-ISDN/Basic_call/Unsuccessful						
Selection criteria:							
Test purpose:	codec at the MGW for the received initial INVI send 503 (Service Unavailable) response if th were available; or send 488 (Not Acceptable Here) response if the	a codec is required and the MGCF does not find an available matching MGW for the received initial INVITE request, the MGCF shall: vice Unavailable) response if the type of codec was acceptable but none s; or Acceptable Here) response if the type of codec was not supported, and DP in the message body to indicate the codecs supported by the					
ISDN Parameter	SETUP = PIXIT						
values:							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	,						

6.3.2 Test purposes for SIP - ISDN Supplementary services

6.3.2.1 OIP/CLIP

SI_XXSSOIP01	ISDN reference to:	NGN reference to:		
	ETSI EN 300 092-1 [i.14], clause 9.3	ITU-T Q.1912.5 [51], clause 6.1.3.6		
	ETSI EN 300 403-1 [i.3],	ETSI EN 383 001 [49], clause 6.1.3.6		
	clauses 4.5.10, 4.5.11	ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6		
		ETSI TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for Asserted Ic	lentity within Trusted Networks		
Selection criteria:				
Test purpose:	format of a tel URI has not bee the priv-value component is set the SIP From header field conta URI has not been received and the Calling Party Number is cor the Calling party information Address signals = default Screening indicator = net Numbering plan indicator	ntaining a SIP URI (PIXIT) with an identity in the in received to "none" aining a URI with an identity in the format of a teld rectly delivered to the called (served) user with element coded: number derived from the P-Asserted-Identity work provided = ISDN numbering plan		
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			

Comments:					
	SIP		SUT		ISDN
	INVITE	→		→	SETUP
	180 Ringing	(+	ALERT
	200 OK INVITE	(-	CONN
	ACK	→			
	BYE	←		+	DISC
	200 OK BYE	→		→	REL

SI_XXSSOIP02	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9 ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI EN ETSI TS 1	Q.191 I 383 29 16 ETSI	N reference to: [2.5 [51], clause 6.1.3.6 [001 [49], clause 6.1.3.6 [33 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]			
TSS reference:		Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:	The user subscribes OIR "temporar No priv value is sent Special arrangement applies						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received No priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: Address signals = default number derived from the From header Screening indicator = user provided not verified Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan 						
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP	SUT		ISDN			
	INVITE →		→	SETUP			
	180 Ringing ← 200 OK INVITE ←		-	ALERT CONN			
	ACK →			COMM			
			1				
	BYE ←		-	DISC			
	200 OK BYE →		→	REL			

SI_XXSSOIP03	ISDN reference to: ETSI EN 300 092-1 [i.14], clause ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI TS	T Q.191 EN 383 3 129 10 ETSI	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 1 TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for Ass	erted Identity withi	in Trust	ed Networks			
Selection criteria:	The user subscribes OIR "tempor No priv value is sent No Special arrangement applies	ary mode" default	"not re	stricted"			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received No priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed 						
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:							
	SIP	SUT		ISDN			
	INVITE →		→	SETUP			
	180 Ringing ←		←	ALERT			
	200 OK INVITE ←		←	CONN			
	ACK →						
	BYE ←		+	DISC			
	200 OK BYE →		→	REL			

SI_XXSSOIP04	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9.3 ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI EN ETSI TS 12	1.1912 383 29 16 ETSI	l reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 3 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for Ass			ed Networks		
Selection criteria:	SIP URI or SIPS URI are used in The user subscribes OIR "tempo No priv value is sent			stricted"		
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received no priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP	SUT	1_	ISDN		
	INVITE -		→	SETUP		
	180 Ringing ←		+	ALERT		
	200 OK INVITE ← ACK →		+	CONN		
	BYE ←		+	DISC		
	200 OK BYE →		→	REL		

SI_XXSSOIP05	ISDN reference to: NGN reference to: ETSI EN 300 092-1 [i.14], ITU-T Q.1912.5 [51], clause 6.1.3. Clause 9.3 ETSI EN 383 001 [49], clause 6.1.3					
	ETSI EN 300 403-1 [i.3],		ETSI TS 129 163 [i.20], clause 7.2.3.1.2.			
	clauses 4.5.10, 4.5.11	ETSI TS 124 607 [43]				
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:	The user subscribes OIR "tempora					
	Special arrangement applies	,				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded:					
	 Numbering plan indi Address Presentation 			Presentation allowed		
SIP Parameter values:	Dial string parameters options=PIX		101 –	r resentation allowed		
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP	SUT	<u> </u>	ISDN		
	INVITE -		→	SETUP		
	180 Ringing ←		(ALERT		
	200 OK INVITE ← ACK →		+	CONN		
	BYE		(DISC		
	200 OK BYE →		→	REL		

SI_XXSSOIP06	ISDN reference to ETSI EN 300 092-1 [i.14], c ETSI EN 300 403-1 [i clauses 4.5.10, 4.5.	lause 9.3 .3], 11	ITU-T Q. ETSI EN ETSI TS 12 E	383 001 [4 9 163 [i.20 TSI TS 12	l], clause 6.1.3.6 l9], clause 6.1.3.6 l], clause 7.2.3.1.2.6 4 607 [43]
TSS reference:	Private Extensions to SIP for				orks
Selection criteria:	The user subscribes OIR "ten No Special arrangement appli		e" default "not	restricted"	
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded:				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT		ISDN
	INVITE	→	-	SETU	D
	180 Ringing	+	•		
	200 OK INVITE	+	•	CONN	
	ACK	→			
	BYE	+	•	- DISC	
	200 OK BYE	→	-	REL	-

SI_XXSSOIP07	ISDN reference to: ETSI EN 300 092-1 [i.14], clau ETSI EN 300 403-1 [i.3] clauses 4.5.10, 4.5.11	,	ITU-T Q ETSI EN ETSI TS 12 E	.191 383 9 16 TSI	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks The user subscribes OIR "temporary mode" default "not restricted"						
Selection criteria:		orary mod	ie" default "no	t res	stricted"		
Test purpose: SIP Parameter values:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received • No priv value is received • the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: - Address signals = default number derived from the From header - Screening indicator = user provided not verified - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: - Address signals = default number derived from the P-Asserted-Identity - Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header:						
	Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE 3)	SETUP		
	180 Ringing			(ALERT		
	200 OK INVITE ← ACK →			←	CONN		
	BYE •	_		(DISC		
	200 OK BYE			<u>`</u>	REL		
<u> </u>	200 OR BIL	,			INLL		

SI_XXSSOIP08	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9.3; ETSI EN 300 403-1 [i.3],		ETSI E	Q.1912 N 383 (129 163	reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 3 [i.20], clause 7.2.3.1.2.6			
T00 == (================================	clauses 4.5.10, 4.5.11		ETSI TS 124 607 [43]					
TSS reference:		Private Extensions to SIP for Asserted Identity within Trusted Networks The user subscribes OIR "temporary mode" default "not restricted"						
Selection criteria:	No Special arrangement applies	orary mo	de" default	not res	stricted			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received no priv value is received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed 							
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)						
Comments:								
	SIP		SUT		ISDN			
	INVITE →			→	SETUP			
	180 Ringing ←			(ALERT			
	200 OK INVITE ←			+	CONN			
	ACK →							
	BYE ←			+	DISC			
	200 OK BYE →			→	REL			

SI_XXSSOIP09	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9 ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI EN ETSI TS 1:	Q.191 I 383 29 10 ETSI	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:		The user subscribes OIR "temporary mode" default "not restricted"				
	Special arrangement applies					
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded:					
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allower Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP	SUT		ISDN		
	INVITE ->		→	SETUP		
	180 Ringing ←		+	ALERT		
	200 OK INVITE		+	CONN		
	ACK →		Ĺ			
	BYE ←		←	DISC		
	200 OK BYE →		→	REL		

SI_XXSSOIP10	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.11	3],	ITU-T Q.1 ETSI EN 3	IGN reference to: 912.5 [51], clause 6.1.3.6 83 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6			
		-	ETSI TS 124 607 [43]				
TSS reference:	Private Extensions to SIP for As	sserted Ide					
Selection criteria:	The user subscribes OIR "temp Special arrangement applies	·					
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with						
	the Calling party information element coded: - Address signals = default number derived from the P-Asserted-Identity - Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT	ISDN			
	INVITE -		→	SETUP			
	180 Ringing		+	ALERT			
	200 OK INVITE		+	CONN			
	BYE •		+	DISC			
	200 OK BYE)	→	REL			

SI_XXSSOIP11	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9 ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI EN ETSI TS 1	Q.19 N 383 29 1 ETS	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 I TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for Assert						
Selection criteria:	The user subscribes OIR "temporary	mode" default "n	ot re	stricted"			
	Special arrangement applies						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received • no priv value is received • the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received • the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: - Address signals = default number derived from the From header - Screening indicator = user provided not verified - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: - Address signals = default number derived from the P-Asserted-Identity - Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan						
SIP Parameter values:			tor =	Presentation allowed			
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:							
	SIP	SUT		ISDN			
	INVITE →		→	SETUP			
	180 Ringing ←		←	ALERT			
	200 OK INVITE		+	CONN			
	ACK →						
	BYE ←		←	DISC			
	200 OK BYE →		→	REL			

SI_XXSSOIP12	ISDN reference to: NGN reference to							
	ETSI EN 300 092-1 [i.14], cla		ITU-T Q.1912.5 [51], clause 6.1.3. ETSI EN 383 001 [49], clause 6.1.3					
	ETSI EN 300 403-1 [i.3	clauses 4.5.10, 4.5.11 ETSI TS 129 163						
	Clauses 4.5.10, 4.5.1			103 [1.20], C SI TS 124 60				
TSS reference:	Private Extensions to SIP for A	sserted Ide						
Selection criteria:	The user subscribes OIR "temp				<u>- </u>			
	No Special arrangement applie							
Test purpose:	Ensure that the SUT in the Idle		eceipt of a INVI	TE message	where:			
	the SIP P-Preferred-Id							
	URI has not been rec	eived	· ·	,				
	no priv value is receive	ed						
	 the SIP From header f 			(PIXIT) with a	an identity in the			
	format of a tel URI has							
	the Calling Party Num			o the called (s	served) user with			
	the Calling party info							
	- Address signals			from the P-As	sserted-Identity			
	- Screening indica			a a nlan				
	 Numbering plan Address Presen 			0.	on allowed			
SIP Parameter values:	Dial string parameters options=		ncieu muicator	= Fresentati	on anoweu			
on rarameter values.	Diai string parameters options=	1 1/(11						
	PIXIT for supported header:							
	Case a) no 100 rel							
	Case b) Supported: 100 rel							
	Case c) Supported: 100 rel and	preconditi	on					
	a = line (PIXIT)							
	b = line (PIXIT)							
Cammantai	m = line (PIXIT)							
Comments:	SIP		SUT	1	ISDN			
	INVITE =	<u> </u>	301	SETUP	ISDIN			
	180 Ringing		+	ALERT				
	200 OK INVITE		+	CONN				
	ACK			301111				
	7	•						
	BYE €		+	DISC				
	200 OK BYE	•	→	REL				

SI_XXSSOIP13	ISDN reference to: NGN reference to:						
	ETSI EN 300 092-1 [i.14], cla				2.5 [51], clause 6.1.3.6		
	ETSI EN 300 403-1 [i.3		ETSI EN 383 001 [49], clause 6.1.3.6				
	clauses 4.5.10, 4.5.1	1			33 [i.20], clause 7.2.3.1.2.6		
					TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	Ensure that the SUT in the Idle						
			itaining a SIP U	IKI ((PIXIT) in the format of a tel		
	URI has been receive						
	the priv-value compo			. /D	IVIT) in the former to for tall IDI		
	has not been receive		ining a SIP UR	I (P	IXIT) in the format of a tel URI		
			oothy dolivorod	40.4	he colled (corred) upor with		
	the Calling party inf				he called (served) user with		
					m the P-Asserted-Identity		
	- Screening indic			1110	in the 1-Asserted-identity		
	- Numbering plan			rina	plan		
	.			_	Presentation allowed		
SIP Parameter values:	Dial string parameters options						
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel an	a preconai	tion				
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:	()						
	SIP		SUT		ISDN		
		→		>	SETUP		
		((ALERT		
		((CONN		
	ACK	→					
		+	•	(DISC		
	200 OK BYE	→	•	→	REL		

SI_XXSSOIP14	ISDN reference t ETSI EN 300 092-1 [i.14], ETSI EN 300 403-1 clauses 4.5.10, 4.9	clause 9.3 [i.3],	ITU-T Q.1 ETSI EN 3 ETSI TS 129	IGN reference to: 1912.5 [51], clause 6.1.3.6 183 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6 ISI TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR "ter						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received no priv value is received the SIP From header field containing a SIP URI (PIXIT) in the format of a tel URI has not been received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan 						
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP	S	UT	ISDN			
	INVITE	→	→	SETUP			
	180 Ringing	(+	ALERT			
	200 OK INVITE	+	+	CONN			
	ACK	→					
	BYE	+	(DISC			
	200 OK BYE	→	→	REL			

SI_XXSSOIP15	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.11	i],	ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6 ETSI TS 124 607 [43]				
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR "tem	porary m	ode" default "no	ot res	stricted"		
	Special arrangement applies						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded:						
SIP Parameter values:	Dial string parameters options		estricted indica	101 =	Presentation allowed		
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
	a = line (PIXIT) b = line (PIXIT)						
	m = line (PIXIT)						
Comments:	III – IIIIE (FIAII)						
Comments.	SIP		SUT		ISDN		
	INVITE	→	301	→	SETUP		
		7		7	ALERT		
	200 OK INVITE	-		/	CONN		
				_	CONN		
	ACK	→			<u> </u>		
	5)/5	-		_	1000		
	BYE	<u> </u>		←	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIP16	ISDN reference to: ETSI EN 300 092-1 [i.14], clau ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	,	ETSI EI ETSI TS 1	Q.19 N 38: 29 1 ETS	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 ITS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "temp	orary m	ode" default "no	ot res	strictea"		
-	Special arrangement applies			N //-			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a URI (PIXIT) in the format of a tel URI has been received no priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: Address signals = default number derived from the From header Screening indicator = user provided not verified Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan 						
			estricted Indicat	tor =	Presentation allowed		
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:		1					
	SIP		SUT		ISDN		
	INVITE =			→	SETUP		
	9 9	+		←	ALERT		
		1		+	CONN		
	ACK -	→					
		-		+	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIP17	ISDN reference to: ETSI EN 300 092-1 [i.14], cl ETSI EN 300 403-1 [i. clauses 4.5.10, 4.5.1	ause 9.3; 3], 1	ETSI E	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1. ETSI EN 383 001 [49], clause 6.1 ETSI TS 129 163 [i.20], clause 7.2.3 ETSI TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem	porary mode	e" default "no	ot res	stricted"		
Test purpose:	 Special arrangement applies Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded:						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
)		→	SETUP		
	3 3	(+	ALERT		
		(←	CONN		
	ACK)					
	BYE	(+	DISC		
		→		→	REL		

SI_XXSSOIP18	ISDN reference to: ETSI EN 300 092-1 [i.14], c ETSI EN 300 403-1 [i. clauses 4.5.10, 4.5.1	lause 9.3 .3], I1	ETSI I ETSI TS	GN reference to: 912.5 [51], clause 6.1.3.6 83 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6 SI TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem	porary mode	e" default "no	ot res	stricted"		
Test purpose: SIP Parameter values:	 Special arrangement applies Ensure that the SUT in the Idle state, on receipt of a INVITE message where the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received no priv value is received the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded:						
on Farameter values.	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:				•			
	SIP		SUT	L	ISDN		
)		→	SETUP		
	5 5	(+	ALERT		
		(←	CONN		
	ACK	→			-		
	BYE	((DISC		
		<u>-</u> →		<u>-</u>	REL		

SI_XXSSOIP19	ISDN reference to: ETSI EN 300 092-1 [i.14], clau ETSI EN 300 403-1 [i.3] clauses 4.5.10, 4.5.11	,	ETSI EI ETSI TS 1	Q.191 N 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "temp						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan						
			stricted Indica	ator =	Presentation allowed		
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:							
	SIP		SUT	 	ISDN		
	INVITE -			→	SETUP		
	180 Ringing •			-	ALERT		
				+	CONN		
	ACK	7					
	BYE	_		+	DISC		
	200 OK BYE →	•		→	REL		

SI_XXSSOIP20	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.1	3], 1	ETSI EN ETSI TS 1	Q.191 N 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received • no priv value is received • the SIP From header is set to anonymous • the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: - Address signals = default number derived from the P-Asserted-Identity - Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan						
			stricted Indica	tor =	Presentation allowed		
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	2:2	1		1			
	SIP		SUT		ISDN		
)		→	SETUP		
	100 199	((ALERT		
		(+	CONN		
	ACK	→					
	BYE	(+	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIP21	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9.3 ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ITU-T Q.19 ⁴ ETSI EN 383 ETSI TS 129 10 ETSI	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for Asserted					
Selection criteria:	The user subscribes OIR "temporary r	node" default "restric	cted"			
	Special arrangement applies					
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity i format of a tel URI has been received 					
			the called (served) user with			
	the 1stCalling party information element coded: - Address signals = default number derived from the From header - Screening indicator = user provided not verified - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: - Address signals = default number derived from the P-Asserted-Identity					
	 Screening indicator = n 	etwork provided	•			
	- Numbering plan indicat		g plan = Presentation allowed			
SIP Parameter values:	Dial string parameters options=PIXIT	testricted indicator -	- i resemation anowed			
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and precondition					
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP	SUT	ISDN			
	INVITE →	→	SETUP			
	180 Ringing ←	+	ALERT			
	200 OK INVITE ←	+	CONN			
	ACK →					
	BYE ←	+	DISC			
	200 OK BYE →	→	REL			

SI_XXSSOIP22	ISDN reference to: ETSI EN 300 092-1 [i.14], clar ETSI EN 300 403-1 [i.3] clauses 4.5.10, 4.5.11	,	ETSI EN ETSI TS 12 E	0.191 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 i3 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "temp						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan 						
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:	OID I		OUT	1	LODAL		
	SIP INVITE -	→	SUT	→	ISDN SETUP		
		7 F		₹	ALERT		
		<u>-</u>		-	CONN		
		`					
		-		+	DISC		
	200 OK BYE	>		→	REL		

SI_XXSSOIP23	ISDN reference to: ETSI EN 300 092-1 [i.14], clause ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	9.3	ETSI EN ETSI TS 12	.191 383 29 16	l reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 3 [i.20], clause 7.2.3.1.2.6	
T00 /	Di de Edución de OlDó				TS 124 607 [43]	
TSS reference:	Private Extensions to SIP for Asse					
Selection criteria:	The user subscribes OIR "tempora	ary mo	ode" default "re	estric	tea"	
Test purpose:	Special arrangement applies Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received • the priv-value component is set to "none" • the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: - Address signals = default number derived from the From header - Screening indicator = user provided not verified - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: - Address signals = default number derived from the P-Asserted-Identification in Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed				PIXIT) with an identity in the the called (served) user with come the From header fied g plan Presentation allowed om the P-Asserted-Identity g plan	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT		ISDN	
	INVITE → 180 Ringing ←			→	SETUP	
	5 5			+	ALERT CONN	
	200 OK INVITE ← ACK →			_	CONN	
	BYE			(DISC	
	200 OK BYE →			→	REL	

SI_XXSSOIP24	ISDN reference to: ETSI EN 300 092-1 [i.14], clause ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11	ETSI EI ETSI TS 1	Q.191 N 383 29 16 ETSI	N reference to: 12.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for Asse						
Selection criteria:	The user subscribes OIR "tempora	ry mode" default "r	estric	cted"			
	Special arrangement applies						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity ir format of a tel URI has been received the Calling Party Number is correctly delivered to the called (served) use						
	the 1stCalling party info						
				rom the From header			
	 Screening indicator 						
	 Numbering plan ind 						
				Presentation allowed			
	2ndCalling party information element coded: Address signals = default number derived from the P-Asserted-Identity						
				rom the P-Asserted-Identity			
	Screening indicatorNumbering plan ind			a nlon			
				g plan • Presentation allowed			
SIP Parameter values:	Dial string parameters options=PIX		at01 =	Fresentation allowed			
SIF Farailleter values.	Diai string parameters options=F17	AI I					
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel and pre	econdition					
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:			1				
	SIP	SUT	+_	ISDN			
	INVITE →		→	SETUP			
	180 Ringing		+	ALERT			
	200 OK INVITE		+	CONN			
	ACK →		+	_			
	DVE		-	DICC			
	BYE ←		←	DISC			
	200 OK BYE →		7	REL			

SI_XXSSOIP25	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.1	3], 1	ETSI EN ETSI TS 12	Q.191 I 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received: the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has not been received the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
		→		→	SETUP		
		(←	ALERT		
		(←	CONN		
	ACK	→					
	BYE	(←	DISC		
		→		→	REL		

SI_XXSSOIP26	ISDN reference to: ETSI EN 300 092-1 [i.14], claus ETSI EN 300 403-1 [i.3], clauses 4.5.10, 4.5.11		ITU-T Q. ETSI EN 3 ETSI TS 129 E	191: 383 9 16 TSI	I reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 3 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for Ass	serted I	dentity within Ti	ruste	ed Networks		
Selection criteria:	The user subscribes OIR "tempo	rary mo	ode" default "res	stric	ted"		
- ,	Special arrangement applies			\			
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received • the priv-value component is set to "none" • the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received • the Calling Party Number is correctly delivered to the called (served) user with the 1stCalling party information element coded: - Address signals = default number derived from the From header - Screening indicator = user provided not verified - Numbering plan indicator = ISDN numbering plan - Address Presentation Restricted Indicator = Presentation allowed 2ndCalling party information element coded: - Address signals = default number derived from the P-Asserted-Identity - Screening indicator = network provided - Numbering plan indicator = ISDN numbering plan						
SIP Parameter values:	Dial string parameters options=P	TIXIT					
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE -			→	SETUP		
	180 Ringing ←			(ALERT		
	200 OK INVITE ←			<u>←</u>	CONN		
	ACK →						
	BYE ←			←	DISC		
	200 OK BYE →			→	REL		

SI_XXSSOIP27	ISDN reference to: ETSI EN 300 092-1 [i.14], clau ETSI EN 300 403-1 [i.3] clauses 4.5.10, 4.5.11	,	ETSI EI ETSI TS 1	Q.191 N 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 33 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for As							
Selection criteria:	The user subscribes OIR "temp							
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan							
			stricted Indica	ator =	Presentation allowed			
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
Comments:	0.0		01.17	1	1001			
	SIP		SUT	-	ISDN			
	INVITE -3			→	SETUP			
	180 Ringing € 200 OK INVITE €			+	ALERT CONN			
	ACK -	>						
	BYE €			+	DISC			
	200 OK BYE			→	REL			

SI_XXSSOIP28	ISDN reference to: ETSI EN 300 092-1 [i.14], clause 9.3 ETSI EN 300 403-1 [i.3],	ETSI EN	.1912 383	reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 3 [i.20], clause 7.2.3.1.2.6				
	clauses 4.5.10, 4.5.11							
TSS reference:	Private Extensions to SIP for Asser							
Selection criteria:	The user subscribes OIR "temporal							
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded:							
	 Address Presentation 	n Restricted Indica	ator =	Presentation allowed				
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
Comments:	OID	OUT	1	1001				
	SIP	SUT	_	ISDN				
	INVITE → 180 Ringing ←		→	SETUP				
	180 Ringing ← 200 OK INVITE ←		-	ALERT CONN				
	ACK →							
	BYE		+	DISC				
	200 OK BYE →		→	REL				

SI_XXSSOIP29	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5.	i.3], 11	ETSI EN ETSI TS 12 E	0.19 383 29 1 ETS	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 I TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR "ten						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received: no priv value is received the SIP From header is set to anonymous the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan						
SIP Parameter values:	- Address Presentation Restricted Indicator = Presentation allowed Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	-		<u> </u>	ALERT		
	200 OK INVITE	(١	(CONN		
	ACK	→					
	BYE	((DISC		
	200 OK BYE	→	•	→	REL		

SI_XXSSOIP30	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.1	3], 1	ETSI EN ETSI TS 12	Q.191 I 383 29 16 ETSI	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 33 [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling Party Number is correctly delivered to the called (served) user with the Calling party information element coded: Address signals = default number derived from the P-Asserted-Identity Screening indicator = network provided Numbering plan indicator = ISDN numbering plan Address Presentation Restricted Indicator = Presentation allowed						
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)					
Comments:							
	SIP		SUT		ISDN		
		→		→	SETUP		
	9 9	(+	ALERT		
		-		←	CONN		
	ACK)					
		←		←	DISC		
	200 OK BYE	→		→	REL		

6.3.2.2 OIR/CLIR

SI_XXSSOIR01	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5.	lause 9.3 i.3],	ETSI	T Q.19 EN 383 3 129 1	6N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 II TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR "te						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received the priv-value component is set to "id" the SIP From header field containing a SIP URI (PIXIT) has been received the Calling party number information element is delivered to the called user without any digit information 						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP	<u> </u>	SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	+		+	ALERT		
	200 OK INVITE ACK	←		+	CONN		
	BYE	-		+	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIR02	ISDN reference to: ETSI EN 300 092-1 [i.14], cl	ause 9.3	N reference to: 12.5 [51], clause 6.1.3.6		
	ETSI EN 300 403-1 [i.	•			3 001 [49], clause 6.1.3.6
	clauses 4.5.10, 4.5.1	11	EISIIS		63 [i.20], clause 7.2.3.1.2.6 I TS 124 607 [43]
TSS reference:	Private Extensions to SIP for	Accorted L	dontity with		
Selection criteria:	The user subscribes OIR "ten				
Test purpose:	Ensure that the SUT in the Id				
rest purpose.					I (PIXIT) has been received
	the priv-value not priv-value n	,	maning a c	JII OIK	(IXII) IIda been received
	·		aining a SII	P LIRI (PIXIT) has been received
			-		delivered to the called user
	without any digit info		nation elem	CIII IS C	delivered to the called user
SIP Parameter values:	Dial string parameters options				
	9				
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel a	nd precond	dition		
	: (D)(IT)				
	a = line (PIXIT)				
	b = line (PIXIT) m = line (PIXIT)				
Comments:					
Commente.	SIP		SUT		ISDN
	INVITE	→		→	SETUP
	180 Ringing	+		+	ALERT
	200 OK INVITE	-		←	CONN
	ACK	→			
	BYE	(←	DISC
	200 OK BYE	→		→	REL

SI_XXSSOIR03	ISDN reference to: ETSI EN 300 092-1 [i.14], cla ETSI EN 300 403-1 [i.3 clauses 4.5.10, 4.5.1	3],	ETSI EN	.191 383	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 i3 [i.20], clause 7.2.3.1.2.6		
					TS 124 607 [43]		
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is set to "id" the SIP From header is set to anonymous the Calling party number information element is delivered to the called user without any digit information 						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:			T				
	SIP		SUT		ISDN		
)		→	SETUP		
	3 3	(+	ALERT		
		<u>←</u> →		+	CONN		
	ACK	7					
	BYE	-		-	DISC		
		→		→	REL		

SI_XXSSOIR04	ISDN reference to: ETSI EN 300 092-1 [i.14], cl: ETSI EN 300 403-1 [i.: clauses 4.5.10, 4.5.1	3],	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2 ETSI TS 124 607 [43]					
TSS reference:	Private Extensions to SIP for	Asserted						
Selection criteria:	The user subscribes OIR "ten							
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is not present the SIP From header is set to anonymous the Calling party number information element is delivered to the called user without any digit information 							
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
Comments:								
	SIP		SUT		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	-		←	ALERT			
	200 OK INVITE	(+	CONN			
	ACK	→						
	BYE	(+	DISC			
	200 OK BYE	→		→	REL			

SI_XXSSOIR05	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5	clause 9.3 i.3],	ETSI EN).19 I 38:	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks						
Selection criteria:	The user subscribes OIR temporary mode" default "not restricted						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received the priv-value component is set to "id" the SIP From header field containing a SIP URI (PIXIT) has been received the Calling party number information element is delivered to the called user without any digit information						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	((ALERT		
	200 OK INVITE	((CONN		
	ACK	→					
	BYE	((DISC		
	200 OK BYE → REL						

SI_XXSSOIR06	ISDN reference to	NGN reference to:					
	ETSI EN 300 092-1 [i.14], clause 9.3		ITU-T Q.1912.5 [51], clause 6.1.3.6				
	ETSI EN 300 403-1	[i.3],	ETSI EN 383 001 [49], clause 6.1.3.6				
	clauses 4.5.10, 4.5	ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6					
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR ten						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where:						
	 the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received 						
	priv-value component is set to "id"						
	the SIP From header is set to anonymous						
	 the Calling party nu 	mber informa	tion element	is de	elivered to the called user		
	without any digit info	ormation					
SIP Parameter values:	Dial string parameters option	s=PIXIT					
	·						
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel and precondition						
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	-		-	ALERT		
	200 OK INVITE	((CONN		
	ACK	→					
	BYE	+		(DISC		
	200 OK BYE → REL						

SI_XXSSOIR07	ISDN reference to	NGN reference to:					
	ETSI EN 300 092-1 [i.14], clause 9.3		ITU-T Q.1912.5 [51], clause 6.1.3.6				
	ETSI EN 300 403-1 [i		ETSI EN 383 001 [49], clause 6.1.3.6				
	clauses 4.5.10, 4.5.		ETSI TS 129 163 [i.20], clause 7.2.3.1.2.				
TSS reference:	Private Extensions to SIP for			ruste	ed Networks		
Selection criteria:	The user subscribes OIR perr						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where:						
	the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received						
	the priv-value component is set to "id"						
	 the SIP From header field containing a SIP URI (PIXIT) has been received 						
	the Calling party number information element is delivered to the called user						
	without any digit info						
SIP Parameter values:	Dial string parameters options						
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel and precondition						
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:			1				
	SIP		SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	←		←	ALERT		
	200 OK INVITE	+		←	CONN		
	ACK	→					
	BYE	-		←	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIR08	ISDN reference to	NGN reference to:						
	ETSI EN 300 092-1 [i.14], clause 9.3		ITU-T Q.1912.5 [51], clause 6.1.3.6					
	ETSI EN 300 403-1	[i.3],	ETSI EN 383 001 [49], clause 6.1.3.6					
	clauses 4.5.10, 4.5	ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6						
TSS reference:	Private Extensions to SIP for			ruste	ed Networks			
Selection criteria:	The user subscribes OIR per							
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where:							
	 the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received 							
	the priv-value component is not present							
		 the SIP From header field containing a SIP URI (PIXIT) has been received 						
			tion element	is de	elivered to the called user			
	without any digit info							
SIP Parameter values:	Dial string parameters option	s=PIXIT						
	PIXIT for supported header:							
	Case a) no 100 rel							
	Case b) Supported: 100 rel							
	Case c) Supported: 100 rel and precondition							
	a = line (PIXIT)							
	b = line (PIXIT)							
	m = line (PIXIT)							
Comments:								
	SIP		SUT		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	+		+	ALERT			
	200 OK INVITE	-		+	CONN			
	ACK	→						
	BYE	-		←	DISC			
	200 OK BYE	→		→	REL			

SI_XXSSOIR09	ISDN reference t ETSI EN 300 092-1 [i.14], ETSI EN 300 403-1 clauses 4.5.10, 4.5	clause 9.3 [i.3],	ETSI EN	Q.19 V 38:	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks						
Selection criteria:	The user subscribes OIR pe						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is set to "id" the SIP From header is set to anonymous the Calling party number information element is delivered to the called user without any digit information						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	+		(ALERT		
	200 OK INVITE	+		(CONN		
	ACK	→					
	BYE	(-	DISC		
	200 OK BYE	→		→	REL		

SI_XXSSOIR10	ISDN reference to ETSI EN 300 092-1 [i.14], ETSI EN 300 403-1 clauses 4.5.10, 4.5	clause 9.3 [i.3], .11	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6								
TSS reference:		Private Extensions to SIP for Asserted Identity within Trusted Networks									
Selection criteria:	The user subscribes OIR per										
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is not present the SIP From header is set to anonymous the Calling party number information element is delivered to the called user										
SIP Parameter values:	without any digit inf										
Commente	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)										
Comments:		1									
	SIP	 	SUT		ISDN						
	INVITE	→	1		SETUP						
	180 Ringing	(•		ALERT						
	200 OK INVITE	+	(€	_	CONN						
	ACK	→									
	BYE	+	•	-	DISC						
	200 OK BYE	→	-3)	REL						

SI_XXSSOIR11	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5	clause 9.3 i.3], .11	ETSI EN ETSI TS 1	Q.19 N 383 29 1 ETS	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 I TS 124 607 [43]						
TSS reference:		Private Extensions to SIP for Asserted Identity within Trusted Networks									
Selection criteria:	The user subscribes OIR "pe Special arrangement applies										
Test purpose: SIP Parameter values:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has been received the Calling party number information element is delivered to the called user without any digit information Dial string parameters options=PIXIT										
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel a a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)									
Comments:											
	SIP		SUT		ISDN						
	INVITE	→		→	SETUP						
	180 Ringing	←		-	ALERT						
	200 OK INVITE										
	ACK	→									
	BYE	(-	DISC						
	200 OK BYE	→		→	REL						

SI_XXSSOIR12	ISDN reference to ETSI EN 300 092-1 [i.14], o ETSI EN 300 403-1 [clauses 4.5.10, 4.5.	clause 9.3 i.3],	ETSI EN	Q.19 I 383 29 1	N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6 I TS 124 607 [43]			
TSS reference:	Private Extensions to SIP for				ed Networks			
Selection criteria:	SIP URI or SIPS URI is used The user subscribes OIR "pe	rmanent mod	e"					
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received SIP URI or SIPS URI are used in the in the P-Preferred -Identity the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has not been received the Calling party number information element is delivered to the called user							
SIP Parameter values:	without any digit information Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:								
	SIP		SUT		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	(<u>←</u>	ALERT			
	200 OK INVITE	((CONN			
	ACK	→						
	BYE	(←	DISC			
	200 OK BYE	→		→	REL			

SI_XXSSOIR13	ISDN reference ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 clauses 4.5.10, 4.	, clause 9.3 [i.3],	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6 ETSI TS 124 607 [43]							
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks									
Selection criteria:	The user subscribes OIR "p	ermanent mod	le"							
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling party number information element is delivered to the called user without any digit information 									
SIP Parameter values:	PIXIT for supported header Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)								
Comments:										
	SIP		SUT		ISDN					
	INVITE	→)	SETUP					
	180 Ringing	+		(ALERT					
	200 OK INVITE	-		<u> </u>	CONN					
	ACK	→								
	BYE	-	,	(DISC					
	200 OK BYE	→		→	REL					

SI_XXSSOIR14	ISDN reference to: ETSI EN 300 092-1 [i.14], c ETSI EN 300 403-1 [i. clauses 4.5.10, 4.5.4	lause 9.3 .3],	ETSI EI ETSI TS 1	N reference to: i [51], clause 6.1.3.6 i 001 [49], clause 6.1.3.6 i [i.20], clause 7.2.3.1.2.6 TS 124 607 [43]						
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks									
Selection criteria:	The user subscribes OIR "pe									
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling party number information element is delivered to the called user									
SIP Parameter values:	without any digit information Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)									
Comments:										
	SIP		SUT		ISDN					
	INVITE	→		→	SETUP					
	180 Ringing	+		(ALERT					
	200 OK INVITE	+		+	CONN					
	ACK	→		1						
	BYE	+		+	DISC					
	200 OK BYE	→		→	REL					

SI_XXSSOIR15	ISDN reference ETSI EN 300 092-1 [i.14] ETSI EN 300 403-1 clauses 4.5.10, 4.	, clause 9.3 [i.3], 5.11	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6 ETSI TS 124 607 [43]								
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks										
Selection criteria:	The user subscribes OIR "p										
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling party number information element is delivered to the called user without any digit information 										
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)										
Comments:				_							
	SIP		SUT	ISDN							
	INVITE	→	→	SETUP							
	180 Ringing	←	←	ALERT							
	200 OK INVITE	+	←	CONN							
	ACK	→									
	BYE	(+	DISC							
	200 OK BYE	→	→	REL							

6.3.2.3 TIP/COLP

SI_XXSSCOLP01	ETSI EN	reference 300 092-1 I 300 403-	[i.14]	NGN reference to: ETSI TS 124 608 [44]						
TSS reference:	SIP-ISDN/SS/COLP									
SIP selection criteria:										
ISDN Parameter criteria:	Temporary presenta	Temporary presentation allowed								
Test purpose:	Ensure that the SUT on receipt of an CONNECT message with a Connected Party Number information element coded Address presentation restricted parameter = presentation allowed nature of address indicator = ISDN_NAI Numbering plan indicator = ISDN/Telephony numbering plan Screening indicator = ISDN_SI Address signals included sends a 200 OK INVITE to the UAC with a P-Asserted-Identity header field containing a URI									
SIP Parameter values:	with an identity in the format of a tel URI has been received. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)									
ISDN Parameter values:	m = line (PIXIT) CONNECT; Connected number									
Comments:										
	SIP		SUT		ISDN					
	INVITE	→		→	SETUP					
	180 Ringing	+		+	ALERT					
	200 OK INVITE	CONN								
	ACK	→								
	BYE	(+	DISC					
	200 OK BYE	→		→	REL					

Values for test purposes SI_XXSSCOLP01						
VA_01	ISDN_NAI = national number, '010'B					
	ISDN_SI = user provided verified and passed, '01'B					
VA_02	ISDN_NAI = national number, '010'B B					
	ISDN_SI = user provided, not screened, '00'B					
VA_03	ISDN_NAI = international number, '001'B					
	ISDN_SI = user provided, not screened '00'B					
VA_04	ISDN_NAI = international number, '001'B					
	ISDN_SI = user provided, verified and passed '01'B					

SI_XXSSCOLP02	ISDN reference ETSI EN 300 092 ETSI EN 300 403	-1 [i.14]	NGN reference to: ETSI TS 124 608 [44]					
TSS reference:	SIP-ISDN/SS/COLP							
SIP selection criteria:								
ISDN Parameter criteria:	Temporary presentation a	allowed						
Test purpose:	Ensure that the SUT on receipt of an CONNECT message without a Connected Party Number information element sends a 200 OK INVITE to the UAC with a P-Asserted-Identity header field containing a URI with an identity in the format of a tel URI has been received.							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)							
ISDN Parameter	m = line (PIXIT) CONNECT:							
values:	Connected number							
Comments:								
	SIP		SUT		ISDN			
	INVITE	→	·	→	SETUP			
	180 Ringing	+		+	ALERT			
	200 OK INVITE	←		+	CONN			
	ACK	→						
	BYE	+		+	DISC			
	200 OK BYE	→		→	REL			

SI_XXSSCOLP03	ISDN reference to:	NGN reference to:					
	ETSI EN 300 092-1 [i.14]	ETSI TS 124 608 [44]					
T00 (ETSI EN 300 403-1 [i.3]						
TSS reference:	SIP-ISDN/SS/COLP						
SIP selection criteria:							
ISDN Parameter	Temporary presentation allowed						
criteria:							
Test purpose:	Ensure that the SUT on receipt of an CONNECT message with a Unscreened Connected Party Number information element sends a 200 OK INVITE to the UAC with a P-Asserted-Identity header field containing a URI with an identity in the format of a tel JRI has been received.						
	The unscreened number is delivered in a Fafter the 200 OK INVITE.	From Header of the UPDATE request send					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	on					
ISDN Parameter	CONNECT;						
values:	Connected number, screening indicator us	ser provided not verified					
Comments:							

SIP		SUT		ISDN
INVITE	→		1	SETUP
180 Ringing	+		+	ALERT
200 OK INVITE	+		4	CONN
ACK	→			
UPDATE	+			
200 OK UPDATE	→			
BYE	+		+	DISC
200 OK BYE	→		→	REL

6.3.2.4 TIR/COLR

SI_XXSSCOLR01	ISDN referend ETSI EN 300 092 ETSI EN 300 40	14]		NGN refe ETSI TS 12			
TSS reference:	SIP-ISDN/SS/COLP						
SIP selection criteria:							
ISDN Parameter	Temporary presentation	allow	ed				
criteria:							
Test purpose:	Ensure that the SUT on receipt of an ANM message with a Connected Party Number information element coded: • Address presentation restricted parameter = presentation restricted, • Nature of address indicator = ISDN_NAI • Numbering plan indicator = ISDN/Telephony numbering plan • Screening indicator = ISDN_SI • Address signal included • sends a 200 OK INVITE to the UAC with • A P-Asserted-Identity header field containing a URI has not been received • A Privacy header field was received and the priv-value component is set to "id".						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
ISDN Parameter values:	m = line (PIXIT) CONNECT; Connected number						
Comments:							
	SIP			SUT		ISDN	
	INVITE	→			→	SETUP	
	180 Ringing	+			-	ALERT	
	200 OK INVITE	+			-	CONN	
	ACK	→					
	BYE	+			-	DISC	
	200 OK BYE	→			→	REL	

	Values for test purposes SI_XXSSCOLR01
VA_01	ISDN_NAI = national number, '010'B
	ISDN_SI = user provided verified and passed, '01'B
VA_02	ISDN_NAI = national number, '010'B B
	ISDN_SI = user provided, not screened, '00'B
VA_03	ISDN_NAI = international number, '001'B
	ISDN_SI = user provided, not screened '00'B
VA_04	ISDN_NAI = international number, '001'B
	ISDN_SI = user provided, verified and passed '01'B

SI_XXSSCOLR02	ISDN referen					erence to:
	ETSI EN 300 09 ETSI EN 300 4	_	•	E1311	15 1	24 608 [44]
TSS reference:	SIP-ISDN/SS/COLP		•			
SIP selection criteria:						
ISDN Parameter criteria:	Permanent presentation	restr	icted			
Test purpose:	Ensure that the SUT on Number information ele	receipment of the receipment o	ot of an CON coded: n restricted p dicator = ISDN = ISDN_SI uded //ITE to the U.	arameter = preser N_NAI /Telephony numbe AC with I has not been rec	ering	on allowed I plan
SIP Parameter values:	"id". Dial string parameters of PIXIT for supported hear Case a) no 100 rel Case b) Supported: 100 Case c) Supported: 100 a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	der:		on		
ISDN Parameter values:	CONNECT; Connected number					
Comments:						
	SIP			SUT		ISDN
	INVITE	→			<u>→</u>	SETUP
	180 Ringing	+			-	ALERT
	200 OK INVITE	(←	CONN
	ACK	→				
	BYE	+			-	DISC
	200 OK BYE	→			→	REL

	Values for test purposes SI_XXSSCOLR02
VA_01	ISDN_NAI = national number, '010'B
	ISDN_SI = user provided verified and passed,
	'01'B
VA_02	ISDN_NAI = national number, '010'B B
	ISDN_SI = user provided, not screened, '00'B
VA_03	ISDN_NAI = international number, '001'B
	ISDN_SI = user provided, not screened '00'B
VA_04	ISDN_NAI = international number, '001'B
	ISDN_SI = user provided, verified and passed
	'01'B

SI_XXSSCOLR03	ISDN reference ETSI EN 300 092- ETSI EN 300 403	·1 [i.14]	1		ence to: 4 608 [44]
TSS reference:	SIP-ISDN/SS/COLP				
SIP selection criteria:					
ISDN Parameter criteria:	Temporary presentation	restricted			
Test purpose:	format of a tel U	KINVITE to the lentity header fi IRI has not bee	UAC with eld containing a URI	with	an identity in the
SIP Parameter values:	Dial string parameters op PIXIT for supported head Case a) no 100 rel Case b) Supported: 100 r Case c) Supported: 100 r a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ler: rel	ition		
ISDN Parameter values:	CONNECT; Connected number				
Comments:					
	SIP		SUT		ISDN
		→		→	SETUP
	100 1 till g	(-	ALERT
		((CONN
	ACK	→			
	BYE	((DISC
	200 OK BYE	→		→	REL

6.3.2.5 CFU

6.3.2.5.1 CFU - SIS

Color Col				GN refere SI TS 124				.5	[i.5 9.2	reference 1 300 207-1 6.1, 9.2.2,	EN ses	ETSI clau		SCFU 01	SIS_XXS							
with CFU. User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding unconditional supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-ch performed correctly (e.g. testing QoS parameters). ISDN Parameter values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN 1 ISDN 2 MGCF I-CSCF S-CSCF P-CSCF UE-A UE ISDN 1 ISDN 2 MGCF I-CSCF S-CSCF P-CSCF UE-A UE ISDN 1 ISDN 2 MGCF I-CSCF INVITE INVITE INVITE INVITE						U	s/CF	y_services	ntar	/Supplemei	SIP/	-ISDN-	SIP									
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b = line (PIXIT) m = line (PIXIT)						11	uitic	ina precon	eı a	ortea. 100 f	ippc	se c) sc	Cas									
b = line (PIXIT) m = line (PIXIT)										-\	VIT	line (DI	_									
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	XSSCFU	02			ETSI EN 3 clauses 6	300 £	ence to: 207-1 [i.5], 0.2.2, 9.2.5				IGN refere SI TS 124			
TSS refe			SIP-I	ISD	N-SIP/Sup	pler	nentary_servi	ces/	CFU					
Configura	ation:		CFU numl	"ca ber	lling user i is released	s no	er C are in ner tified of call d the diverted-to arded" = Yes).	ivers o use	sion with dive er" = Yes, "s	erted erve	to numbe d user rec	er" = eive	Yes, "dives notifica	erting tion that
Selection			Call 1	forv Jotif	ications su	conc	litional suppoi rted							
Test purp			of ca allow preso Ensu is pe	III di /ed enta ire t rfor	version an - no COLR ation allowe that in the a med corre	d intal activents	A calls user Eformed of the duser C is in User B is notice call state (Ne.g., testing C	dive form fied 110) loS p	rted-to numbled of the following of call diversity the voice transfer.	oer (ward sion. ansfe	user C has ding numb	er (esentatio user B ha	n IS
SIP Para	meter val	ues:	PIXITE Case Case Case a = li b = li	T fo e a) e b) e c) ine	r supported no 100 rel Supported	d he I: 10			ition					
Commen						_				1				
ISDN 1	ISDN 2	ľ	MGCF		I-CSCF	•	S-CSCF		P-CSCF		UE-A		UE-0	<i>)</i>
						1				,	INVITE		1	
								+	INVITE	+	INVITE			
						+	INVITE							
		_		+	INVITE		404	→	404	→	181			
				→	181 INVITE	4	181 INVITE	7	181 INVITE	7	161	→	INVITE	
				Ť	1144112		1144112	Ť	1144112			-	100 Trying	
				+	180	+	180	+	180	+	180	+	180	
\Box				→	180	→	180	\	180	→	180	ب	000 511	
				+	200 OK ACK	↓ ↑	200 OK ACK	+	200 OK ACK	<u> </u>		↓ ↑	200 OK ACK	
		-		7	200 OK	→	200 OK	→ →	200 OK	→	200 OK	-	AON	
				+	ACK	÷	ACK	÷	ACK	-	ACK			
				+	BYE 200 OK BYE	+	BYE 200 OK BYE	+	BYE 200 OK BYE			+	BYE 200 OK BYE	
				→	BYE	→	BYE	→	BYE	→	BYE			
				+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE			
		,			200 OR BIL	``	200 ON DIL	,	200 OK DIL	`	200 OR BIL			

SIS_XXSSCFU 03		ISDN ref ETSI EN 36 clauses 6.	00 1, 9	207-1 [i.5], 9.2.2, 9.2.5				_		erence to: 24 604 [45]
TSS reference:		SIP/Suppler									
Configuration:	CFU "callin number is	g user is no eleased to	otifi the	ed of call di diverted-to	ve u	ork N1. The rsion with di ser" = Yes, " er B has a p	ver 'se	ted to num	ber' ecei	' = Yes, "di ves notifica	verting ation that
Selection criteria:	Call forwar CF Notifica	ding by the ding uncond tions suppo	ditio orte	onal suppor d						_	
Test purpose:	call diversion COLR) allowed). LEnsure that	on and infor and user C lser B is not t in the activ	me is i t no re o	ed of the divention of the of	ert the I d I10	he call is for ed-to number of forwarding iversion. b) the voice to parameters	er (nu rar	(user C has ımber (user	pre B ł	esentation a nas present	allowed - tation
SIP Parameter values:	PIXIT for s Case a) no Case b) Su	pported: 10 pported: 10 XIT) XIT)	ad 00 r	er: el		dition					
Comments:		,									
ISDN 1 ISDN 2	MGCF	I-CSCF		S-CSCF		P-CSCF		UE-A	1	UE	-C
	÷ ÷	INVITE 181 INVITE	← →	INVITE 181 INVITE	→	INVITE 181 INVITE		181	→	INVITE	
	÷	180 180 200 OK	+ +	180 180 200 OK	→	180 180 200 OK	←	180 180	+	100 Trying 180 200 OK	
	→ → ←	ACK 200 OK ACK	→ →	ACK 200 OK ACK	→ ←	ACK 200 OK ACK		200 OK ACK	→	ACK	
	÷ ÷ ÷	BYE 200 OK BYE BYE 200 OK BYE	+ + +	BYE 200 OK BYE BYE 200 OK BYE	→	BYE 200 OK BYE BYE 200 OK BYE		BYE 200 OK BYE	←	BYE 200 OK BYE	

SIS_XX	SSCFU 04				00 2	ence to: 207-1 [i.5], 0.2.2, 9.2.5			ı	NGN refe ETSI TS 12					
TSS referen	JCO.	SIP-IS				entary_ser		/CFII							
Configuration									IISE	r R is in ne	two	rk N2 and is	ς		
Comigaratio	,,,,											ted to numb			
								e diverted-t							
		receive	es r	otification	tha	t the call ha						has a point-	•		
				int Configu											
Selection cr	iteria:			rding by th											
						tional supp	orted								
Test purpos				ations sup			r D +k	ne call is for		dod to uso	r C	ugor A io			
rest purpos	e.														
			notified of call diversion and not informed of the diverted-to number (user C has presentation not allowed - COLR) and user C is not informed of the forwarding												
												of call diver	sion.		
) the voice t							
								testing QoS	pa	rameters).					
SIP Parame	eter values:	Dial str	ring	paramete	rs o	ptions=PI	KIT								
		DIVIT 6		supported	h o o	don									
				o 100 rel	nea	der.									
				upported:	100	rel									
						rel and pr	econo	dition							
			•			•									
		a = line													
		b = line	•	,											
Commonto		m = lin	e (I	JIXII)											
Comments: ISDN 1	ISDN 2	MGC	F	I-CSCI	<u> </u>	S-CS0	⊃F	P-CSC	<u> </u>	UE-A		UE-C			
IODIT I	100112	Wioo		1 000.		0 000			+	INVITE		02 0			
					+	INVITE	+	INVITE							
			+	INVITE					<u> </u>						
			→	181 INVITE	→	181 INVITE	→	181 INVITE	→	181	→	INVITE			
											+	100 Trying			
			←	180 180	+	180 180	←	180 180	←	180	+	180			
			+	200 OK	+	200 OK	+	200 OK			÷	200 OK			
			→	ACK 200 OK	→	ACK 200 OK	→	ACK 200 OK	→	200 OK	→	ACK			
			+	ACK	+	ACK	+	ACK	+	ACK	Ļ				
			←	BYE 200 OK BYE	+	BYE 200 OK BYE	←	BYE 200 OK BYE	<u> </u>		←	BYE 200 OK BYE			
			→	BYE	→	BYE	→	BYE	→	BYE		200 OR BTE			
			+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE					

SIS	XXSS	SCFU 0	5			ISDN refe						_		rence to:		
						TSI EN 300 lauses 6.1,						ETSITS	12	4 604 [45]		
TSS re	eferen	ce:	,	SIP-ISDI				tary_servic	es	CFU						
Config										network N1.	. TI	ne user B is	s in	network N2	2 and is	
			l l	orovided	wit	h CFU.										
			-	The use	· A	and the use	er C	are in netv	voi	k N1. The u	se	r B is provid	ded	with CFU '	'calling	
			l	user is n	otif	ed of call d	ive	rsion with d	ive	rted to num	bei	r'' = No, "div	vert	ing number	ris	
			ı	eleased	to	the diverted	d-tc	user" = No), ":	served user	red	ceives notif	icat	tion that the	call has	
			ı	peen for	war	ded" = no).	Us	ser B has a	ро	int-to-multip	oin	t Configura	tior	٦.		
Select	ion cri	iteria:	(Call forw	ard	ling by the r	net	work								
			(Call forw	ard	ling uncond	itio	nal support	ed							
			(CF Notif	icat	ions suppoi	rte	t								
Test p	urpos	e:	l l	Ensure t	hat	when user	Αd	calls user B	, th	e call is forv	var	ded to use	r C,	user A is r	notified of	
-	•		(call dive	sio	n and not ir	nfoi	med of the	di۱	erted-to nur	mb	er (user C	has	presentation	on	
			á	allowed -	- nc	TIR) and ι	ıse	r C is not in	for	med of the f	orv	varding nur	mbe	er (user B h	as	
			l l	oresenta	tior	not allowe	d).	User B is n	ot	notified of c	all	diversion.		•		
			Įį	Ensure t	hat	in the activ	e c	all state (N	10)	the voice tr	an	sfer on the	me	dia and B-d	channels	
			li	s perfori	s performed correctly (e.g. testing QoS parameters).											
SIP Pa	arame	ter		Dial string parameters options=PIXIT												
values	s:				•											
			ļ.	PIXIT for	su	pported hea	ade	er:								
			(Case a)	no	100 rel										
			(Case b)	Sup	ported: 10	0 re	el								
			(Case c)	Sup	ported: 100	o re	el and preco	nc	lition						
					-			-								
			á	a = line (PIX	(IT)										
			ı	o = line (PIX	(IT)										
			ı	m = line	(PI	XIT)										
Comm	ents:															
ISDI	N 1	ISDN	12	MGC	F	I-CSCF		S-CSCF		P-CSCF		UE-A		UE	-C	
									Ţ	INVITE	+	INVITE				
							+	INVITE	٢	INVITE						
					+	INVITE										
					→	INVITE	→	INVITE	→	INVITE			→	INVITE		
				 	+	180	+	180	+	180	+	180	+	100 Trying 180		
					→	180		180		180	→	180				
				 	←	200 OK ACK		200 OK ACK		200 OK ACK			+	200 OK ACK		
					١^	200 OK		200 OK		200 OK	→	200 OK	É	7.010		
					Ψ,	ACK		ACK		ACK	+	ACK	_	DVE		
-		-		1	←	BYE 200 OK BYE		BYE 200 OK BYE		BYE 200 OK BYE			+ +	BYE 200 OK BYE		
					→	BYE	→	BYE	→	BYE		BYE				
					+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE				

SIS_XXS			С	TS lau	DN referer I EN 300 20 ses 6.1, 9.2)7-′ 2.2,	1 [i.5], , 9.2.5				NGN refe ETSI TS 1			
TSS referen	ce:						tary_service							
Configuratio	n:								k N1. The u t-to-point C			two	rk N2 and	is provided
Selection cri	teria:	Call t	forw	ard	ing uncondi	itior		ed	performed b					
Test purpose	э:	activ	е са	ll st	ate (N10) tl	he v		er	e call is forv on the med					
Community		Case	e a) (e b) (e c) (ine (ine (no ⁷ Sup Sup PIX PIX	· IT) IT)) re		ndi	ition					
Comments:	LOF	N 4	1.40) (C) [1.000	_	0.000	_	D CCCI	_	III			F 0
ISDN 2	IOL	DN 1	MG	100	I-CSCF	<u> </u>	S-CSCF		P-CSCF		UE-A	1	U	E-C
						+	INVITE	+	INVITE		INVIIL			
		SETUP	+	+	INVITE	<u> </u>		Ļ		4_				
		FAC REL	+	→	181 INVITE	→	181 INVITE		181 INVITE	→	181	→	INVITE	
		RLC	→									+	100 Trying	
	<u> </u>			+	180	+	180		180		180	+	180	
	+			→	180	→	180	→		→	180	_	000 014	
	+		-	←	200 OK	+	200 OK	+		_	1	+	200 OK ACK	
	+		-	→	ACK 200 OK	→	ACK 200 OK	→	200 OK	→	200 OK	7	ACK	
	+ +			+	ACK	+	ACK		ACK		ACK	1	1	
	+ +			÷	BYE	+	BYE		BYE	÷	7.010	+	BYE	
 	+ +			→	200 OK BYE	<u>`</u>	200 OK BYE		200 OK BYE	+	+	À	200 OK BYE	
	† †			→	BYE	→	BYE	→	BYE	→	BYE		200 011 212	

		CFU 0			ET cla	ISDN refero SI EN 300 : auses 6.1, 9	207 9.2.	7-1 [i.5], .2, 9.2.5						ence to: 4 604 [45]	
TSS ref	eren	ce:						tary_service							
Configu	ıratioı	n:	wit Ye	h Part s, "div	ial I erti	Rerouting "d	call	ing user is r	not	k N1. The us ified of call of diverted-to	vib	ersion with	div	erted to n	umber" =
Selection	on cri	teria:	Us	er B h	as	activated th		artial Rerounal supporte		ng service performed b	v t	he UE			
Test pu	rpose	e :	En cal no allo En	sure ti Il diver COLF owed). sure ti	hat sion R) a hat	when user and inform nd user C is in the active	A conects in	alls user B, d of the dive formed of the	th rte ne 0)	e call is forw d-to number forwarding r the voice tra	r (u	ded to use ser C has nber (user	pre B ł	esentation nas preser	allowed -
SIP Pai	ramet	ter valu	es: Dia PIX Ca Ca Ca a = b =	XIT for use a) use b)	g p su no Sup Sup PIX PIX	pported heal 100 rel ported: 100 ported: 100 ported: 100 IT)	opti ade) re	ons=PIXIT r:							
Comme	nte:		1111	<u> </u>	(1 1/	XII)									
ISDN		ISD	N 1	MG	CF	I-CSCF		S-CSCF		P-CSCF		UE-A		U	IE-C
									Ļ		+	INVITE			
				<u> </u>	-		_	INVITE	•	INVITE				-	
			SETUP	+	+	INVITE		IIIVIIL							
			FAC	→	→	181	→	181	→	181	→	181			
			REL	+	→	INVITE	→	INVITE	→	INVITE			→	INVITE	
			RLC	→									+	100 Trying	
					+	180		180		180		180	+	180	
				ļ	→	180	→	180		180	→	180	_	222.014	
				1	+	200 OK ACK	+	200 OK ACK		200 OK ACK	-		+	200 OK ACK	
-					7	200 OK	7 →	200 OK		200 OK	4	200 OK	7	AUN	
				1	+	ACK		ACK		ACK		ACK			
					÷	BYE		BYE		BYE	È	,,,,,,,	+	BYE	
					→	200 OK BYE	→	200 OK BYE		200 OK BYE			→	200 OK BYE	
					→	BYE	→	BYE		BYE	→	BYE			
					+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE			

SIS_X	XSSCF	*U 08		cl	TSI laus	DN referen EN 300 20 ses 6.1, 9.2	7-1 2.2,	[i.5], 9.2.5						ence to: 4 604 [45]	
TSS refe	rence:		SIP-I	SDN-SI	P/S	Supplement	ary	_services/C	FL	J					
Configura	ation:		The with dive	user A a Partial F	ind Rero mbe	the user C outing "calli	are ng	in network user is notif	N' iec	1. The user of the control of call divection in the control of the	rsi	on with div	erte	ed to numb	er" = Yes,
Selection	n criteria	a:				vated the Paus				ervice formed by th	e l	JE			
Test purp	pose:		Ensu diver COLI allow Ensu	re that version and R) and under the that in the that in the that in the the the the the the the the the the	whe d no use n th	en user A ca ot informed r C is not in	alls of t for	user B, the the diverted med of the tate (N10) t	ca I-to for he	all is forward number (us warding num voice transf	ed ser nbe	to user C, C has pre er (user B	ser has	tation not presentat	allowed - ion not
SIP Para		values	PIXIT Case Case Case a = li b = li	string pa If for superal (a) no 1 be b) Superal (b)	pportport	neters option rted header rel ted: 100 rel ted: 100 rel	ons ::	=PIXIT							
Commer		ICE	201.4	MCC	_	1,000		C 000F		D CCCE				1	F 0
ISDN	N Z	ISL	ON 1	MGC	_	I-CSCF		S-CSCF		P-CSCF		UE-A		U	E-C
					\vdash	†			+	INVITE	È		1		
							+	INVITE							
			SETUP	+	+	INVITE	Ļ		Ļ		Ļ				
			FAC	→	<u>→</u>	181	→	181		181	→	181	_	IND/ITE	
			REL RLC	←	→	INVITE	→	INVITE	7	INVITE	-	-	→	INVITE 100 Trying	
		H	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	 	+	180	+	180	+	180	+	180	+	180	
					<u>`</u>	180	÷	180		180		180	Ť		
					+	200 OK	+	200 OK		200 OK		-	+	200 OK	
					→	ACK	→	ACK		ACK			→	ACK	
		\longrightarrow			→	200 OK	→	200 OK		200 OK		200 OK	1	ļ	
		 +			+	ACK BYE	4	ACK BYE		ACK BYE	+	ACK	+	BYE	
		\vdash		-	→	200 OK BYE	→	200 OK BYE		200 OK BYE	-		7	200 OK BYE	
-				 	→	BYE	→	BYE			<u> </u>	D)/E	-	200 OK DIE	
1					7			DIE	7	BYE	7	BYE			

SIS_XXSSCFU 09	ISDN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP/Supplementary_services/CFL	
Configuration:	The user A and the user C and D are in netw is provided with Partial Rerouting User C is provided with TIR. The user B is p is notified of call diversion with diverted to nureleased to the diverted-to user" = No. User	rovided with Partial Rerouting "calling user umber" = No, "diverting number is
Selection criteria:	User B has activated the Partial Rerouting so Call forwarding unconditional supported perf CF Notifications supported	ervice formed by the UE
Test purpose:	Ensure that when user A calls user B, the ca of call diversion and not informed of the dive not allowed - TIR) and user C is not informed presentation not allowed). Ensure that in the active call state (N10) the channels is performed correctly (e.g. testing	rted-to number (user C has presentation d of the forwarding number (user B has voice transfer on the media and B-
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	

			a =	line (F	PIXIT)									
			D =	line (F	1XII)									
			m =	line (PIXIT)									
Comm	nents:		İ	•	•									
ISD	N 1	ISDN 2	2 M	GCF	I-CSCF	=	S-CSCF	F	P-CSCF		-A		UE-C	
										4	INVITE			
								+	INVITE					
						+	INVITE							
		SETU		+	INVITE									
		FAC	→											
		REL	+	→	INVITE	→	INVITE	1	INVITE			→	INVITE	
		RLC	→									+	100 Trying	
				+	180	+	180	+	180	+	180	+	180	
				→	180	→	180	→	180	→	180			
				+	200 OK	+	200 OK	+	200 OK			+	200 OK	
				→	ACK	→	ACK	→	ACK			→	ACK	
				→	200 OK	→	200 OK	→	200 OK	→	200 OK			
				+	ACK	+	ACK	+	ACK	+	ACK			
				+	BYE	+	BYE	+	BYE			+	BYE	
				→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			→	200 OK BYE	
				→	BYE	→	BYE	→	BYE	→	BYE			
				+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE			

SIS_X	XSSCFI	J 10			ISDN ref ETSI EN 30 clauses 6.	00 2	207-1 [i.5],						ference to 124 604 [4	=			
TSS refer	ence:		SIP-ISE	DN-	SIP/Supple	me	ntary_servi	се	s/CFU								
Configura	tion:								vided with C	FU	User B h	as	a point-to-i	multipoint			
· ·			Configu				•						•	•			
Selection	criteria:				ding by the	ne	twork										
00.00	011101101						onal suppo	rte	d								
							d user busy		u .								
Test purp	000:								y if CFU wa	e n	of succe		ful				
rest purp	056.													oor buoy			
OID D		1		er A calls user B, the call is forwarded to user C who is user determined user busy. al string parameters options=PIXIT													
SIP Parar	neter va	iues:	Diai stri	I string parameters options=PIXII													
			Case a) nd) St) St (PI (PI	IXIT) IXIT)	00		cor	ndition								
Comment									1				1				
ISDN 2	l IS	<u>DN 1</u>	MGC	F	I-CSCF		S-CSCF		P-CSCF		UE-A		U	E-C			
		_						_	INVITE	+	INVITE						
						+	INVITE	_	INVITE								
				+	INVITE	1											
				→	181	→	181		181	→	181						
\vdash				→	INVITE	→	INVITE		INVITE	<u> </u>			INVITE				
\vdash		_		←	486 ACK	+	486 ACK		486 ACK	1			486 ACK	 			
				→	486	→	486		486	→	486	_	AOR				
				+	ACK		ACK		ACK		ACK						

	_	SCFU 11		cl	ISDN refer ISI EN 300 auses 6.1,	20 9.2	7-1 [i.5], 2.2, 9.2.5				NGN refe ETSI TS 12		
TSS ref	ferenc	ce:			SIP/Supple								
Configu	ıratior	າ:	The use Configu			ork	N2 and is p	ro	vided with C	FU	l. User B has	a point-to-	multipoint
Selection	on crit	eria:	Call for	wai	rding by the rding uncon network dete	diti	onal suppo						
Test pu	rpose):	User A busy.	cal	ls user B, th	ne d	call is forwa	rde			ot successfu no is networ l		ed user
SIP Pai	ramet	er values	PIXIT for Case a Case b	or s) no) Si) Si (P (P	IXIT)	eac	der: rel		dition				
Comme	ents:												
ISDN	12	ISDN	MGC	F	I-CSCF		S-CSCF		P-CSCF		UE-A	U	E-C
						<u> </u>		+	INVITE	+	INVITE		
						+	INVITE	Ė					
				↓ ↑	INVITE 181	→	181	_	181	_	181		
				<u>7</u>	INVITE	7 →	INVITE		INVITE	+	101		
				+	486	+	486	+	486				
				→ ,	ACK	→	ACK		ACK	Ļ	400		
				<u>→</u>	486 ACK	→	486 ACK		486 ACK		486 ACK		
	1				, tort	-	/ NOIN	•	,,,,,,,	•	/ () (1

SIS_	XXS	SCFU 1	12		cl	ISDN refe TSI EN 30 auses 6.1	0 20 , 9.2	7-1 [i.5], 2.2, 9.2.5						erence to: 24 604 [45]
TSS refe	erenc	e:		SIP-ISI	ON-S	SIP/Supple	mei	ntary_serv	ices/0	CFU					
Configur	ation	1:		The use		is in netwo	ork I	N2 and is p	rovic	led with C	FU.	. User B I	nas	a point-to-	-point
Selection	n crite	eria:		Call for user C User B	ward is ne has	ding by the ding uncon etwork dete activated	dition ermind the	onal suppo ined user t Partial Rer	ousy outin	g service	-				
Test purp	pose	:				at a call is s user B, th									ser busy.
				PIXIT for Case a Case b	or su) no) Su) Su (PI)	XIT)	ead 00 r	er: el		tion					
Commer															
ISDN	1	ISD	N 2	MGC	<i>;</i> ⊦	I-CSCI	_	S-CSC	<i>;</i> ⊦	P-CSC		UE-A		U	E-C
								†	+	INVITE		IINVIIE	 		+
							+	INVITE							
			SETUP	+	<u>+</u>	INVITE		101		101		101	1		
			FAC REL	→	→	181 INVITE	→	181 INVITE	→ →	181 INVITE	7	181	→	INVITE	+
			RLC	`	÷	486		486	É	486				486	
			-		→	ACK	→	ACK	→	ACK				ACK	
					→	486	→	486	→	486		486			
l	1	1			+	ACK	+	ACK	+	ACK	←	ACK	1		1

SIS_XX	XSSC	CFU 13	3	ETSI	ΕN	reference 300 207-1 6.1, 9.2.2,	[i.5				E		SN references SI TS 124 60		
TSS refer	rence	:	SI	P-ISDN	-SII	P/Supplem	enta	ary_servi	ces	/C	FU				
Configura	ation:		Tł	ne user	B is	in network	(N2	and is p	rovi	id	ed with CFl	J. l	Jser B has a	a point-to-p	oint
			C	onfigura	tion	١.		•						•	
Selection	crite	ria:	C	all forwa	ırdir	ng by the n	etw	ork							
									rted	р	erformed b	y th	ne UE		
						work deterr						,			
						ctivated the					service				
Test purp	ose:											not	successful.		
														determined	d user busy.
SIP Parar	mete	r value				rameters o									,
					,		J		-						
			Ы	XIT for	sun	ported hea	der	•							
				ase a) n				•							
						oorted: 100	rel								
						orted: 100			onc	tił	ion				
				400 0, C	MPF	ortoa. 100		and proc	,0110	411	1011				
			а	= line (F	ΝI	T)									
				= line (F = line (F		,									
				= line (i		,									
Comment	te.			- 11110 (1/1/										
ISDN 1		ISDI	N 2	MGC	F	I-CSCF	-	S-CS	^F		P-CSCF	:	UE-A	1	JE-C
10011	-	1001	12	IVICO	i	1 0001		0 00.			1 0001		INVITE	—	1
									•	÷	INVITE				
			SETUP	4	+	INVITE	+	INVITE				-		1	
+			FAC	→	→	181	→	181	-	→	181	→	181	1	
			REL	+	→	INVITE	→	INVITE	-	>	INVITE				
			RLC	→	←	486 ACK	+	486 ACK			486 ACK	-		1	
+					7 →	486	7	486			486	→	486	1	
						ACK		ACK			ACK		ACK		

SISI_XXSSCFU 14	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP-ISDN/Supplementar	y_services/CFU
Configuration:	The user A and the user C are in no	etwork N1. The user B is in network N2 and is provided
	with CFU. User D forwards the call	to back to user B. User B has a point-to-multipoint
	Configuration.	
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional support	orted
Test purpose:	Ensure that when user A calls user	B, the call is forwarded to user C and D.
	User D forwards the call to back to	user B. Ensure that the call is released.
SIP Parameter values:	Dial string parameters options=PIX	IT
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and pre	condition
	ii (D1)(IT)	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.3.2.5.2 CFU - SII

SII_XXSSC	FU 01				ISDN refe TSI EN 300	20	07-1 [i.5],				_		rence 24 604		
					lauses 6.1,										
TSS reference:							entary_serv								
Configuration:			The use	er A a	and the use	r C	are in netw	vor	k N1. The u	ser	B is in ne	twork	N2 an	d is	provided
			with CF	U. U	ser B has a	pc	int-to-multi	poi	nt Configura	atio	n.				
Selection criteri	a:		Call for	wardi	ing by the n	etv	vork								
			Call for	wardi	ing uncondi	itio	nal supporte	ed							
Test purpose:									e call is forw	varo	ded to use	er C.			
									the voice tra				ia and	B-ch	annels is
							esting QoS								
SIP Parameter	values				arameters of			۳.							
on raramotor	valueo.		Diai ou	9 P		ייקי	0110-1 17(11								
			PIXIT f	or suu	oported hea	ade	r·								
	Case a														
					ported: 100) rc	.I								
							l and preco	nd	ition						
			Case C) Sup	ported. Too	, 16	and preco	ııu	ition						
			a lina	/DIV	IT\										
			a = line												
			b = line												
			m = line	e (PI)	(11)										
Comments:			L												
UE B	UĘ (<u>ز</u>	MG	CF	I-CSCF		S-CSCI	<u> </u>	P-CSCF		UE-A				
		+				-		_	INVITE	+	INVITE			_	
		$^{+}$			1	+	INVITE	Ť						-	
				+	INVITE										
SETUP	+	+		→	181	→	181	→	181	7	181				
ALERTIN		+		→	180	→	180	→	180	→	180			-1-	
CONNEC				→	200 OK	→	200 OK		200 OK	→	200 OK				
DISC	+	4		→ +	ACK BYE	→	ACK BYE		ACK BYE	→	ACK BYE			_	
REL	→	+			200 OK BYE	7	200 OK BYE		200 OK BYE	7	200 OK				
											BYE				
RLC	+				1	1	1								

SII_XXSSCFU	02	(ETS clau	DN referen I EN 300 20 ses 6.1, 9.2	7-1 :.2,	[i.5], 9.2.5			-	IGN refer SI TS 12						
TSS reference:				N-ISDN/Sup												
Configuration:		provi Yes,	ded "div catio	with CFU "c erting number on that the ca	allir er is	ng user is n s released t	otif to t	ied of call on the diverted-	live to ι	rsion with user" = Ye	div s,	work N2 and verted to nur served use a point-to-mu	nber" = r receives			
Selection criteria:		Call f Call f CF N	orw orw otifi	arding by the arding uncor cations supp	nditi orte	ional suppo ed										
Test purpose: SIP Parameter val	ues	call d no Co allow Ensu is per														
		PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)														
Comments:										•						
UE B U	E C	MG	CF	I-CSCF	=	S-CSCI	<u> </u>	P-CSCF		UE-A						
						1		INVITE	+	INVITE						
			-	+	+	INVITE	_	IIIVIIE	+							
			•													
CETUD	٦		7	181	→	181	→	181	→	181	4					
SETUP ALERTING	↓ →		-	180	→	180	-	180	→	180						
CONNECT	ź		-	200 OK	÷	200 OK		200 OK	→	200 OK						
			7	ACK	→	ACK	→	ACK	→	ACK						
DISC	,		•		+	BYE		BYE	+	BYE	_]					
REL	→		7	200 OK BYE	→	200 OK BYE	7	200 OK BYE	→	200 OK BYE						
RLC	←							İ								

SII_	XXSSCF	FU ()3			Е	ISDN ref								erence 24 604		1	
							lauses 6.1						_			•	•	
TSS ref	erence:			SIP-I	SE				nentary_se	rvic	es/CFU							
Configu	ıration:										ork N1. The							
											ied of call d							
											ne diverted-							
								all h	as been fo	rwa	arded" = No). U	ser B has	ap	oint-to	-mul	tipoint	
0-14				Confi					t									
Selection	on criteria	a:					ding by the			-4-	ـا							
									onal suppo	rτe	a							
Test pu	rnoco.						tions supp			R 1	the call is fo	rws	arded to 1	cor	Cusa	rΛ id	s notified of	
l est pu	ipose.										ted-to numb							
					COLR) and user C is informed of the forwarding number (user B has presentation wed). User B is not notified of call diversion. ure that in the active call state (N10) the voice transfer on the media and B-channels													
					sure that in the active call state (N10) the voice transfer on the media and B-channels													
				is per	performed correctly (e.g. testing QoS parameters).													
SIP Par	rameter v	valu	es:	Dial s	ial string parameters options=PIXIT													
				DIVIT	٠.				l									
							upported h 100 rel	eac	ier:									
							ipported: 1	$\cap \cap$	rما									
									rel and pre	cor	dition							
				Cuoc	Ο,	-	ipportou. T		ioi ana pio	٠٠.	i di ti di i							
				a = lii	ne	(PI	XIT)											
				b = liı														
				m = li	ine	(P	IXIT)											
Comme											_		1					
UE	В	UE	С	MG	C	=	I-CSCF		S-CSCI	=	P-CSCF		UE-A					
										+	INVITE	-	INVITE					
								+	INVITE									
		+	-			←	INVITE 181	→	181	→	181	→	181					
	SETUP	•																
	ALERTING CONNECT	7				<u>→</u> →	180 200 OK	→	180 200 OK		180 200 OK	→ →	180 200 OK					
						→	ACK	→	ACK	→	ACK	→	ACK					
<u> </u>	DISC REL	+				←	BYE 200 OK BYE	+	BYE 200 OK BYE		BYE 200 OK BYE	←	BYE 200 OK	$\vdash \vdash$				
								Ĺ		Ĺ		Ĺ	BYE					
	RLC	•	•															

	XXSSCF	U 04		C	TS la	SI E	N reference N 300 207 es 6.1, 9.2.2	-1 [2, 9	i.5], .2.5				GN referer SI TS 124 (
	erence:								ntary_servi							
Configu	ıration:			provide Yes, "d	ed dive	witl ertii on tl	h CFU "call ng number hat the call	ing is r	user is not eleased to	ifie the	k N1. The used of call diverted-todadded" = no). I	ersi us	on with div	erte serv	ed to nun /ed user	nber" = receives
Selection	on criteria	1:		Call fo CF No	rwa tifio	ardi cati	ons suppor	itior ted	nal supporte							
Test pu				of call allowe preser Ensure is perfe	div d - ntat e th	ers CC tion at ned	ion and not DLR) and us not allowed in the active I correctly (t inf ser d). e ca e.g.	formed of th C is not info User B is not all state (N1 testing Qo	ne orn ot i	e call is forw diverted-to re ned of the for notified of ca the voice tra parameters)	orwall o	nber (user darding num diversion.	C h	as presei r (user B	ntation not has
is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)																
Comme	ents:															
UE	В	UE (2	MC	GC.	F	I-CSCF		S-CSCF		P-CSCF		UE-A			
		-	╂_		_		1	-		-	INVITE	+	INVITE			+
		-	\vdash				1	+	INVITE	_	INVIIE	1				+ -
						+	INVITE					L				
						↑	181	→	181	→	181	→	181			
	SETUP ALERTING	+	╂—			→	180	→	180	_	180	┕	180			+
	CONNECT		\vdash			<u>7</u> →	200 OK	7	200 OK		200 OK		200 OK			+
	23231	Ť	t			÷	ACK	÷	ACK		ACK		ACK			
	DISC	+				+	BYE	+	BYE	+	BYE	+	BYE			
	REL	→				^	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			oxdot
	RLC	+	<u> </u>				L									

SII_XXSSCFU 05	ET	SI E	N reference N 300 207-	-1 [i	i.5],				GN reference SI TS 124 60		
TOC reference:			es 6.1, 9.2.2			:	/CELL				
TSS reference:			DN/Supple						Die in netwo	ali NO au	ام مادن بمسمد منام
Configuration:											nd is provided
											No, "diverting
									d user recei		
0.1.11.11						ser	B nas a po	ınt-ı	o-multipoint	Configur	ation.
Selection criteria:			ng by the n								
			ng uncondi		ıaı support	ea					
			ons support								
Test purpose:											is notified of
									er (user C ha		
					ser C is not	tint	ormed of the	e to	rwarding nu	mber (us	er B has
			not allowed			_					_,
									e active call s		
				nd E	3-channels	s is	performed o	corr	ectly (e.g. te	sting Qo	5
	paramete										
SIP Parameter values	: Dial strin	g pa	arameters o	ptic	ons=PIXIT						
			oported hea	ıder	r:						
	Case a)										
			ported: 100								
	Case c) S	Sup	ported: 100	rel	and preco	ondi	tion				
	a = line (PIX	IT)								
	b = line (PIX	IT)								
	m = line	(PIX	(IT)								
Comments:											
UE B UE C	MGC	F	I-CSCF		S-CSC	F	P-CSCF		UE-A		
								+	INVITE		
		-		4	INVITE	+	INVITE	-			
		+	INVITE	`	II VII L	-		+	† †		
OFTUD.											
SETUP ← ALERTING →	-	→	180	→	180	-	180	→	180		
CONNECT -		→	200 OK	→	200 OK			→	200 OK		
DIGG.		→	ACK	→	ACK		ACK	→	ACK		
DISC ←	+	+ +	BYE 200 OK BYE	←	BYE 200 OK BYE		BYE 200 OK BYE	+	BYE 200 OK BYE		
RLC €	-	Ť		Ť		Ť		Ť		+	_

SII_XXS	SCFL	06				cl	TSI	DN referen EN 300 20 ses 6.1, 9.2	7-1 2.2,	[i.5], 9.2.5				NGN reference to: ETSI TS 124 604 [45]
TSS referen	ice:							I/Suppleme						
Configuration	n:													is in network N2 and is provided Configuration.
Selection cr	iteria:							vated the F uncondition				service formed by t	he	UE
Test purpos	e:		а	ctiv	e cal	l st	ate		voic	ce transfer				d to user C. Ensure that in the I B-channels is performed correctl
SIP Parame	eter va	llues:	P C C C a b	PIXITE ASSE	T for e a) n e b) S	su Sup Sup PIX	ppo 100 ppo ppoi (IT)	rted: 100 re rted: 100 re	r: l		itio	n		
Comments:														
UE C		U	ΕВ		MC	ЭC	F	I-CSCF		S-CSCF	=	P-CSCF	-	UE-A
													+	INVITE
									+	INVITE	+	INVITE		
				SETI	IP	+	+	INVITE	~	INVITE	-			
				FAC	<u> </u>	<u>→</u>	<u>→</u>	181	→	181	→	181	→	181
	SETUP			REL		+								
	ALERTI		→	RLC		→	→	180 200 OK	→	180 200 OK		180 200 OK	→	
	CONNE	UI	7			┢	7 →	ACK	→	ACK		ACK	→	
	DISC		+				+	BYE	+	BYE		BYE	+	71011
	REL		→				→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE
	RLC		+			<u> </u>						<u> </u>		

SII_XX	SSCFU	07	ET	SI	ΕN	eference t 300 207-1	i.5				E		SN references SI TS 124 60			
						6.1, 9.2.2, 9										
TSS refere	nce:					N/Supplem										
Configurati	on:		with Par number	tia ' =	l Re	erouting sei	vic g nu	e "calli umber	ing us	er	is notified of	of c	B is in netwo all diversion rted-to user	wi	th divert	ted to
Selection of	riteria:		Call forv	vai	din	tivated the g unconditi	ona	al supp	orted	Ŭ						
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - n COLR) and user C is informed of the forwarding number (user B has presentation allowed Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT														allowed - no on allowed).		
SIP Param	eter valu	ies:	Dial strii PIXIT fo Case a) Case b) Case c) a = line b = line	ng or s no Si Si (P	par upp 10 upp upp upp	oorted head oorted: 100 rel oorted: 100 r oorted: 100 r	otion ler: rel	ns=PI>	KIT							
			m = line	(F	IXI	Γ)										
Comments																
UE C		UE B	MC	Ûز	H	I-CSCF	1	S-C	CSCF		P-CSCF		UE-A			
		-		┢				1	ŀ	+	INVITE	_	INVITE			+
							+	INVITE		_						
			SETUP		(INVITE	Ļ	101				Ę				
	SETUP	+	FAC REL	→	→	181	→	181		7	181	7	181			+
	ALERTING	→	RLC	<u>`</u>	→	180	→	180		→	180	→	180			+
	CONNECT	→		Ť	→	200 OK	→	200 OK			200 OK	<u>→</u>	200 OK			
					→	ACK	→	ACK		→	ACK	→	ACK			
	DISC	+		L	+	BYE	+	BYE			BYE		BYE	[\bot
	REL	→		├	→	200 OK BYE	→	200 OK	BYE	→	200 OK BYE	→	200 OK BYE	_		1
L	RLC	+	1	Щ	<u> </u>	l	<u> </u>						<u> </u>			

SII_X	KXSSCFU	80 ا		TSI	ΕN	reference 300 207-1	[i.				_	N reference I TS 124 60			
						6.1, 9.2.2,									
TSS ref	ference:		SIP-IS	ID8	1-IS	DN/Supple	me	ntary_serv	ice	s/CFU					
Configu	ıration:		The u with P numb	ser 'arti er"	A a al F = Y	and the use Rerouting s	r C ervi ng r	are in netwice "calling number is r	vor us	k N1. The user is notified	of	B is in netw call diversio erted-to use	n with	diver	ed to
Selection	on criteria	:	Call fo	rw	ardi		tior	nal support	ed	performed b					
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified o call diversion and not informed of the diverted-to number (user C has presentation not allowed - COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT														ion not las	
SIP Pa	rameter v	alue	PIXIT Case Case	for a) r b) \$ c) \$ e (l	sup Sup Sup PIX	oported hea 00 rel ported: 100 ported: 100 IT)	ade) re	r: I	ond	tion					
Comme	ents:					•									
UE	C	JE B	В	GC	F	I-CSCF	:	S-CSC	F	P-CSCF		UE-A			
				Ī					T			INVITE			
									+	INVITE					
		-	OFTUD	+	+	INVITE	+	INVITE							
		-	SETUP FAC		→	181	→	181	-	181	4	181			
	SETUP	+	REL	É	ť	101	Ť	101	ť	101	ť	101			
	ALERTING	→	RLC	→	→	180	→	180		180		180			
	CONNECT	→			→	200 OK	→	200 OK		200 OK		200 OK			-
					→	ACK	→	ACK		ACK	→	ACK			
	DISC	+			+	BYE	+	BYE	+	BYE		BYE			
	REL	+		_	→	200 OK BYE	→	200 OK BYE	7	200 OK BYE	→	200 OK BYE	-		
	RLC		l		Ц	1	Ц	l .		l .	<u> </u>				

SII_XX			9		ETS cla	I E	EN :	eference to 300 207-1 [5.1, 9.2.2, 9	i.5]	5					SN reference SI TS 124 60				
TSS refer	rence:			SIP	-ISDN	1-15	ND8	V/Suppleme	enta	ary_ser	vices	s/C	FU						
Configura	ation:			The with = N	e user n Parti lo, "div nfigura	A a al l er atio	and Rer ting n.	the user Couting serving number is	ar rice rel	e in net "calling eased t	tworl g use to the	k N er i e d	I1. The user s notified of liverted-to u	ca	is in networ Il diversion " = No). Use	with	n diver	ted t	to number"
Selection	criter	ia:						vated the F				gs	service						
								unconditio											
Test purp	ose:			dive CO allo Ens	ersion LR) a wed). sure th	an nd nat	d n use in t	ot informed er C is not i	d of nfo	the div rmed of state (N	erted f the N10)	d-te for the	o number (urwarding nu	ise mb	to user C, r C has preser (user B h	sen ias	tation a preser	allov ntati	ved - no on not
SIP Para	meter							meters opti				u	101010).						
values:	1110101			Dia		9 12	uiu	motoro opti	0110	J—1 17(1 1	•								
				Cas Cas Cas a = b =	se a) r se b) \$	no Sup Sup PIX	ioo po po (IT) (IT)	rted: 100 re rted: 100 re	el	nd prec	condi	tio	n						
Comment																			
UE B	3	l	JE I	<u> </u>	MC	3C	F_	I-CSCF		S-C	SCF		P-CSCF		UE-A				
						_			-			4	INVITE	+	INVITE				
				-					+	INVITE		_	IIIVII L	+					
				SETU	JP		+	INVITE											
	SETUP		_	FAC REL		→			<u> </u>			<u> </u>		1					
	ALERTI	NG	←	RLC		→	→	180	→	180		→	180	→	180				
	CONNE		ź			ŕ	→	200 OK	→	200 OK			200 OK	→	200 OK				
							1	ACK	→	ACK		→	ACK	→	ACK				
	DISC		+				4	BYE	+	BYE			BYE	+	BYE				
	REL		→				↑	200 OK BYE	→	200 OK E	BYE	→	200 OK BYE	→	200 OK BYE				
	RLC		+							l									

SII_X>	SSCFU	10		TS	ΙE	N reference N 300 207- s 6.1, 9.2.2	1 [i.5],			-	IGN referei SI TS 124		
TSS refere	nce:		SIP-IS	D١	I-IS	DN/Supple	me	entary_serv	ice	s/CFU				
Configurat	on:									k N1. The unint Configura			work N2 a	nd is provided
Selection of	riteria:		Call forwarding by the network Call forwarding unconditional supported											
Test purpo	se:		To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is user determined user busy.											
SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)														
Comments	:												1	
UE B		UE C	MC	3CI	_	I-CSCF		S-CSCI		P-CSCF		UE-A		
		_							+	INVITE	_	INVITE		
							+	INVITE						
						INVITE	Ļ	101	Ļ	101	\downarrow	101		
	SETUP	+			→	181	→	181	7	181	7	181		
	RLC#17	→			→	486	→	486	→	486	→	486	1	
						ACK	+	ACK		ACK		ACK		

S	II_X	XXS	SSC	FU [•]	11				ISDN ref ETSI EN 30 clauses 6.	00 2	207-1 [i.5],						erence to 24 604 [
TSS I	refe	erer	nce:			SI	P-I	SD	N-ISDN/St	ıpp	lementary_	service	s/CFU						
Confi	gur	atic	n:						r A and the N2 and is										
Selec	tio	n cr	iteria	a:		Ca	Call forwarding by the network Call forwarding unconditional supported												
Test	pur	pos	e:			Us	To verify that a call is released correctly if CFU was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. Dial string parameters options=PIXIT												ined user
SIP F				valu	es:	PI Ca Ca Ca a:	XIT ase ase ase = lir = lir	Γ fo e a) e b) e c) ne ne	or supported no 100 rel Supported Supported (PIXIT) (PIXIT)	d he	eader: 00 rel		ition						
Comr	_	<u>nts:</u>													•				
UE	С		U	E B		MG	CF	=	I-CSCF		S-CS	CF	P-CS0						
												+	INVITE	+	INVITE				
										+	INVITE	_	IINVIIE	-					
								(INVITE			<u> </u>							
				-			<u> </u>	<u>→</u>	181	→	181	→	181	→	181				
				1			١,	→	486	→	486	→	486	→	486			-+	
								(ACK	+	ACK	+	ACK		ACK				

SII_XXSSCFU 13		IS	SDN refere	nce	e to:				NGN refe	erence to:		
		ETS	I EN 300 2	07-	1 [i.5],				ETSI TS 1	24 604 [45]		
		clau	ıses 6.1, 9.	.2.2	., 9.2.5							
TSS reference:	SIP-ISDI	N-ISE	N/Supplen	nen	ntary_servic	es/	CFU					
Configuration:	The user	A ar	nd the user	C a	are in netwo	rk	N1. The use	er E	3 is in netw	ork N2 and	is provided	
	with Part	ial R	erouting se	rvic	e. User B h	as	a point-to-p	oir	nt Configura	ation.		
Selection criteria:					al supported							
		Jser B has activated the Partial Rerouting service										
Test purpose:		o verify that a call is released correctly if CFU performed by the UE was not successful.										
	User A c	ser A calls user B, the call is forwarded to user C who is user determined user busy.										
SIP Parameter values:	Dial strin	al string parameters options=PIXIT										
			ported head	der:								
	Case a)											
			orted: 100									
	Case c)	Supp	orted: 100	rel	and precon	dıtı	on					
	1. /	DIV/-	- \									
	a = line (,									
	b = line (
Comments:	m = line	(PIXI	1)									
UE B UE C	MG	CE	LCCCE				D CCCE		UE-A	T		
ОЕВ ОЕС	ING	<u>CF</u>	I-CSCF	1	S-CSCF		P-CSCF		INVITE		1	
						+	INVITE	È	III VIII E			
	SETUP •	£ ←	INVITE	+	INVITE		_					
		> →	181	→	181	→	181	→	181			
SETUP ← RLC#17 →	REL •	-		1		1		t				
		→ →	486	→	486	+-	486	-	486	_	+	

ETSI EN 300 2	07-1 [i.5],		NGN referer ETSI TS 124 (
·	•	vices/CFU									
The user A and the u	ser C are in ne	work N1. The									
User B has activated the Partial Rerouting service											
o verify that a call is released correctly if CFU performed by the UE was not successful. User A calls user B, the call is forwarded to user C who is network determined user											
busy.	usy.										
•											
Case a) no 100 rel Case b) Supported: 1	100 rel	ondition									
MGCF I-CSCF	S-CSCF	P-CSCF	UE-A	UE-C							
			INVIIE								
	→ 181 -	181	181								
+											
	ETSI EN 300 2 clauses 6.1, 9. SIP-ISDN-ISDN/Sup The user A and the u provided with Partial Call forwarding unco User B has activated To verify that a call is successful. User A calls user B, 1 busy. Dial string parameter PIXIT for supported h Case a) no 100 rel Case b) Supported: 1 Case c) Supported: 1 a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) MGCF I-CSCF	The user A and the user C are in net provided with Partial Rerouting servi Call forwarding unconditional suppor User B has activated the Partial Rero To verify that a call is released corre successful. User A calls user B, the call is forward busy. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and preconditional processes and preconditional processes are incompleted. The processes are incompleted in the processes are incompleted. The processes are incompleted in the processes are incompleted. The processes are incompleted in the processes are incompleted in the processes are incompleted. The processes are incompleted in t	ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5 SIP-ISDN-ISDN/Supplementary_services/CFU The user A and the user C are in network N1. The provided with Partial Rerouting service. User B has Call forwarding unconditional supported User B has activated the Partial Rerouting service To verify that a call is released correctly if CFU per successful. User A calls user B, the call is forwarded to user C busy. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) MGCF I-CSCF S-CSCF P-CSCF MGCF I-CSCF S-CSCF P-CSCF MGCF I-CSCF S-CSCF P-CSCF MGCF I-SCF S-CSCF	ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5 SIP-ISDN-ISDN/Supplementary_services/CFU The user A and the user C are in network N1. The user B is in net provided with Partial Rerouting service. User B has a point-to-point Call forwarding unconditional supported User B has activated the Partial Rerouting service To verify that a call is released correctly if CFU performed by the successful. User A calls user B, the call is forwarded to user C who is networe busy. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) MGCF I-CSCF S-CSCF P-CSCF UE-A MGCF I-CSCF S-CSCF P-CSCF UE-A MGCF I-CSCF S-CSCF P-CSCF UE-A MGCF I-CSCF S-CSCF P-CSCF UE-A MGCF I-CSCF S-CSCF P-CSCF UE-A MGCF I-CSCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF S-CSCF P-CSCF INVITE MGCF I-SCF INVITE							

SIIS_XXSSCFU 15	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP-ISDN/Supplementary_services/CFU	
Configuration:	The user A and the user C are in network N1. The user A and the user C are in network N1.	user B is in network N2 and is provided
	with CFU. User D in network N2 forwards the call to	back to user B.
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
Test purpose:	Ensure that when user A calls user B, the call is for	
	User D forwards the call to back to user B. Ensure t	hat the call is released.
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
ISDN Parameter	BC = PIXIT	
values:		
Comments:		

SIIS_XXSSCFU 16	ISDN reference to: ETSI EN 300 207-1 [i.5],
	clauses 6.1, 9.2.2, 9.2.5
TSS reference:	SIP-ISDN-ISDN-SIP/Supplementary_services/CFU
Selection criteria:	The user is A in network N1. The user B and the user C are in network N2. User B is provided with CFU. User D in network N1 forwards the call to back to user B. Network option: hop counter supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C, C to D. User D forwards the call to back to user B. User D forwards the call to back to user B. Ensure that the call is released.
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
ISDN Parameter values:	BC = PIXIT
Comments:	

6.3.2.6 CFB

6.3.2.6.1 CFB - SIS

SIS_X	(XSS	CFB01				ISDN refe						_		rence to:	_
						TSI EN 300						ETSI T	5 12	24 604 [45]
					cl	auses 6.1,	9.2	2.2, 9.2.5							
TSS refe			,	SIP-ISDI	N-S	IP/Supplem	nen	tary_servic	es/	CFB					
Configur	ratior	n:													is provided
			١	vith CFB	8- (r	etwork det	erm	nined). Use	r B	has a point	-to-	multipoint	Co	nfiguration	l.
Selection	n crit	eria:	0	Call forw	ard	ing by the r	netv	vork							
						ork determin									
Test pur	pose	:	E	Ensure th	nat	when user	A c	alls user B	, th	e call is forv	var	ded to use	r C.		
			Į.	Ensure th	nat	in the active	ес	all state (N ²	10)	the voice tr	ans	fer on the	me	dia and B-	channels is
			r	erforme	d c	orrectly (e.g	g. te	esting QoS	рá	rameters).					
ISDN Pa	arame	eter	E	3C = PIX	ΊT	•									
values:															
SIP Para	amet	er value	es: I	Dial strin	g p	arameters of	opti	ons=PIXIT							
					-		-								
			F	PIXIT for	su	pported hea	ade	r:							
				Case a) i											
						ported: 100) re	ıl.							
								and preco	nd	ition					
			(Jase c _j (Jup	ported. Tot	, 10	and prece	<i>n</i> Iu	ition					
				. 1:	עום	'I T \									
				a = line (
				= line (
			r	n = line	(PI)	KIT)									
Comme										1		1		1	
ISDN	1	ISDN	12	MGC	F	I-CSCF		S-CSCF		P-CSCF		UE-A		U	E-C
					ļ				Ļ	INVITE	+	INVITE			
-					 		+	INVITE	_	INVITE	+		-		
					+	INVITE	1	IIVVIIL	T						
					→	181	→	181	→	181	→	181			
					→	INVITE	→	INVITE	→	INVITE			→	INVITE	
													+	100 Trying	
L					←	180	+	180		180		180	+	180	
					→	180	→	180		180	→	180	,	222 214	
				1	+	200 OK	←	200 OK ACK		200 OK	-	 	←	200 OK ACK	
 				1	→	ACK 200 OK	→	200 OK	<u> </u>	ACK 200 OK	→	200 OK	7	ACK	
\vdash				1	7	ACK	7	ACK		ACK		ACK	1	1	
 		i		+	+	BYE	+	BYE		BYE	+	7.01	+	BYE	
					→	200 OK BYE	÷	200 OK BYE		200 OK BYE	+	†	→	200 OK BYE	
		i			→	BYE	→	BYE		BYE	→	BYE	Ť		
					+	200 OK BYE	+	200 OK BYE		200 OK BYE		200 OK BYE			
				•			•	-	•	•		•	•	•	

	(SSCFB			cl	ISDN refe TSI EN 300 auses 6.1,	20 9.2	7-1 [i.5], 2.2, 9.2.5						rence to: 24 604 [45]
TSS refe			SIP-ISDN	1-S	IP/Supplem	en	tary_service	es/	CFB					
Configura	ition:								k N1. The u					
			with CFB	-(n	etwork dete	rm	ined). User	В	has a point-	to-r	multipoint (Cor	nfiguration.	
Selection	criteria:				ing by the n		vork determined	4)						
Test purp	ose.								e call is forw	ard	ded to use	r C		
														channels is
							esting QoS			unc	101 011 1110		ala alla B	oriarii lolo lo
ICDN Do	omotor		BC = PIX		orrectly (e.g	<i>j</i> . ι	esting QUS	μa	iameters).					
ISDN Par	ameter		DC = PIX	A I										
values:							50/-							
SIP Para	meter va	lues:	Dial string	g pa	arameters o	ptı	ons=PIXII							
			DIVIT (
					pported hea	ade	er:							
			Case a) r											
					ported: 100									
			Case c) S	Sup	ported: 100) re	l and preco	nd	ition					
			a = line (PIX	IT)									
			b = line (line)											
			m = line (,									
Commen			III – IIIIC ((1 1/	XII)									
		2010	1 1400	_	1.0005		0.000		D 000F				1	IF 0
ISDN 1	151	DN 2	MGC	<u> </u>	I-CSCF		S-CSCF		P-CSCF		UE-A	1	U	E-C
+								4	INVITE	~	INVITE	-	+	
						+	INVITE	È						
		+	SETUP	+	INVITE									
		→	RLC # 17	L_	101	Ļ	101	Ļ	404	Ļ	101			
-		_		→	181 INVITE	→	181 INVITE		181 INVITE	7	181	→	INVITE	
+			-	7	IINVIIE	7	IINVIIE	7	INVIIE	1		-	100 Trying	
				+	180	+	180	+	180	+	180	÷	180	
				→	180	→	180		180	→	180			
				+	200 OK	+	200 OK		200 OK	1		+	200 OK	
 		_		→	ACK 200 OK	→	ACK 200 OK		ACK 200 OK	_	200 OK	→	ACK	
 				7 ←	ACK	7	ACK		ACK		ACK	1	+	
—				÷	BYE	÷	BYE		BYE	Ť	7.010	+	BYE	
				→	200 OK BYE	→	200 OK BYE		200 OK BYE			→	200 OK BYE	
	·			→	BYE	→	BYE		BYE		BYE			
				+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE			

SIS_XXSSCFB03			ISDN reference to:							NGN reference to: ETSI TS 124 604 [45]							
	ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5								E15113	5 12	24 604 [45]						
TSS refer	SIP-ISDN-SIP/Supplementary_services/CFB																
Configuration:			The user A and the user C are in network N1. The user B is provided with CFU														
			"calling user is notified of call diversion with diverted to number" = Yes, "diverting														
			number is released to the diverted-to user" = Yes, "served user receives notification that														
			the call has been forwarded" = Yes). User B has a point-to-multipoint Configuration.														
Selection criteria:			Call forwarding by the network														
			Call forwarding busy (user determined)														
			CF Notifications supported														
Test purpose:			Ensure that when user A calls user B, the call is forwarded to user C, user A is notified														
			of call diversion and informed of the diverted-to number (user C has presentation														
			allowed - no COLR) and user C is informed of the forwarding number (user B has														
			presentation allowed). User B is notified of call diversion.														
			Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (a.g. testing OoS permeters)														
SIP Parar	IES.	is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT															
On Talai	on rarameter values.			שומו אווויש אמומוויפנפוס טאנוטווס=רואוו													
			PIXIT for supported header:														
			Case a) no 100 rel														
			Case b) Supported: 100 rel														
			Case c) Supported: 100 rel and precondition														
			a = line (PIXIT)														
			b = line (PIXIT)														
			m = line (PIXIT)														
Comment					MOOF LOOSE SOOF 5							P-CSCF UE-A UE-C					
ISDN 1	ISDN 2		MGC	_	F I-CSCF		S-CSCF		P-CSCF		UE-A		UI	<u> </u>			
								+	INVITE		INVIIL						
		+	SETUP	+	INVITE	+	INVITE	-									
		→	RLC #17	_	INVITE					+							
				→	181	→	181	→	181 INVITE	→	181	→	INDUTE				
				→	INVITE	→	INVITE	7	INVITE			7	INVITE 100 Trying				
				+	180	+	180		180		180	+	180				
			-	→	180 200 OK	<u>→</u>	180 200 OK	→	180 200 OK	→	180	+	200 OK				
				→	ACK	→	ACK	→	ACK	Ļ	200 0:1	→	ACK				
			 	→	200 OK ACK	→	200 OK ACK	→	200 OK ACK		200 OK ACK						
				+	BYE	+	BYE	+	BYE			+	BYE				
			-	→	200 OK BYE BYE	→	200 OK BYE BYE	→	200 OK BYE BYE	→	BYE	→	200 OK BYE				
	<u> </u>			′	200 OK BYE	÷	200 OK BYE		200 OK BYE		200 OK BYE						

SIS_XXS	SCFB0	4			ISDN refer								erence to:	
					SI EN 300						ETSI T	S 1	24 604 [45]
				cla	auses 6.1,	9.2	.2, 9.2.5							
TSS refere	ence:	9	SIP-ISDN	I-SI	P/Supplem	ent	ary_service	es/(CFB					
Configurat	ion:								N1. The us	ser	B is provi	dec	with CFU	
														g number is
									served user					
									nt-to-multipe					
Selection of	criteria:				ng by the n						· · · · · · · · · · · · · · · · · ·			
00.000.01.		Ò	Call forwa	ırdi	ng busy (us	er (determined)						
					ons support			,						
Test purpo	se:						alls user B.	the	call is forw	ard	led to use	r C	user A is i	notified of
Toot parpe														allowed - no
														on allowed).
					notified of			011	raraing man	100	(4001 B	ilao	procentati	on anoway.
								O) :	the voice tra	ansi	fer on the	me	edia and B-	channels is
					rrectly (e.g						101 011 1110		Jaia ana B	0110111101010
SIP Param	neter				rameters o			ou.	<u> </u>					
values:	.0.01	-	Jiai oti ii g	, ,		P								
values.		PIXIT for supported header:												
Case a) no 100 rel														
		Case b) Supported: 100 rel												
					orted: 100			ndi	tion					
			Juo 0, C	, apı)	101	and procon	iui						
		2	a = line (F	PΙΧΙ	T)									
			= line (F											
			n = line (i											
Comments	· ·	ť	11 – 11110 (1 1/1	,									
ISDN 1	ISDN	12	MGC	F	I-CSCF		S-CSCF	=	P-CSCF	:	UE-A		11	E-C
100111	100.	12	10100		1 0001	1	0 0001	1	1 0001		INVITE		<u> </u>	
								+	INVITE					
 		(SETUP	+	INVITE	+	INVITE			1				
		`	RLC #17	Ì	INVITE					1				
				→	181	→	181		181	→	181		IN 0.775	
-				→	INVITE	→	INVITE	7	INVITE	+		→	INVITE 100 Trying	
				+	180	+	180		180		180	÷	180	
				→	180 200 OK	→	180	→	180	→	180	+	200 OK	
	+ +			→	ACK	→	200 OK ACK	→	200 OK ACK	-		→	200 OK ACK	
				→	200 OK	→	200 OK	1	200 OK	→	200 OK			
				+	ACK BYE	+	ACK BYE		ACK BYE	+	ACK	+	BYE	
	1			→	200 OK BYE	→	200 OK BYE		200 OK BYE	+		→	200 OK BYE	
				→	BYE	→	BYE	→	BYE		BYE			
				+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE		1	

SIS_	XXS	SSCFB	5		С	ISDN refe TSI EN 300 lauses 6.1	0 20 , 9.:	07-1 [i.5], 2.2, 9.2.5				_		rence to: 24 604 [45]
TSS re						SIP/Suppler									
Config	urati	on:		with CFE "diverting	3 "c g ni on '	alling user umber is re that the cal	is n lea:	otified of cased to the o	all o dive	diversion w erted-to use	vith c er" =	liverted to No, serve	nun d u	nber" = Ye ser receive	es
Selecti				Call forwarding by the network Call forwarding busy (user determined) CF Notifications supported Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of											
Test pu	urpo	se:		call diver allowed presenta Ensure t	rsio - Co tio hat	when user on and not in OLR) and un n not allowed in the actived d correctly	nfoi iser ed). ve c	med of the C is not in User B is rall state (N	div fori not 10)	verted-to n med of the notified of the voice	umb forw call tran	er (user C varding nu diversion.	has mbe	s presenta er (user B	tion not has
SIP Pa	aram	eter		Dial strin	g p	arameters	opt	ions=PIXIT							
values	:						-								
				Case a) Case b)	no Su Su PI)	pported: 10 pported: 10 KIT) KIT)	0 re	el	onc	lition					
Comm	ents	:													
ISDN	1	ISDN	2	MGC	F	I-CSCF		S-CSCI	F	P-CSC		UE-A		l	IE-C
								1	_	INVITE	+	INVITE	-	1	
							+	INVITE	_	INVITE					
			+	SETUP	+	INVITE									
			→	RLC #17	Ļ	101	Ļ	101	Ļ	101		101			
					→	181 INVITE	→	181 INVITE		181 INVITE	→	181	→	INVITE	
				+	ŕ		ŕ		Ť		+		+	100 Trying	
					+	180	+	180		180		180	+	180	
	[→	180	→	180		180	→	180	_	000 011	
 				+	↓ →	200 OK ACK	+	200 OK ACK		200 OK ACK	+		+	200 OK ACK	
				+	→	200 OK	→	200 OK		200 OK	→	200 OK	ť	TON	
					+	ACK	+	ACK	+	ACK		ACK			
					÷	BYE	+	BYE		BYE			+	BYE	
				1	^ +	200 OK BYE BYE	→	200 OK BYE BYE		200 OK BYE BYE		BYE	→	200 OK BYE	
				+	7 ←	200 OK BYE	7	200 OK BYE		200 OK BYE		200 OK BYE	+	1	
l l				_1	-			1=== 0				1=== 0.1.212	1	1	

		SSCFI	B06			ETSI EN clauses (300 3.1,	rence to: 207-1 [i.5 9.2.2, 9.2.	.5			_		ference to 124 604 [4	
TSS r	efere	nce:				I-SIP/Supp									
Config	guratio	on:		provid	ed	with CFB									rk N2 and is
				to nun	nbe ece	r" = No, "di	ver atio	ting number n that the	er is	ing user is released to has been f	o th	e diverted	d-to	user" = No	, served
Selec	tion c	riteria:		Call fo	rwa	arding by the arding busy cations sup	ne n / (u:	etwork ser determ	nine	d)					
Test p	ourpos	se:		Ensur of call allowe presed Ensur	e th div ed - ntat e th	nat when us rersion and no TIR) ar ion not allo nat in the ac	not not id u we ctive	A calls use informed ser C is no d). User B e call state	of the of	the call is ne diverted formed of the ot notified of 10) the voices, testing Q	to r he f of ca e tr	number (u orwarding all diversi ansfer on	ser nu on. the	C has pre imber (usei	r B has
SIP P	arame	eter va	alues	PIXIT	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel										
				Case	b) S c) S	Supported: Supported:			reco	ondition					
				b = lin	e (l										
Comn															
ISD	N 1	ISD	N 2	MGC	<u> </u>	I-CSCF		S-CSC	<u> </u>	P-CSCF		UE-A		U	E-C
							1		-	INVITE	-	INVITE			
							+	INVITE	Ŧ		+		+	1	
			+	SETUP	+	INVITE									
			→	RLC #17											
					→	INVITE	→	INVITE		INVITE			→	INVITE	
				 	7	IINVIIE	7	IINVIIE	7	IINVIIE	+		7	100 Trying	
				†	+	180	+	180	+	180	+	180	÷	180	
					→	180	→	180		180	→	180			
					+	200 OK	+	200 OK		200 OK			+	200 OK	
					→	ACK	→	ACK		ACK	1		→	ACK	
					→	200 OK	→	200 OK		200 OK		200 OK	1		
					↓	ACK BYE	+	ACK BYE		ACK BYE	+	ACK	+	BYE	
						200 OK BYE	→	200 OK BYE		200 OK BYE	+		→	200 OK BYE	
					∕	BYE	,	BYE		BYE	→	BYE	Ť	200 OR BIL	
	1			İ	+	200 OK BYE	+	200 OK BYE		200 OK BYE		200 OK BYE		1	1

SIS_XX	SSCFB07		Εī	ISDN refer ISI EN 300 auses 6.1,	20	7-1 [i.5],				_		erence to: 124 604 [4	
TSS refe				IP/Supplem									
Configura	ition:							k N1. The ι					
													ng number is
													he call has
		been for	war	ded" = Yes). U	ser B has a	а р	oint-to-multi	poi	nt Config	urat	ion.	
Selection	criteria:	Call forw	ard	ing by the r	etv	vork							
				ing busy (n			ine	d)					
		CF Notifi	cati	ons suppor	ted								
Test purp	ose:	Ensure t	hat	when user	Ас	alls user B	, th	e call is for	vard	ded to us	er C	C, user A is	notified of
		call diver	sio	n and inforr	nec	of the dive	erte	d-to numbe	er (u	iser C ha	s pr	esentation	allowed - no
		TIR) and	use	er C is infor	me	d of the for	wa	rding numb	er (user B ha	as p	resentation	allowed).
		User B is	s no	tified of cal	ldi	ersion.							
		Ensure t	hat	in the active	е са	all state (N	10)	the voice tr	ans	fer on the	e m	edia and B	-channels is
		performe	ed c	orrectly (e.g	g. te	esting QoS	pa	rameters).					
SIP Para	meter			arameters of				•					
values:			•										
		PIXIT for	· su	pported hea	ade	r:							
		Case a)	no ²	100 rel									
		Case b)	Sup	ported: 100	re (I							
		Case c)	Sup	ported: 100) re	l and preco	ond	ition					
		,	·	•		·							
		a = line (PIX	IT)									
		b = line (PIX	IT)									
		m = line	(PI)	(IŤ)									
Commen	ts:			•									
ISDN 1	ISDN 2	MGC	F	I-CSCF		S-CSCI	F	P-CSCI	=	UE-A	1	l	JE-C
									+	INVITE			
					4	INVITE	+	INVITE					
			+	INVITE	Ì	INVITE							
			→	181	→	181		181	→	181		IND CITE	
			→	INVITE	7	INVITE	7	INVITE			→	INVITE 100 Trying	
			+	180	+	180		180		180	+	180	
			+	180 200 OK	→	180 200 OK		180 200 OK	→	180	+	200 OK	
			→	ACK	→	ACK	→	ACK	+		→	ACK	
			→	200 OK	→	200 OK	→	200 OK		200 OK			
			+	ACK BYE	+	ACK BYE		ACK BYE	+	ACK	+	BYE	
			→	200 OK BYE	→	200 OK BYE		200 OK BYE	+		→	200 OK BYE	
			→	BYE	→	BYE	→	BYE		BYE			
			+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE		<u> </u>	

TSS refe					TSI EN 300						ETSI T	S 12	24 604 [45]	l
	ronco.		SID-ISL		auses 6.1, SIP/Supple			ico	/CER					
Cornigui									ork N1. The	LIC	or B ic pro	wid	lod with CE	11
	alion.													ting number
			io rologi	ust	to the dive	u UI	d to upor" -	- V	es, "served	tu t	o number	= 0 D	res, uivei	ant the coll
														iai ine caii
0 1 (nas	s a point-to-	mu	itipoint Co	onii	guration.	
Selection	i criteria:				ding by the				1)					
					ding busy (mır	nea)					
					tions supp			_						
Test purp	pose:		Ensure	tha	t when use	r A	calls user	B, 1	the call is fo	rwa	arded to u	ser	C, user A	is notified of
									ted-to numb					
									orwarding n	um	ber (user	Βh	nas present	ation
					Jser B is no									
											nsfer on t	he i	media and	B-channels
									S parameter	s).				
SIP Para	meter va	lues:	Dial stri	ng	parameters	op	tions=PIXI	Т						
			PIXIT fo	or s	upported h	eac	ler·							
					100 rel	00.0								
					ipported: 1	00	rel							
					ipported: 10			con	dition					
			00000		ipportod. T	00 1	or and pro-	501	idition					
			a = line	(PI	XIT)									
			b = line											
			m = line											
Commer	nte:		111 – 11110	<i>,</i> (1	17(11)									
ISDN 1	ISDN	1.2	MGC	_	I-CSCF		S-CSCF		P-CSCF	:	UE-A		1	IE-C
IODIVI	IODI	I Z	IVIOO		1-0001	1	0-0001	T T	1 -0001		INVITE		<u> </u>	,L-0
								+	INVITE					
-				+	INVITE	+	INVITE	-						
				→	181	→	181	→	181	→	181			
				→	INVITE	→	INVITE		INVITE			→	INVITE	
				+	180	+	180	_	180	+	180	+	100 Trying 180	
				<u>₹</u>	180	→	180	→	180	→ →	180	_	100	
				(200 OK	+	200 OK		200 OK			←	200 OK	
				→	ACK 200 OK	→	ACK 200 OK		ACK 200 OK	→	200 OK	→	ACK	
				+	ACK	+	ACK		ACK		ACK			
				+	BYE	+	BYE	+	BYE			+	BYE	
				→	200 OK BYE BYE	→	200 OK BYE BYE		200 OK BYE BYE	→	BYE	→	200 OK BYE	
				7 ←	200 OK BYE	7	200 OK BYE		200 OK BYE		200 OK BYE	1	1	

ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5 TSS reference: SIP-ISDN-SIP/Supplementary_services/CFB Configuration: The user A and the user C are in network N1. The user B is in network N2 and is							
TSS reference: SIP-ISDN-SIP/Supplementary_services/CFB Configuration: The user A and the user C are in network N1. The user B is in network N2 and is							
TSS reference: SIP-ISDN-SIP/Supplementary_services/CFB Configuration: The user A and the user C are in network N1. The user B is in network N2 and is							
Configuration: The user A and the user C are in network N1. The user B is in network N2 and is							
provided with CFB "calling user is notified of call diversion with diverted to number"	=						
Yes, "diverting number is released to the diverted-to user" = No). User B has a poir							
multipoint Configuration.							
Selection criteria: Call forwarding by the network							
Call forwarding busy (network determined)							
CF Notifications supported							
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified.	ed						
of call diversion and not informed of the diverted-to number (user C has presentation							
allowed - TIR) and user C is not informed of the forwarding number (user B has							
presentation not allowed). User B is not notified of call diversion.							
Ensure that in the active call state (N10) the voice transfer on the media and B-cha	nels						
is performed correctly (e.g. testing QoS parameters).							
SIP Parameter values: Dial string parameters options=PIXIT							
PIXIT for supported header:							
Case a) no 100 rel							
Case b) Supported: 100 rel							
Case c) Supported: 100 rel and precondition							
a = line (PIXIT)							
b = line (PIXIT)							
m = line (PIXIT)							
Comments:							
ISDN 1 ISDN 2 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C							
← INVITE							
(INVITE							
→ INVITE → INVITE → INVITE → INVITE							
€ 100 Trying							
★ 180 ★ 180 ★ 180 ★ 180 ★ 180 ★ 180 ★ 180 ★ 180							
← 200 OK ← 200 OK ← 200 OK ← 200 OK							
← BYE ← BYE ← BYE ← BYE							
→ 200 OK BYE → 200 OK BYE → 200 OK BYE → BYE → BYE → BYE							

TSS reference: SIP-ISDN-SIP/Supplementary_services/CFB Configuration: The user A and the user C and D are in network N1. The user B is in network N2 is provided with CFB The user B is provided with CFB "calling user is notified of call diversion with divition number" = No, "diverting number is released to the diverted-to user" = No, "se user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is not call diversion and not informed of the diverted-to number (user C has present allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT)	verted erved notified tation nas
Configuration: The user A and the user C and D are in network N1. The user B is in network N2 is provided with CFB The user B is provided with CFB "calling user is notified of call diversion with divention number" = No, "diverting number is released to the diverted-to user" = No, "see user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Ensure that when user A calls user B, the call is forwarded to user C, user A is not feall diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	verted erved notified tation nas
is provided with CFB The user B is provided with CFB "calling user is notified of call diversion with diversion number" = No, "diverting number is released to the diverted-to user" = No, "see user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is not call diversion and not informed of the diverted-to number (user C has present allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	notified tation
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user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is no for call diversion and not informed of the diverted-to number (user C has present allowed - no TIR) and user C is not informed of the forwarding number (user B has a present allowed - no TIR) and user C is not informed of the forwarding number (user B has a point diversion and not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	notified tation nas
point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is n of call diversion and not informed of the diverted-to number (user C has presente allowed - no TIR) and user C is not informed of the forwarding number (user B his presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	notified tation nas
Selection criteria: Call forwarding by the network Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is n of call diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	tation nas
Call forwarding busy (network determined) CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is not call diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	tation nas
CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is not of call diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	tation nas
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is not call diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	tation nas
of call diversion and not informed of the diverted-to number (user C has presented allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	tation nas
allowed - no TIR) and user C is not informed of the forwarding number (user B hapresentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	nas
presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
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SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
a = line (PIXIT) b = line (PIXIT)	
b = line (PIXIT)	
b = line (PIXIT)	
m = line (PIXIT)	
Comments:	
ISDN 1 ISDN 2 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C)
← INVITE	
← INVITE	
← INVITE	
→ INVITE → INVITE → INVITE → INVITE	
← 100 Trying	-
← 180 ← 180 ← 180 ← 180 ← 180 → 180 → 180 → 180 → 180	
€ 200 OK € 200 OK € 200 OK € 200 OK	
→ ACK → ACK → ACK → ACK → ACK	
→ 200 OK → 200 OK → 200 OK → 200 OK ← ACK ← ACK ← ACK	
► BYE ← BYE ← BYE ← BYE	
→ 200 OK BYE → 200 OK BYE → 200 OK BYE → 200 OK BYE → BYE → BYE → BYE → BYE	

SIS_XXS	SCFI	3 11		С	ISDN refe TSI EN 300 lauses 6.1,	9.	07-1 [i.5], 2.2, 9.2.5				_		rence to: 24 604 [45]		
TSS referen	ce:				-SIP/Supple										
Configuratio	n:								ork N1. The . User B ha		-				
Selection cri	iteria:				s activated rding busy				ting service UE)					
Test purpose	e:		Ensure active of correct Ensure	Ensure that when user A calls user B, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Ensure that in the active call state (N10) the voice transfer on the media and B-channel is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT											
SIP Parame	ter va	lues:	PIXIT for Case a	or s) n) S) S : (P	supported ho 100 relupported: 1 upported: 1 upported: 1 ulxiti)	ea 00	der: rel		ndition						
Comments:	1				1		,		1		1		1		
ISDN 2	IS	DN 1	MGC	<u>F_</u>	I-CSCF	:	S-CSCI	=	P-CSCF		UE-A	١	L U	E-C	
								1		+	INVITE				
\vdash	ļ				1	Ļ		+	INVITE		ļ				
	 	OFTUE	1	Ļ	IN II II II	+	INVITE	_		_			1		
	+	SETUP	+	4	INVITE	→	101	_	101		404	+	1		
\vdash	+	FAC	→	→	181	→	181 INVITE		181 INVITE	→	181	→	INVITE		
\vdash	+	REL	→	7	INVITE	17	IINVIIE	7	IINVITE	+-	 	7	100 Trying		
	RLC				180	+	180	4	180	+	180	+	180 Trying		
			1	←	180	→	180	→		→	180	_	100		
					200 OK	+	200 OK	+		+	100	+	200 OK		
								-		1	1				
			-	←		→		→				→			
				→	ACK	→	ACK		ACK	→	200 OK	→	ACK		
				→	ACK 200 OK	→	ACK 200 OK	→	ACK 200 OK		200 OK	→			
				→ →	ACK 200 OK ACK	→	ACK 200 OK ACK	→	ACK 200 OK ACK		200 OK ACK		ACK		
				→	ACK 200 OK	→	ACK 200 OK	→	ACK 200 OK			÷			
				→ → ←	ACK 200 OK ACK BYE	→	ACK 200 OK ACK BYE	→ + +	ACK 200 OK ACK BYE	+			ACK BYE		

SIS_XXSSCFB 12		ISDN refe ETSI EN 30						_		rence to: 24 604 [45			
		clauses 6.1							3 12	24 604 [43	' [']		
TSS reference:	CID ICDN	N-SIP/Supple			ioo	o/CEP							
	The week	A and the u	31116	Cara in ma	toe	S/CFD		an Diain n	4	مح ۱۸۱۸ ماسم	al :a		
Configuration:													
		with Partial											
		to number" =					ea	sea to tne	aiv	ertea-to us	ser" = Yes.		
		as a point-to											
Selection criteria:		as activated	the	Partial Rer	ou	ting service							
	Call forwarding busy Ensure that when user A calls user B, the call is forwarded to user C, user A is notified o												
Test purpose:													
	call diversion and informed of the diverted-to number (user C has presentation allowed -												
	no TIR) and user C is informed of the forwarding number (user B has presentation												
	allowed).												
	Ensure tl	nat in the act	ive	call state (1	N1 (0) the voice	tra	nsfer on th	ne n	nedia and	B-channels		
	is perforr	ned correctly	(e	.g. testing C	၃၀	Sparameter	s).						
SIP Parameter values:	Dial strin	g parameters	s or	otions=PIXI	Т								
			·										
	PIXIT for	supported h	ead	der:									
		no 100 rel											
		Supported: 1	00	rel									
		Supported: 1			cor	ndition							
	,												
	a = line (PIXIT)											
	b = line (PIXIT)												
	m = line (PIXIT)												
Comments:	m = line (PIXII)												
ISDN 2 ISDN 1	MGCF I-CSCF S-CSCF P-CSCF UE-A									E-C			
IODITZ IODITI	Wicoi	1 0001	T	0 0001	1	1 0001		INVITE	1				
					+	INVITE							
SETUP	+ +	· INVITE	+	INVITE			╂_		_				
FAC	→ → →		→	181	→	181	→	181					
REL	← →		→	INVITE		INVITE			→	INVITE			
RLC	→	180	+	180	_	180	+	180	+	100 Trying 180			
	3		→	180		180	→	180		160			
	+	200 OK	+	200 OK	+	200 OK			+	200 OK			
	1		→	ACK 200 OK		ACK 200 OK	_	200 OK	→	ACK			
			7	ACK		ACK	7	ACK					
	•	BYE	+	BYE	+	BYE			+	BYE			
	9		→	200 OK BYE BYE		200 OK BYE BYE	→	BYE	→	200 OK BYE			
			+	200 OK BYE		200 OK BYE		200 OK BYE					
							1			1			

SIS_XXSSCFB 13	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP/Supplementary_services/CI	FB
Configuration:	The user A and the user C are in network	N1. The user B is in network N2 and is provided
	with Partial Rerouting service "calling user	
	number" = Yes, "diverting number is released	sed to the diverted-to user" = No. User B has a
	point-to-point Configuration.	
Selection criteria:	User B has activated the Partial Rerouting	service
	Call forwarding busy performed by the UE	
Test purpose:		call is forwarded to user C, user A is notified of
		ted-to number (user C has presentation not
	allowed - COLR) and user C is not informed	d of the forwarding number (user B has
	presentation not allowed).	
		e voice transfer on the media and B-channels is
	performed correctly (e.g. testing QoS para	meters).
SIP Parameter	Dial string parameters options=PIXIT	
values:	DIVIT (
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	on
	a line (DIVIT)	
	a = line (PIXIT)	
	b = line (PIXIT)	

			m = line	(PI)	(IT)									
Comm	ents:			•	•									
ISDN	٧2	ISDN 1	MGCI	F	I-CSCF		S-CSC	F	P-CSCF		UE-A		U	E-C
										+	INVITE			
								+	INVITE					
						+	INVITE							
		SETUP	+	+	INVITE									
		FAC	→	→	181	→	181	→	181	→	181			
		REL	+	→	INVITE	→	INVITE	→	INVITE			+	INVITE	
		RLC	→									+	100 Trying	
				+	180	+	180	+	180	+	180	+	180	
				→	180	→	180	→	180	→	180			
				+	200 OK	+	200 OK	+	200 OK			+	200 OK	
				→	ACK	→	ACK	→	ACK			→	ACK	
				→	200 OK	→	200 OK	→	200 OK	→	200 OK			
				+	ACK	+	ACK	+	ACK	+	ACK			
				+	BYE	+	BYE	+	BYE			+	BYE	
				→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			→	200 OK BYE	
				→	BYE	→	BYE	→	BYE	→	BYE			
				+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE			

		SSCF	B 14			ISDN re ETSI EN 3 clauses 6	00 .1, 9	207-1 [i.5] 9.2.2, 9.2.5	5				_		erence to: 24 604 [4	
		ence:				I-SIP/Supp										
Conf	figura	tion:				A and the					The	u	ser B is in	ne	twork N2 a	nd is
						with Partia										
				The u	ser	B is provid	ed	with Partia	ıl Re	erouting	serv	ice	e "calling ι	ıseı	is notified	of call
														ele	ased to the	e diverted-to
						o). User B							n.			
Sele	ction	criteria	:			as activated					rvice)				
				Call for	orwa	arding busy	pe pe	rformed by	y th	e UE						
						cations sup										
Test	purp	ose:														is notified
						ersion and										
						no TIR) ar			ot in	formed (of the	e f	orwarding	nu	mber (user	B has
						ion not allo										
				Ensu	e th	nat in the a	ctive	e call state	(N	10) the v	oice/	tra	ansfer on	the	media and	ł
				B-cha	nne	els is perfor	me	d correctly	(e.	g. testing	g Qo	S	paramete	rs).		
ISDN	N Par	ameter		BC =	PIX	IT										
value	es:															
SIP	Parar	neter v	alues:	Dial s	tring	g paramete	rs c	ptions=PI	XIT							
				Case Case Case a = lir b = lir	a) r b) S c) S ne (I	supported no 100 rel Supported: Supported: PIXIT) PIXIT) PIXIT)	100) rel	reco	ondition						
Com	ment	s:			,											
ISD	N 2	ISD	N 1	MG	CF	I-CSCF	:	S-CSC	F	P-CS	SCF		UE-A		U	E-C
												+	INVITE			
					1		+	INVITE	+	INVITE				 		
			SETUP	(+	INVITE										
			FAC REL	→	→	INVITE	→	INVITE		INVITE				→	INVITE	
			RLC	→	7	IINVIIE	7	IINVIIE	7	IINVIIE				7 ←	100 Trying	
					+	180	+	180		180			180	+	180	
					→	180	→	180 200 OK		180 200 OK		→	180	+	200 OK	
					←	200 OK ACK	←	ACK		ACK				₹	ACK	
					→	200 OK	→	200 OK		200 OK				Ĺ		
						ACK	+	ACK	+	ACK		+	ACK			
					←	BYE 200 OK BYE	←	BYE 200 OK BYE		BYE 200 OK BY	_			←	BYE 200 OK BYE	
-					_	BYE		BYE		BYE		→	BYE	7	ZUU UN BIE	
			1	1		200 OK BYE		200 OK BYE		200 OK BY			200 OK BYE	t	1	

SIS_XXSSCFB 15	ETS	ΙE	l reference N 300 207- s 6.1, 9.2.2	1 [i.5],				GN refer SI TS 12					
TSS reference:	SIP-ISDN	I-SI	IP/Supplem	nen	tary_servi	ices	CFB							
Configuration:	The user Configura			k N	2 and is p	rovi	ded with C	FB.	User B h	as	a point-to-m	nultipoint		
Selection criteria:	CFB supp	oort	ing by the r ted er determin			,								
Test purpose:			t a call is re user B, the								.I . ermined use	er busy.		
SIP Parameter	Dial string	string parameters options=PIXIT												
values:	Case a) r Case b) S Case c) S a = line (F b = line (F	vial string parameters options=PIXIT VIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition = line (PIXIT) = line (PIXIT) n = line (PIXIT)												
Comments:	,		•											
ISDN 1 ISDN 2	MGCF	=	I-CSCF		S-CSC	F	P-CSCI	=	UE-A		UI	E-C		
								+	INVITE					
				_	INVITE	+	INVITE	-		1				
SETUP	+	+	INVITE	_	IIIVIIE			-						
RLC#17		→	181	→	181		181	→	181					
			INVITE	1	INVITE		INVITE				INVITE			
			486 ACK	↓	486 ACK		486 ACK		-		486 ACK	1		
			486	→	486	_	486	→	486	ŕ	AON			
			ACK	+	ACK		ACK		ACK					

SIS_XXS	SCFB 16			ΕT	ISDN refer SI EN 300 auses 6.1, 9	207	'-1 [i.5],				NGN re ETSI TS	ference 124 604					
TSS refere	nce:						y_services/										
Configurati	on:	The	user B	is ir	network N	12 a	and is provid	de	d with CFB.	Us	er B has a p	oint-to-m	nultipoint				
J			figuratio				•				•		•				
Selection c	riteria:	Call	forward	ina	by the net	wor	k										
			3 suppor	_	•												
					ork determii	ned	user busy										
Test purpos	Se.							if (CFB was not	l SI	iccessful						
rest purpo.	50.											terminer	d user busy.				
SIP Param	otor								doci o wiic	, 13	iletwork de	, tomme c	a doci bady.				
values:	etei	Dia	stillig p	tring parameters options=PIXIT													
values.		DIV	T for supported header:														
			IT for supported header: se a) no 100 rel														
					rted: 100 re												
		Cas	e c) Sup	po	rted: 100 re	el a	nd precond	itic	n								
		a =	line (PIX	(IT)													
		b =	line (PIX	(IT)													
		m =	line (PI)	XIT)												
Comments	:																
ISDN 1	ISDN	12	MGCI	F	I-CSCF		S-CSCF		P-CSCF		UE-A		UE-C				
											INVITE						
						_	IND ATE	+	INVITE								
	$\overline{}$		\vdash	+	INVITE	+	INVITE			1							
				1	181	→	181		181	→	181						
				→	INVITE	→	INVITE	→	INVITE								
	-		\vdash	<u>+</u> →	486 ACK		486 ACK		486 ACK	+-							
	$\overline{}$		\vdash	<u> </u>	486	7 →	486		486	→	486		+				
					ACK		ACK		ACK		ACK						

SIS_XXS	SCFB 17				SDN refere SI EN 300 2								erence to: 124 604 [45]
				cla	uses 6.1, 9	.2.2	2, 9.2.5							
TSS referen	ice:	SIP	-ISDN-S	SIP/	Supplemen	tar	y_services/	CF	В					
Configuration	n:	The	user B	is ir	n network N	12 a	and is provi	de	d with Partia	al R	erouting	ser	vice. User E	3 has
		acti	vated th	e P	artial Rerou	ıtin	g service. l	Jse	er B has a p	oint	t-to-point	Co	nfiguration.	
Selection cr	iteria:	CFE	3 suppo	rted	performed	by	the UE							
		use	r C is ne	etwo	ork determin	nec	l user busy							
		Use	r B has	act	ivated the F	ar	tial Reroutir	ng	service					
Test purpos	e:	То ч	erify the	at a	call is relea	ase	d correctly	if (CFU was no	t sı	ıccessful.			
		Use	r A calls	us	er B, the ca	all is	s forwarded	tc	user C who	o is	user det	ern	nined user b	ousy.
SIP Parame	eter	Dia	string p	ara	meters opti	ion	s=PIXIT							-
values:					-									
		PIX	IT for su	ippo	orted heade	er:								
		Cas	e a) no	100) rel									
					rted: 100 re	el								
					rted: 100 re		nd precond	itic	n					
			, ,				•							
		a =	line (PI)	(IT)	1									
			line (PI)											
			line (PI											
Comments:		1			/									
ISDN 1	ISDN	12	MGC	F	I-CSCF		S-CSCF	:	P-CSCF		UE-A		U	E-C
102:11:				·			0 000.				INVITE			Ī
								+	INVITE					
		SETU	+	+	INVITE	+	INVITE	-						
		P												
		FAC	→	→	181	→	181		181	→	181	Ę	IND //TE	
		REL	←	→	INVITE 486	→	INVITE 486	→	INVITE 486	+			INVITE 486	
		ILLO		<u>`</u>	ACK	<u>`</u>	ACK		ACK	T			ACK	
				→	486	→	486				486			
	1			+	ACK	+	ACK	+	ACK	+	ACK		1	

SIS_X	XSS	CFB 18	3			ISDN refe	0 2	07-1 [i.5],					reference S 124 60	
TSS refe	arenc	٠٠.		SIP-ISDN		lauses 6.1 IP/Supplem	•		- <u>D</u> C/	CER				
Configur											rtio	I Porquitino	convico	User B has
Cornigui	alioi	1.								Jser B has				
Selection	n orit	orio				ted perform			₽. (JSEI D Has	α μι	Jii it-to-poii i	it Cornigu	ialion.
Selection	II CIII	ena.				twork dete			101					
						activated th								
Toot pur	naaa									if CFU was	noi	cucoccefu	.1	
Test pur	pose	٠.												ned user busy.
CID Dore	- m o t	0 ") (0) (0							uec	i to user C	WIIC	is networ	K determi	neu usei busy.
SIP Pala	ameu	er value	8. L	Jiai Silin	y pa	arameters of	opu	ONS=PIAN						
				DIVIT for		operted be	مطم	r .						
				Case a) i		oported hea	aue	1.						
						ported: 100	n ro	ı						
						ported: 100			nd	ition				
				Jase C) (Sup	portea. Tot	Jie	i and preco	JIIU	шоп				
				a = line (DIV	IT\								
) = line (,								
				n = line (
Comme	ntc:			11 – 11116	(1 1/	XII)								
ISDN		ISDN	12	MGC		I-CSCF		S-CSC	_	P-CSCI		UE-A		UE-C
ISDIN	1	יוטטוי	1 _	IVIGO	Г	1-0301	1	3-030	<u> </u>	F-030		INVITE		UE-C
									+	INVITE				
			SETU	+	+	INVITE	+	INVITE			_			
			SEIU P	-	_	IINVITE								
			FAC	→	→	181	→	181		181	→	181		
	-		REL RLC	←	→	INVITE 486	→	INVITE 486		INVITE 486	-	-	+	
		1	INLO	+	→	ACK	→	ACK		ACK	-	 		
					→	486	→	486		486	→	486		
					+	ACK	+	ACK	+	ACK	+	ACK		

SISI_XXSSCFB 19	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP-ISDN/Supplementar	y_services/CFB
Configuration:	The user A and the user C are in newith CFB. User D forwards the call	etwork N1. The user B is in network N2 and is provided to back to user B.
Selection criteria:	Call forwarding by the network Call forwarding busy	
Test purpose:		B, the call is forwarded to user C and D. user B. Ensure that the call is released.
SIP Parameter values:	Dial string parameters options=PIX PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and pre a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
ISDN Parameter	BC = PIXIT	
values:		
Comments:		

6.3.2.6.2 CFB - SII

SII_XXSSCFB 01			reference		-				IGN refere		
			N 300 207-1					Εī	TSI TS 124	4 604 [45]	
			s 6.1, 9.2.2,								
TSS reference:	SIP-ISDN-	ISD	N/Supplem	en	tary_servic	es/	CFB				
Configuration:	The user A	an	d the user (Са	re in netwo	ork	N1. The use	er B	in networ	k N2 is provid	ded with
	CFB. User	Βŀ	nas a point-	to-ı	multipoint (Con	figuration.				
Selection criteria:	Call forwar	din	g by the net	twc	ork						
	Call forwar	din	g busy - ND	UE	3						
Test purpose:	Ensure tha	it w	hen user A	cal	lls user B, t	he	call is forwa	ırde	d to user (C.	
	Ensure tha	at in	the active of	call	state (N10)) th	ne voice tran	nsfe	er on the m	nedia and B-d	hannels is
	performed	cor	rectly (e.g.	tes	ting QoS p	ara	meters).				
SIP Parameter			ameters op								
values:		•									
	PIXIT for s	upr	orted head	er:							
	Case a) no										
			orted: 100 r	el							
			orted: 100 r		and precon	diti	on				
	0400 0, 00	י קקי		.	ana procon		511				
	a = line (P	ТІХІ	7								
	b = line (P)										
	m = line (P)		,								
Comments:	111 = 11110 (1	1/(1	'/								
ISDN 2 ISDN	1 MGC	<u></u>	I-CSCF		S-CSC		P-CSCF	-	UE-A	1 11	E-C
100112 10011	i ivido	1	1-0001		0-000	<u>' </u>	1 -0001		INVITE		<u> </u>
						+	INVITE				
		+	INVITE	+	INVITE						
		→	181	→	181	→	181	→	181		
SETUP ←							.01				
ALERTING →		→	180	→	180	→	180		180		
CONNECT →		→	200 OK ACK	→	200 OK ACK	<u>→</u>	200 OK ACK		200 OK ACK		
DISC +		+	BYE	+	BYE		BYE		BYE		
REL →		→	200 OK BYE	→	200 OK BYE		200 OK BYE		200 OK		
RLC 🗲		1			1	+		-	BYE		
1		1			1	-	l	-	L. L.	I	1

SII_X	XSSCFB	02			IS	DN	reference	to	:			N	IGN reference	e to:			
				E.	TS	I EI	N 300 207-	1 Ti	.51.			Εī	TSI TS 124 60	4 [45]			
							6.1, 9.2.2	-	= "								
TSS ref	erence:		SIP				N/Supplem			es/	CFB						
Configu	ration:											er E	in network N2	2 is provi	ded with		
							nas a point-							·			
Selection	on criteria	1:	Call	forw	/ar	din	g by the ne	twc	rk								
			Call	forw	/ar	din	g busy - UE	UE	3								
Test pu	rpose:		Ens	ure t	ha	t w	hen user A	cal	Is user B, t	the	call is forwa	arde	ed to user C. E	nsure tha	at in the		
	•												d B-channels i				
			(e.g	. tes	ting	g Q	oS parame	ter	s).					•	-		
SIP Par	rameter						ameters op										
values:							·										
			PIX	IT for supported header:													
				ise a) no 100 rel													
			Cas	e b)	Sι	ıpp	orted: 100 i	el									
							orted: 100 r		and precor	diti	on						
				,		• •			•								
			a =	line ((PI	XIT)										
				line (
				line													
Comme	ents:						,										
ISDN	12 1	SDN	1	MC	ЭC	F	I-CSCF	•	S-CSC	F	P-CSCF	=	UE-A	Ų	JE-C		
												+	INVITE				
-								+	INVITE	+	INVITE						
			SETU	P	+	+	INVITE	_	IINVITE								
			RLC#		→												
	SETUP	+				→	181	→	181	→	181	→	181				
	ALERTING	→ -				→	180	→	180	→	180	→	180				
	CONNECT	→				→	200 OK	→	200 OK	→	200 OK		200 OK				
						→	ACK	→	ACK	→	ACK	→	ACK				
	DISC	+	1			+	BYE	+	BYE		BYE	4	BYE		1		
	REL	→	1			→	200 OK BYE	→	200 OK BYE	7	200 OK BYE	→	200 OK BYE				
	RLC	+	1				1	<u> </u>	l		l			l			

	XXSSC		03		ET cla	SI E	N referenc EN 300 207 es 6.1, 9.2.	-1 2, 9	[i.5], 0.2.5				IGN referer SI TS 124 (]		
TSS ref							SDN/Suppl										
Configu	ration:			CFB numb	"ca er	Illing is r	g user is no eleased to	tifie the	ed of call di diverted-to	ver	rk N1. The usion with div ser" = Yes, "ser B has a p	/er ser	ted to numb ved user re	er" = Ye ceives r	es, "di notific	verting ation that	
Selection	n crite	ria:		Call f	orv otil	varo ica	ding by the ding busy - tions suppo	ND rte	UB d								
Test pu	rpose:			call d no Co allow Ensu	ive OL ed) re	rsic R) a). U that	on and infor and user C ser B is not in the activ	me is ii ifie /e c	d of the div nformed of d of call div call state (N	ert the ers) the voice tr	er (nu ran	user C has mber (user	present B has p	ation reser	allowed - Itation	
SIP Par	rametei	r val	ues	PIXIT Case Case Case	Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)												
				b = li													
				m = 1	ine	PI	XIŤ)										
Comme	nts:						•										
ISDN		ISD	N 1	MC	3CI	F	I-CSCF		S-CSCF	:	P-CSCF		UE-A		UE	E-C	
				•								+	INVITE				
					1		ļ	_	INIVITE	+	INVITE						
					+-	+	INVITE	+	INVITE	\vdash		_			+		
					1	→	181	→	181	→	181	→	181		-+		
	SETUP		+		T	1		Ť		Ť	-	Ť	-				
	ALERTING		→			→	180	→	180	→	180	→	180				
	CONNEC	Т	→			→	200 OK	→	200 OK		200 OK	→	200 OK				
						→	ACK	→	ACK		ACK	→	ACK			_	
	DISC		+			+	BYE	+	BYE		BYE	+	BYE				
	REL		→		1	→	200 OK BYE	→	200 OK BYE	1	200 OK BYE	→	200 OK BYE				
	RLC		+		1		<u> </u>										

	XXSSC		04			С	ISDN refe TSI EN 30 lauses 6.1	0 2 , 9.	07-1 [i.5], 2.2, 9.2.5				NGN re ETSI TS				
TSS ref									nentary_sei								
Configu				CFB numl the c	"ca ber all	allir is ha:	ng user is n released to s been forw	otifi the varc	ied of call d e diverted-to led" = No).	ive o u	ork N1. The rsion with d ser" = Yes, er B has a p	ive "se	rted to num rved user r	ber ece	" = Ye ives n	s, "o	diverting cation that
Selection		ia:		Call t	for loti	var fica	ding by the ding busy ations supp	- NE orte	DUB ed								
Test pu	rpose:			call on Callow the v	dive OL ved voic	ersi .R)). L e ti	on and info and user C Jser B is no ransfer on t	rme is ot ne	ed of the diving of the contract of the contra	ver th	the call is fo ted-to numb e forwarding liversion. Er channels is	er g ni isu	(user C has umber (use re that in th	s pr r B e a	esenta has pr ctive c	atior ese all s	allowed - ntation state (N10)
SIP Par		valu	ues	PIXIT Case Case Case b = li	the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)												
Comme																	
ISDN	12	ISD)N 1	I MC	3CI	-	I-CSCF		S-CSCF		P-CSCF		UE-A			UI	E-C
								-		_	INVITE	+	INVITE				
								+	INVITE	_	II W V I I L	1	+			- 	
		t				+	INVITE	Ť				1	† †				
						→	181	→	181	→	181	→	181				
	SETUP		+														
	ALERTING		,			<u>→</u>	180	→	180	→			180				
	CONNECT	<u> </u>	→		Ш)	200 OK	→	200 OK	→	200 OK		200 OK				
<u> </u>	DIGG		_			→	ACK	→	ACK		ACK	→	ACK				
	DISC		←		-	7	BYE	+	BYE		BYE		BYE				
	REL		→		-	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE				
	RLC	,	7				l	<u> </u>		1							

SII_XXSSCFB 05			ISDN refe						NGN ref						
			TSI EN 300						ETSI TS	124 60	4 [45]				
			lauses 6.1												
TSS reference:					entary_serv										
Configuration:							rk N1. User								
							rsion with di								
	number	is r	eleased to	the	diverted-to	us	ser" = No, "s	erv	ed user red	eives i	notifica	ation that			
	the call	has	been forwa	ard	ed" = no). L	Jse	er B has a po	oint	-to-multipoi	nt Con	figurat	tion.			
Selection criteria:	Call forv	vard	ding by the	net	work				-						
	Call forv	vard	ding busy -	ND	UB										
			tions suppo												
Test purpose:						. tl	ne call is for	wa	ded to use	r C. us	er A is	notified			
							diverted-to								
							ed of the for								
		entation not allowed).													
		B is not notified of call diversion. Ensure that in the active call state (N10) the voice													
		sfer on the media and B-channels is performed correctly (e.g. testing QoS													
		rameters).													
SIP Parameter values:				on	tions=PIXIT										
on rarameter values.	Diai ouii	.9 1	Jaramotoro	Op.											
	PIXIT fo	ır çı	upported he	adı	or∙										
	Case a)			Juu	01.										
			pported: 10	nn r	ام										
					el and prec	nn,	dition								
	Case c)	Ou	pported. To	,0 1	er and prec	OII	aition								
	a = line	יום/	VIT\												
	b = line														
	m = line														
Comments:	III = IIIIe	(FI	<u> </u>												
ISDN 2 ISDN 1	MGC		1.000		C C C C C		D CCCE		UE-A		1.15	-C			
13DN 2 13DN 1	IVIGC	_	I-CSCF	_	S-CSCF	<u> </u>	P-CSCF		INVITE		UE	:-C			
						+	INVITE	Ť	IIVVIIL						
				+	INVITE										
		+	INVITE 181	→	181	4	181	-	181						
SETUP ←		Ť	101	Ť	101	ŕ	101	Ť	101						
ALERTING →		→	180	→	180		180		180						
CONNECT →		→	200 OK ACK	→	200 OK ACK	4	200 OK ACK		200 OK ACK						
DISC ←		+	BYE	+	BYE		BYE		BYE						
REL →		→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE						
RLC (+				<u> </u>	1	<u> </u>]	1							

SII_XXSSCFB 00	6		E.	_	ON referen EN 300 20					-	IGN referer			
					ses 6.1, 9.2							•	•	
TSS reference:		SIF			I-ISDN/Sup			erv	ices/CFB					
Configuration:										er E	3 in network	N2 is	provid	ed with
											erted to nun			
											erved user re			
											nt-to-multip			
Selection criteria:					arding by th						•			
					arding busy									
					ations sup									
Test purpose:								r B.	the call is t	forw	arded to us	er C. u	ser A	is notified
											number (use			
											e forwarding			
					ion not allo						`	,	`	
								ion.	Ensure tha	at in	the active of	call stat	te (N1	0) the voice
											correctly (e.g			
					rs).				•		, , ,	5	0	
SIP Parameter value	s:	Dia	al st	ring	paramete	rs c	ptions=PI	ΚIΤ						
							•							
		PIX	ΚIΤ	for	supported	hea	ider:							
		Ca	se	a) n	o 100 rel									
		Ca	se	b) S	Supported:	100	rel							
					Supported:			eco	ndition					
				•			•							
		a =	: lin	e (F	PIXIT)									
					PIXIT)									
		m :	= lir	ne (PIXIŤ)									
Comments:				,	•									
ISDN 2 ISDN	l 1	N	1GC	F	I-CSCF	=	S-CSC	F	P-CSCI	=	UE-A		UE	-C
										+	INVITE			
	-					_	INVITE	+	INVITE	_				
	+		+	+	INVITE	+	IIN VII E	+						
OFTUD.														
SETUP ← ALERTING →	+		-	→	180	→	180	→	180	→	180			
CONNECT →	L		t	→	200 OK	→	200 OK	→	200 OK	→	200 OK			
DICC	Ţ	-	I	→	ACK	→	ACK		ACK		ACK			
DISC +	+		-	+	BYE 200 OK BYE	+	BYE 200 OK BYE		BYE 200 OK BYE	+	BYE 200 OK			
				Ĺ	200 010 01	Ĺ	200 OK BIL	Ľ	200 ON BIE	Ĺ	BYE			
RLC +									I					

	xxss		07				С	ISDN refe TSI EN 300 lauses 6.1	0 2 , 9.	07-1 [i.5], 2.2, 9.2.5				NGN ref			
TSS ref										nentary_ser							
Configu	ıration	:			CFB num	"c bei	allir ' is	ng user is n released to	otifi the	ied of call d e diverted-to	ive o u	rsion with di ser" = Yes,	ive "se	rted to numb	er" = Ye ceives n	otification that	
Selection					Call Call CF N	for for lot	war war ifica	ding by the ding busy - ations supp	ne U[orte	twork DUB ed							
Test pu	rpose:	:			call of no Callow voice	dive OL vec e tr	ersi .R) I). L ans	on and info and user C Jser B is no ifer on the r	rme is otifie	ed of the divinformed of ed of call div	er th	ted-to numb e forwarding sion. Ensure	er g n e tl	(user C has umber (user hat in the action	presenta B has pi ive call s	state (N10) the	
SIP Par	ramete	er va	lues	S:	voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)												
					m =	line) (P	(TIXI									
Comme	ents:																
ISDN	12	ISI	NC	1]	MC	ЭĈ	F _	I-CSCF		S-CSCF		P-CSCF		UE-A		UE-C	
													+	INVITE			
				<u> </u>		!	<u> </u>		_	IND //TE	+	INVITE	_				
				SET	LID	+	_	INVITE	~	INVITE			1	-			
					# 17	→	<u> </u>	IIIVIIL			H		1				
					11	ŕ	→	181	→	181	→	181	→	181			
	SETUP		+														
	ALERTII		→				→	180	→	180	→	180	→	180			
	CONNE	CT	→				→	200 OK	→	200 OK	→	200 OK	→	200 OK			
							→	ACK	→	ACK		ACK	→	ACK			
	DISC		+				+	BYE	+	BYE		BYE	+	BYE			
	REL		→				→	200 OK BYE	→	200 OK BYE	>	200 OK BYE	→	200 OK BYE			
	RLC		+								<u> </u>						

TSS reference: SIP-ISDN-ISDN/Supplementary_services/CFB The user A and the user C are in network N1. The user B in network N2 is provided with CFB "calling user is notified of call diversion with diverted to number" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Selection criteria: Call forwarding by the network Call forwarding busy - UDUB CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is informed of the forwarding number (user B has presentation allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) m = line (PIXIT) SETUP			SSCF	B 08				С	ISDN refe TSI EN 300 lauses 6.1	0 2 , 9.	07-1 [i.5], 2.2, 9.2.5				_		erence to: 124 604 [45]		
CFB "calling user is notified of call diversion with diverted to number" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = No). User B has a point-to-multipoint Configuration. Call forwarding by the network Call forwarding busy - UDUB CF Notifications supported Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is informed of the diverted-to number (user B has presentation allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF ISDN 3 ISB ISB ISB ISB ISB ISB ISB ISB ISB ISB						SIP-I	SE	<u> NC</u>	ISDN/Supp	len	nentary_ser	vic	es/CFB						
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call diversion and informed of the diverted-to number (user C has presentation allowed no COLR) and user C is informed of the forwarding number (user B has presentation allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C SETUP	Selection	on d	criteria	:		Call 1	for lot	war ifica	ding busy - ations supp	UI orte	OUB ed								
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SETUP								-	INVITE		-			1					
SETUP ← ALERTING → 180 → 180 → 180 CONNECT → 200 OK → 200 OK → 200 OK → 200 OK DISC ← BYE ← BYE ← BYE REL → 200 OK BYE → 200 OK BYE → 200 OK BYE → 200 OK BYE → 200 OK BYE → BYE					INLO	π 11	ŕ	→	181	→	181	→	181	→	181				
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TSS ref	erence	e :					ISDN/Supp											
Configu	iration:			"ca is r has	lling elea s be	us sec en f	er is notified to the dive forwarded"	d of erte = n	f call divers d-to user" = o). User B	ion = N	with diverte o, "served u	d t	in network is o number" = r receives no tipoint Confi	Yes, "d tificatio	livertir n that	ng number		
Selection	on crite	ria:		Ca CF	l foi No	wa tifica	rding by the rding busy - ations supp	- UI orte	DUB ed									
Test pu	rpose:			cal allo pre Uso trai	Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation not allowed - COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT													
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SII_XXSSCFB	3 10			TSI	N reference EN 300 207 es 6.1, 9.2.	7-1	[i.5],				IGN refere SI TS 124			
TSS reference:			SIP-IS	SDN-	ISDN/Supp	len	nentary_se	rvic	ces/CFB					
Configuration:			The u "callin is rele	iser Ang use easec	and the user is notified to the dive	ser d of erte	C are in ne call divers d-to user" :	etwo	ork N1. Use with diverte o, "served u s a point-to-r	ed t isei	o number" r receives ı	= N noti	No, "diverting fication that	ng number
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Test purpose: SIP Parameter va	ilues	::	call di allower prese User I transf paran Dial s PIXIT Case Case Case a = lir b = lir	iversited - rentation B is refer on the restring for sea) noted by Successive (Pine (Pine (Pine deliversity))	on and not to COLR) a con not allow not notified the media s). parameters upported he 100 relupported: 1 upported: 1 upported: 1 (XIT)	info nd ved of c and s or eac	ormed of th user C is n). call diversion d B-channe otions=PIXI der:	ne o not i non. els	liverted-to no informed of Ensure that is performed	um the in t	ber (user 0 forwarding the active of	C ha g nu call	as presenta umber (use state (N10	er B has) the voice
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SII_XXS	SSCFB 11			ETS clau	SI E	EN es (eference to 300 207-1 5.1, 9.2.2, 9	[i.5).2.	5		E		SN referenc SI TS 124 60		
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TSS refe	rence):					DN/Suppler			service	S/	/CFB					
Configura	ation:			The use CFB Pa numbe	er / artia r" =	A ai al F : Ye	nd the user Rerouting se	· C a ervi g n	are in r ce "cal umber	networ	rk se	N1. The user is notified	of	call diversion	n w	vith dive	
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	SETUF)	+	FAC REL	→	→	181	→	181		7	181	7	181			_
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Configurati	on:			CFB Pa number'	rtia ' =	al Ro Yes	erouting se	rvio g nu	e "call	ling us	ser	is notified	of c	B in network N call diversion rted-to user" :	with di	
Selection of	riteria	a:		Call forv	var	din										
Test purpo	se:			call dive allowed presenta Ensure t	rsi - C atio	on a COL on n at in	and not info R) and use ot allowed)	orm er C). call	ed of t is not state	he div inforn (N10)	er ne th	ted-to numbed of the for-	oer wai	ed to user C, u (user C has proding number or on the med	presen (user l	tation not
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TSS refere							N/Supplem										
Configurati	on:			CFB - P number	art " =	ial I No	Rerouting s	ser\ nu	ice "ca mber is	ılling u	JS	er is notified	l of	B in network N2 call diversion ed-to user" = I	with d	iverted to	
Selection of	riteria:			Call for	var	din	ctivated the g busy perf	forr	ned by	the U	Ě						
Test purpo	se:			Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation allowed no - COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). Dial string parameters options=PIXIT													
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TSS reference:		SIP-ISE	DN-	ISC	N/Supplem	nen	tary_servi	ices/	CFB							
Configuration:					d the user er B has a p								ork	N2 an	d is p	orovided
Selection criteri	ia:	Call for	war	din	g by the ne	twc	ork									
					g busy sup											
Test purpose:		To verif	y th	nat	a call is release ser B, the c	eas	ed correc							ned us	ser b	usy.
SIP Parameter		Dial stri	ing	par	ameters op	tio	ns=PIXIT									
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				FB 1	6				ETSI EN 3 clauses 6	00 .1,	ence to: 207-1 [i.5] 9.2.2, 9.2.5	,					rence t 24 604 [••	
TSS I	re	fere	ence	:		SIP	-IS	DN	l-ISDN/Sup	ple	mentary_se	erv	ices/CFB						
Confi	igı	urat	ion:			1							vork N1. The t-to-multipoi				ork N2	and is	
Selec	cti	on (crite	ia:					arding by the arding busy										
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busy. SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)																			
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	t				SET	UP	+	+	INVITE	Ì		t		H					
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SII_XXSSCFB 17			IS	DN refe	rer	nce to:				NGN refere	ence to:
		E.	TSI	EN 300	20)7-1 [i.5],				ETSI TS 124	4 604 [45]
		cl	au	ses 6.1,	9.2	2.2, 9.2.5					
TSS reference:	SIP-IS					nentary_se	ervi	ces/CFB			
Configuration:									e us	er B is in netwo	rk N2 and is provided
						point-to-po					
Selection criteria:				ng busy				· · · · · · · · · · · · · · · · · ·			
Coronion omena						Partial Re	rou	tina servic	е		
Test purpose:										outing was not	successfully
l oot parpooo.											mined user busy.
SIP Parameter values:	_					ptions=PIX		04 to 4001	<u> </u>	no lo uco n doton	illinea acer bacy.
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			→	486	→	486		486		486	
	1		+	ACK	+	ACK	+	ACK	+	ACK	
		.		l		ı		I			<u> </u>

SII_XXSSCFB 18			ETSI EN 3	00					_	N reference to: TS 124 604 [45]			
TCC reference:	CID IC		clauses 6				/CED						
TSS reference:			-ISDN/Sup						D · ·				
Configuration:			A and the u Partial Rei							network N2 and is provided juration.			
Selection criteria:			rding busy s activated			erou	ıting serv	rice					
Test purpose:	To ver	ify t		re					outing - C	FB performed by the UE			
	User A calls user B, the call is forwarded to user C who is network determined user. Dial string parameters options—PIXIT.												
SIP Parameter values:	es: Dial string parameters options=PIXIT												
			supported h	nea	der:								
			upported: 1	100	rel								
			upported: 1			reco	ndition						
		,	•										
	a = line	e (F	TIXI ^r										
	b = line	e (F	PIXIT)										
	m = lin	ne (l	PIXIT)										
Comments:													
ISDN 1 ISDN 2	MGC	F	I-CSCF		S-CSC	F	P-CS		UE-A	UE-C			
						_		+	INVITE 100 Trying				
						+	INVITE	7	100 Trying				
						→	100 Trying						
				+	INVITE								
SET	ID 4	+	INVITE	→	100 Trying								
I SET	J. C	→	100 Trying		†	-			 				
FAC	→	→	181										
REL	+			→	181								
RLC	→			-		→	181		101				
		1		-		+		7	181				
		1			Ì				†				
		→	486	→	486		486		486				
		+	ACK	+	ACK	+	ACK	+	ACK				

SII_	XXSS	CFB			ET cla	ISDN refer SI EN 300 auses 6.1, 9	207 9.2.	'-1 [i.5], 2, 9.2.5					erence to: 124 604 [45]	I			
TSS re	eferen	ce:		SIP-	ISD	N-ISDN/Su	ppl	ementary_s	e۲	/ices/CFB							
Config	juratio	n:		The	use	r A and the	use		et	work N1. Th				and is provided			
Selecti	ion cri	teria:		Call Use	forv r B l	varding bus has activate	y sı ed th	upported ne Partial Ro	erc	outing service	ce						
Test p	urpose	э:		was	not	successful						·		ed by the UE ed user busy.			
				Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)													
	Comm	ents:				,											
ISDI		_	N 2	MG	CF	I-CSCF	:	S-CSCF		P-CSCF		UE-A		UE-C			
												INVITE					
											→	100 Trying					
			ļ							INVITE	-						
					-		+	INVITE	7	100 Trying	+						
					-		→	100 Trying			-						
			SETUP	+	· (INVITE	Ť				T						
					→	100 Trying											
			FAC	7		181											
			REL	+		1	→	181	_	404			-	1			
-			RLC	7		+	1	-	7	181	-	181	+				
SET	TUP	+	-		-	1	1				Ť	101	1				
	C #17	<u>`</u>			1		1										
					→	486		486		486		486					
					+	ACK	+	ACK	+	ACK	+	ACK					

SIIS_XXSSCFB 20	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP-ISDN/Supplementary_servi	ces/CFB
Configuration:	The user A and the user C are in network I	N1. The user B is in network N2 and is provided
	with CFU. User D forwards the call to back	to user B. User B has a point-to-multipoint
	Configuration.	
Selection criteria:	Call forwarding by the network	
	Call forwarding busy	
Test purpose:	Ensure that when user A calls user B, the	call is forwarded to user C and D.
	User D forwards the call to back to user B.	Ensure that the call is released.
ISDN Parameter	BC = PIXIT	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	on
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SIIS_XXSSCFB 21	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ITU-T Q.1912.5 [51]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-ISDN-SIP/Supplementary_services	/CFB
Selection criteria:	The user is A in network N1. The user B and t	he user C are in network N2. User B is
	provided with CFB. User E forwards the call to	back to user B.
	Network option: hop counter supported	
Test purpose:	Ensure that when user A calls user B, the call	is forwarded to user C, C to D. User D
	forwards the call to back to user B.	
	User D forwards the call to back to user B. En	sure that the call is released.
ISDN Parameter values:	BC = PIXIT	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.3.2.7 CFNR

6.3.2.7.1 CFNR - SIS

SIS_XXS		ET clau	SI E	N reference N 300 403 9.2.2, 9.2.	3-1 4.4	i.3], , 9.2.5	NGN reference to: ETSI TS 124 604 [45]								
TSS reference	ce:	SIP-ISD	SIP-ISDN-SIP/Supplementary_services/CFNR/												
Selection crit	eria:	with CF	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option B, immediate release, and no notification. User B has a point-to-multipoint Configuration.												
Test purpose) :	Ensure	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).												
SIP Paramet	er values:	Dial strii PIXIT fo Case a) Case b)	ng F no Su Su (PI)	parameters upported he 100 rel pported: 10 pported: 10 KIT) KIT)	opteade	ions=PIXIT er:	•								
	ICDN (NACC	_	1.000	_	0.000	_	D CCCE		115 4			IF C		
ISDN 1	ISDN 2	2 MGC	_	I-CSCF	_	S-CSCF		P-CSCF		UE-A	1	٦ ,	E-C		
-	+	+	+				4	INVITE	_	IINVITE	1	+			
-			+		+	INVITE	Ť	IIIVII L							
	+	SETUP	+	INVITE											
	→	ALERTING	→	180	→	180	→	180	→	180					
	(REL					_								
	→	RLC	→	181	→	181	_	181	_	181	-				
-	+	+	 →	INVITE	7	INVITE		INVITE	7	101	→	INVITE			
			Ť	IIIVIII	Ť	III VIII L	ť	IIIVIIL	+		÷	100 Trying			
			+	180	+	180	+	180			+	180			
			→	180	→	180	→	180	→	180					
			+	200 OK	+	200 OK		200 OK		·	+	200 OK			
	1		→	ACK	→	ACK		ACK	Ļ		→	ACK			
			→	200 OK	→	200 OK		200 OK		200 OK	<u> </u>	_			
			+	ACK BYE	+	ACK BYE		ACK	+	ACK	+	DVE			
	+		←	200 OK BYE	→	200 OK BYE		BYE 200 OK BYE	+	 	7	BYE 200 OK BYE			
	+ +	+	→ →	BYE	7	BYE	3	BYE	-	BYE	1	ZUU UN BYE			

SIS_XX	SSCI	FNF	02		ISDN reference to: NGN reference to: ETSI EN 300 403-1 [i.3], ETSI TS 124 604 [45] clauses 9.2.2, 9.2.4.4, 9.2.5											
TSS refere	ence:			SIP-ISDN-SIP/Supplementary_services/CFNR/												
Selection of	criteria	a:		The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option A, late release, no notification. User B has a point-to-multipoint Configuration.												
Test purpo	se:			Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).												
Comments				Case a) Case b)	no Su Su (PI)	pported: 10 pported: 10 XIT) XIT)	00 r		on	dition						
ISDN 1		ICD	N 2	MGCF		I-CSCF	_	0.000	_	P-CSCF	_	UE-A		UE		
IODIN I		טטו	IN Z	MGCF	_	1-0301		S-CSCF	P-CSCI		INVITE		UE			
							-		-	INVITE	_	INVITE	1			
							+	INVITE	Ť	IIIVIIL						
			+	SETUP	+	INVITE										
			→	ALERTING	→	180	→	180	→	180	→	180				
				-					-				-			
					→	181	→	181	→	181	→	181				
					→	INVITE	→	INVITE		INVITE			→	INVITE		
													+	100 Trying		
					+	180	+	180		180			+	180		
			+	REL	→	180	→	180		180	→	180				
			→	RLC	+	200 OK	+	200 OK		200 OK			+	200 OK		
				.	→	ACK	→	ACK		ACK	1		→	ACK		
					→	200 OK	→	200 OK		200 OK		200 OK				
 				-	+	ACK	+	ACK		ACK	+	ACK	_	D)/E		
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				1	7	200 OK BYE				200 OK BYE		200 OK BYE	1			
L				1	<u> </u>	1200 ON DIE	1.	200 ON DIE	1.	ZOO ON DIE	1.	1200 OK DIE	1	ı		

SIS_X			₹03		cla		0 4 , 9	03-1 [i.3], .2.4.4, 9.2.5		NGN reference to: ETSI TS 124 604 [45]							
TSS refe	rence	:						ntary_servi									
Configura	ation:			"calling is releas Configu	The user A and the user C are in network N1. The user B is provided with CFNR "calling user is notified of call diversion with diverted to number" = Yes, "diverting number is released to the diverted-to user" = Yes ". User B has a point-to-multipoint Configuration.												
Selection	crite	ria:		CFNR supported, option B, immediate release CF Notifications supported													
Test purp	ose:			A is noti	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. User A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is informed of the forwarding number (user B has presentation allowed).												
ISDN Pai	ramet	er va	lues:		D has presentation allowed).												
SIP Para		· valu	ies:	PIXIT fo Case a) Case b)	or su no Su Su (PI)	upported he 100 rel pported: 10 pported: 10 KIT) KIT)	ad 00 r			dition							
Commen														•			
ISDN	1	ISE	N 2	MGCF	-	I-CSCF		S-CSCF		P-CSCF		UE-A	1	UE	-C		
			+	SETUP	+	INVITE	+	INVITE	+	INVITE	_	INVITE					
			→	ALERTING	→	180	→	180	→	180	→	180					
			+	REL													
			→	RLC	→	181	→	181	_	181	_	181		+			
					→	INVITE	÷	INVITE		INVITE	ŕ	101	→	INVITE			
													+	100 Trying			
		+			←	180 180	+	180 180		180 180	_	180	+	180			
					+	200 OK	+	200 OK		200 OK	ŕ	100	+	200 OK			
					→	ACK	→	ACK	→	ACK			→	ACK			
		+			→	200 OK ACK	→	200 OK ACK		200 OK ACK		200 OK ACK		1			
			1	<u> </u>		BYE	+	BYE		BYE	Ė	AUN	+	BYE			
					→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			→	200 OK BYE			
						BYE	→	BYE		BYE		BYE					
		1	<u> </u>	L	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE					

SIS_XX	SSC	FNR	04		ET cla	SDN refer SI EN 300 uses 6.1,	207 9.2.	7-1 [i.5], .2, 9.2.5		NGN reference to: ETSI TS 124 604 [45]								
TSS refer					SIP-ISDN-SIP/Supplementary_services/CFNR													
Configura	tion:			The user	e user A and the user C are in network N1. The user B is in network N2 and is provided th CFNR "calling user is notified of call diversion with diverted to number" = Yes,													
				with CFNI	nber" = Yes	S,												
				"diverting number is released to the diverted-to user" = No). User B has a p Configuration.														
Selection	criter	ia.			FNR supported, option B, immediate release													
Colocion	Onto	ıu.				ns support		iiiiiioaiato		ouoo								
Toot purp								lle user D	tha	call is forwa	ord	od to upor	<u> </u>	ugar A ia na	tified of			
Test purp	ose.																	
										erted-to num								
								s not info	rm	ed of the for	wa	irding numl	oer	(user B has	3			
						not allowed												
SIP Parar	neter	valu	es:	Dial string	pa	rameters o	ptic	ns=PIXIT										
				PIXIT for	sup	ported hea	der	:										
				Case a) n														
						orted: 100	rel											
								and precor	dit	ion								
				0400 0, 0	MPF	ortoa. 100		ana procor	·									
				a = line (F	ıvı	т\												
				b = line (F		,												
_				m = line (ZIX	11)												
Comment										•				•				
ISDN	1	ISE	ON 2	MGCF		I-CSCF	=	S-CSCF	=	P-CSCF		UE-A		UE	E-C			
									Ļ	IND OTE	+	INVITE						
	₩	_					-	INVITE	+	INVITE	-			+				
			+	SETUP	+	INVITE	1	IIIVIIL						1				
			→	ALERTING	→	180	→	180	→	180	→	180						
		_	←	REL	ļ													
	 	-	+	RLC	→	181	→	181	4	181	4	181	 	+				
					÷	INVITE	÷	INVITE	ź	INVITE	ŕ	101	→	INVITE				
													+	100 Trying				
					+	180	+			180			+	180				
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	 		+	 	→	ACK	+	ACK	→	ACK	 	 	←	200 OK ACK				
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					+	ACK	+	ACK	+	ACK		ACK						
_					+	BYE	+	BYE		BYE			+	BYE				
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		L		1		200 ON DIE	1.	IZOU ON DIE		200 ON DTE		ZOO ON DIE	1	1	l			

SIS_X			05		ET cla	ISDN refer SI EN 300 auses 6.1,	207 9.2	7-1 [i.5], .2, 9.2.5		NGN reference to: ETSI TS 124 604 [45]							
TSS refe		:		SIP-ISDN-SIP/Supplementary_services/CFNR The user A and the user C are in network N1. The user B is in network N2 and is provided													
Configur	ation:																
				with CFNR "calling user is notified of call diversion with diverted to number" = No,													
				"diverting number is released to the diverted-to user" = No). User B has a po													
				multipoint Configuration.													
Selection	critor	ia.		CFNR supported, option B, immediate release													
Selection	i Cillei	ıa.		CF Notifications supported													
Test pur	pose:			Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of													
										erted-to num							
										ormed of the							
						not allowed		01 0 10 1101		onnoa or are	, 10	rwaranig in	arrik	301 (4001 B	iido		
SIP Para	motor	. volu	001					no DIVIT									
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						ported hea	ider	:									
				Case a) r													
				Case b) S	Supp	ported: 100	rel (
				Case c) Supported: 100 rel and precondition													
				,													
				a = line (f	ועוכ	T)											
				b = line (f													
				m = line (PIX	11)											
Commer	nts:																
ISDN	1	ISE	N 2	MGCI	F	I-CSCF	=	S-CSCF		P-CSCF	•	UE-A		UE-	-C		
											+	INVITE					
									+	INVITE							
		+	+	SETUP	+	INVITE	+	INVITE			+		1				
		1	→	ALERTING	→	180	→	180	→	180	→	180	1				
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					→	180	→	180	→	180	→	180					
					+	200 OK	+	200 OK		200 OK			+	200 OK			
		1			→	ACK	→	ACK		ACK	┺	000 014	→	ACK			
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SIS_XXSSC		06		clau	ISDN refe ISI EN 300 uses 9.2.2,	40 9.2)3-1 [i.3], 2.4.4, 9.2.5		NGN reference to: ETSI TS 124 604 [45]							
TSS reference:	:						ntary_servi									
Configuration:			The use	r A	and the us	er (C are in net	wo	rk N1. The	use	r B is pro	vide	ed with CFN	NR		
			"calling user is notified of call diversion with diverted to number" = Yes, "diverting number													
			is releas	ed	to the dive	rtec	d-to user" =	Υe	s). User B l	าลร	a point-to	o-m	ultipoint Co	onfiguration.		
Selection criter	ia:		is released to the diverted-to user" = Yes). User B has a point-to-multipoint Configuration. CFNR supported, option A, late release													
			CF Notifications supported													
Test purpose:			Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. User													
rest purpose.									ed of the div							
			presentation allowed - no COLR) and user C is informed of the forwarding number (user B has presentation allowed).													
			B nas pi	rese	entation allo	owe	ea).									
ISDN Paramete																
SIP Parameter	value	es:	Dial stri	ng p	arameters	op	tions=PIXIT	•								
Comments:			Case a) Case b) Case c) a = line b = line	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)												
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ISDN 1	ISDI	N 2	MGCF		I-CSCF	1	S-CSCF	_	P-CSCF		UE-A		U	E-C		
	+							+	INVITE	_	IINVITE					
						+	INVITE									
		← ↑	SETUP	←	INVITE	→	100	Ļ	100	Ļ	100					
	+	7	ALERTING	7	180	7	180	7	180	7	180		1			
	1 1										1					
				→	181	→	181		181	→	181					
	+			→	INVITE	→	INVITE	→	INVITE			→	INVITE			
	+	+	REL	+	180	+	180	_	180			+	100 Trying 180			
		-	RLC	→	180	-	180		180	→	180	_	160			
			IKEO	+	200 OK	+	200 OK		200 OK	Ť	100	+	200 OK			
	1 1			→	ACK	→	ACK		ACK			→	ACK			
				→	200 OK	→	200 OK		200 OK	→	200 OK					
			•		ACK	+	ACK		ACK	+	ACK					
	+			+	BYE	+	BYE		BYE	1	ļ	+	BYE			
	+			→	200 OK BYE	→	200 OK BYE		200 OK BYE	1	DVE	→	200 OK BYE			
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			1	_	ZUU UN DIE	_	200 ON DIE	_	200 ON D1E	1	ZUU UN BYE	<u> </u>	1	l .		

SIS_X	CXSSC	FNR	2 07		ISDN reference to: NGN reference to: ETSI EN 300 207-1 [i.5], ETSI TS 124 604 [45] clauses 6.1, 9.2.2, 9.2.5										1	
TSS refe	erence			SIP-ISE	SIP-ISDN-SIP/Supplementary_services/CFNR The user A and the user C are in network N1. The user B is in network N2 and is provided											
Configur	ation:			The use	r A	and the us	er (C are in net	wo	rk N1. The	use	r B is in n	etv	vork N2 and	d is provided	
				with CFNR "calling user is notified of call diversion with diverted to number" = Yes,												
										erted-to use						
						Configuration				01104 10 400	•	. 10). 000	,	riao a poi		
Selection	o critor	io.			CFNR supported, option A, late release											
Selection	Cillei	ıa.														
				CF Notifications supported Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of												
Test purp	pose:															
										verted-to nu						
				allowed	- C	OLR) and i	use	r C is not in	for	med of the	forv	warding ni	uml	ber (user B	has	
				allowed - COLR) and user C is not informed of the forwarding number (user B has presentation not allowed).												
SIP Para	meter	valu	es.					tions=PIXIT	-							
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				DIVIT		unnorted be		٥								
						ipported he	au	er.								
				Case a) no 100 rel Case b) Supported: 100 rel												
				Case c) Supported: 100 rel and precondition												
				1	, 11											
				a – lina	(PI	XIT)										
				a = line (PIXIT) b = line (PIXIT)												
				b = line (PIXIT) m = line (PIXIT)												
				m = line	· (PI	XII)										
Commer	nts:															
ISDN	l 1	ISD	N 2	MGCF	=	I-CSCF	=	S-CSCF	:	P-CSCF		UE-A		U	E-C	
											+	INVITE				
							_	IND #75	+	INVITE						
			+	SETUP	+	INVITE	+	INVITE								
		1	→	ALERTING	→	180	→	180	→	180	→	180				
							Ę		Ę							
	<u> </u>				→	181	→	181	 →	181	→	181	_	IND CITE		
	-	1	 	-	→	INVITE	→	INVITE	7	INVITE		-	+ +	INVITE 100 Trying		
	1	1	+	REL	+	180	+	180	+	180			+	180		
			→	RLC	→	180	→	180	→	180	→	180				
					+	200 OK	+	200 OK		200 OK			+	200 OK		
		1			→	ACK	→	ACK		ACK	Ļ	222 014	→	ACK		
	1	1	-	 	→	200 OK ACK	→	200 OK		200 OK ACK		200 OK ACK	-	+		
	1			 	+	BYE	+	ACK BYE		BYE	7	ACK	+	BYE		
	+	1	 		→	200 OK BYE	`	200 OK BYE		200 OK BYE	+	1	`	200 OK BYE		
								200 ON DIL		200 OK B 1 E			-	200 OK B1E		
					→	BYE 200 OK BYE	→	BYE 200 OK BYE	→	BYE 200 OK BYE		BYE 200 OK BYE	Ĺ	200 OR BTE		

	XSSC			ETS cla	SI E use	l reference N 300 207- s 6.1, 9.2.2	·1 [2, 9	i.5], .2.5				IGN refere ISI TS 124			
TSS refe		:		SIP-ISDN	I-SII	P/Supplem	ent	ary_service	es/(CFNR					
Configui	ration:			The user	A a	nd the usei	r C	are in netw	ork	N1. The us	ser	B is in netw	ork/	N2 and is	orovided
			,	with CFN	R "c	alling user	is ı	notified of c	all	diversion w	ith (diverted to	nun	nber" = No,	"diverting
				number is	rel	eased to th	ne c	liverted-to ι	use	r'' = No, ").	Use	er B has a r	oin	t-to-multipo	int
				Configura						-, ,					
Selectio	n crite	ria·					1 A	late releas	<u>.</u>						
Colootio	011101	iia.				ns support		iato roidad	,0						
Test pur	noco:							alle ucor B	the	call is forw	ard	od to usor	<u> </u>	ıcor Λ ic no	tified of
rest pui	pose.														
										erted-to num					
					•	id user C is	no	t informed	of t	he forwardi	ng i	number (us	er E	3 has prese	ntation
				not allowe											
SIP Para	ametei	r valu	es:	Dial string	g pa	rameters o	ptic	ons=PIXIT							
				PIXIT for	sup	ported hea	der	·:							
				Case a) n											
						oorted: 100	rol								
									اــ ــ						
			ľ	Case c) S	upp	onea: 100	rei	and preco	nai	lion					
				a = line (F	PIXI	T)									
			1	b = line (F	PIXI	T)									
				m = line (PIX	ΙΤ΄)									
Comme	nts:														
ISDN		ICD													
יוטטוי	V I		NI 2	MGCE	=	LCSCE	-	S-CSCI	=	D-CSCE	=	I IE-A			:-C
		IOD	N 2	MGCF	_	I-CSCF	-	S-CSCF	=	P-CSCF		UE-A		UE	-C
		180	N 2	MGCF	= 	I-CSCF	: 	S-CSCF		P-CSCF		UE-A		UE	-C
		190						S-CSCF						UE	-C
		190	+	SETUP	+	INVITE	+	INVITE	+	INVITE	+	INVITE		UE	-C
		190							+		+			UE	E-C
			+	SETUP	+	INVITE	+	INVITE	+	INVITE	+	INVITE		UE	E-C
			+	SETUP	+	INVITE 180	+	INVITE 180	÷	INVITE	+	INVITE			-C
			+	SETUP	+	INVITE	+	INVITE	÷	INVITE	+	INVITE	→	INVITE	-C
			÷ →	SETUP ALERTING	÷ ÷	INVITE 180	÷	INVITE 180 INVITE	÷	INVITE 180 INVITE	+	INVITE	+	INVITE 100 Trying	:-C
			← →	SETUP ALERTING REL	÷ ÷	INVITE 180 INVITE	÷	INVITE 180 INVITE 180	÷	INVITE 180 INVITE 180	÷	INVITE		INVITE	E-C
			÷ →	SETUP ALERTING	÷ ÷ ÷	INVITE 180 INVITE 180 180	÷ ÷ ÷	INVITE 180 INVITE 180 180	÷ ÷ ÷ ÷	180 INVITE 180 INVITE	÷	INVITE	+	INVITE 100 Trying 180	E-C
			← →	SETUP ALERTING REL	÷ ÷	INVITE 180 INVITE	÷	INVITE 180 INVITE 180	÷	180 INVITE 180 INVITE 180	÷	INVITE	+	INVITE 100 Trying	E-C
			← →	SETUP ALERTING REL	÷ ÷ ÷ ÷ ÷ ÷ ÷	INVITE 180 INVITE 180 180 200 OK ACK 200 OK	÷ ÷ ÷ ÷ ÷ ÷ ÷	INVITE 180 INVITE 180 180 200 OK ACK 200 OK	÷ ÷ ÷ ÷ ÷ ÷ ÷	INVITE 180 INVITE 180 180 180 200 OK ACK 200 OK	÷	180 180 200 OK	+	INVITE 100 Trying 180 200 OK	E-C
			← →	SETUP ALERTING REL	+ + + + + +	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ †	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ † † † †	180 180 INVITE 180 180 180 200 OK ACK 200 OK ACK	÷	180 180	← ← →	INVITE 100 Trying 180 200 OK ACK	E-C
			← →	SETUP ALERTING REL	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ † † † † † † † †	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK BYE	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ † † † † † † † † †	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK BYE	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ † † † † †	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK BYE	÷	180 180 200 OK	+ + + +	INVITE 100 Trying 180 200 OK ACK	E-C
			← →	SETUP ALERTING REL	+ + + + + +	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ †	INVITE 180 INVITE 180 180 200 OK ACK 200 OK ACK	÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ ÷ † ÷ ÷ †	180 180 INVITE 180 180 180 200 OK ACK 200 OK ACK	÷	180 180 200 OK	← ← →	INVITE 100 Trying 180 200 OK ACK	E-C

	(XSSC		09	ETS cla	SI E	N referenc N 300 207 es 6.1, 9.2.	-1 [2, 9	i.5], .2.5				IGN refer			
TSS re	ferenc	e:		SIP-ISDN	I-S	IP/Supplen	nen	tary_servic	es/	CFNR					
Configu	uration	:		The user	Αa	and the use	er C	are in netv	wor						is provided
Selection	on crite	eria:		Partial re	rou	ting during	ale	rting - no n	otif	ication					
Test pu	irpose	:		Ensure th	nat	when user	Αc	alls user B	, th	e call is for	war	ded to use	r C		
ISDN P	arame	eter		BC = PIX											
values:															
SIP Pa		ar val	ΠΦC.	Dial string	n n	arameters	onti	one-PIXIT							
Comme				Case a) r Case b) S Case c) S a = line (l b = line (l m = line (l	no Z Sup Sup PIX PIX	pported: 100 ported: 100 IT) IT) KIT)	0 re	el I and preco							
ISDN	\ 1	ISD	N 2	MGCF		I-CSCF	:	S-CSCI	=	P-CSCI		UE-A		U	E-C
									Ļ	D 0.475	+	INVITE			
-							+	INVITE		INVITE					
			+	SETUP	+	INVITE	Ť	IIIVIIL	+						
			→	ALERT	→	180	→	180	→	180	→	180			
				FAC											
			Ψ,	REL										1	
			→	RLC SETUP	→	INVITE	→	INVITE	_	INVITE			→	INVITE	
-	-	╁	~	SETUP	7	IINVIIE	7	IINVIIE	7	IINVIIE	-		+	100 Trying	
<u> </u>	1			 	+	180	+	180	+	180	+		÷	180	
	 	1		1	`	180	<u>→</u>	180		180	→	180	Ť	1.50	
		1			+	200 OK	+	200 OK		200 OK			+	200 OK	
		1			→	ACK	→	ACK		ACK			→	ACK	
					1	200 OK	→	200 OK	1	200 OK	→	200 OK			
					¥	ACK	+	ACK		ACK	+	ACK			
					4	BYE	+	BYE		BYE			+	BYE	
<u> </u>	ļ	<u> </u>			۰,	200 OK BYE	→	200 OK BYE		200 OK BYE	4		→	200 OK BYE	
	ļ	1		-	<u>→</u>	BYE	→	BYE		BYE		BYE	1	1	
L	l	1		1	+	200 OK BYE	+	200 OK BYE	~	200 OK BYE	7	200 OK BYE	1	1	

SIS_XXS	SCFN	R 10		_	N reference						IGN refere			
					EN 300 207- es 6.1, 9.2.2					EI	TSI TS 124	ŀ 60	14 [45]	
TSS refere	nco:				IP/Supplem			00/	CENID					
Configurati									k N1. The us		D io in no	two	rk NO and	io provided
Cornigurati	OH.								ing user is n					
								eie	ased to the	aiv	ertea-to us	ser	= Yes). U	ser B has a
0.1.0					t Configura									
Selection of					ting during									
Test purpo	se:								e call is forw					
									d-to number					
			,		d user C is i	nfo	rmed of the	e fo	rwarding nu	mb	er (user B	ha	s presenta	ıtion
			allowed).											
ISDN Para	meter		BC = PIX	ΊT										
values:														
SIP Param	eter va	lues:	Dial string	g p	arameters o	pti	ons=PIXIT							
			PIXIT for	su	pported hea	ade	r:							
			Case a) r	no '	100 rel									
					ported: 100	re)	el .							
					ported: 100			ndi	ition					
			a = line (l	PIX	IT)									
			b = line (l											
			m = line (
Comments			111 – 11110 (,	,									
ISDN 1		N 2	MGCF	:	I-CSCF		S-CSCF	=	P-CSCF		UE-A		11	E-C
IODIVI	IOL	111 2	IVICCI		1-0001		0-0001	T	1 -0001	+	INVITE	1		
								+	INVITE					
		+	SETUP	+	INVITE	+	INVITE	-						
		>	ALERT	→	180	→	180	→	180	→	180			
		→	FAC											
		←	REL RLC	→	101	→	101	_	181	→	181			
		7	RLC	7	181 INVITE	7	181 INVITE		INVITE	7	101	→	INVITE	
												+	100 Trying	
				4	180	+	180		180	حا	100	+	180	
	+	<u> </u>	<u> </u>	→	180 200 OK	→	180 200 OK		180 200 OK	7	180	+	200 OK	
				→	ACK	→	ACK	→	ACK			→	ACK	
				→	200 OK	→	200 OK		200 OK		200 OK			
1				+	ACK BYE	+	ACK BYE		ACK BYE	_	ACK	+	BYE	
				→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			÷	200 OK BYE	
				→	BYE	→	BYE		BYE		BYE			
			L	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	4	200 OK BYE	<u> </u>	I	

SIS_XXSS	CFNF	R 11	ETS	SI E	N reference N 300 207- es 6.1, 9.2.2	-1 [i.5],				IGN refere SI TS 124			
TSS reference	۵.				IP/Supplem			<u> </u>	CENR					
Configuration										cor	B ic in not	hwo	rk N2 and	is provided
Comiguration	1.		with Dart	اداد	rerouting di	ırin	a alertina "	vui പി	ing usar is r	octi	fied of call	div	in inz aiiu Arcion with	n diverted to
									ased to the					
								ele	aseu to the	uiv	eneu-io us	SEI	= 100). US	el Dilas a
Selection crit	orio				nt Configura Iting during									
								41-	II :- f		dad ta	- 0	A :-	4:f: - d - f
Test purpose) :								e call is forw					
									erted-to nur					
							C is not inf	orn	ned of the fo	orw	arding nun	nbe	er (user B l	nas
					not allowe	d).								
ISDN Param	eter		BC = PIX	ΊT										
values:														
SIP Paramet	er va	lues:	Dial strin	g p	arameters o	opti	ons=PIXIT							
			PIXIT for	su	pported hea	ade	er:							
			Case a) r	no '	100 rel									
			Case b) S	Sup	ported: 100	re	el							
			Case c) S	Sup	ported: 100	re	and preco	nd	ition					
			'	٠	•		•							
			a = line (PIX	IT)									
			b = line (,									
			m = line											
Comments:			111 – 11110	,	,									
ISDN 1	ISL	N 2	MGCF	:	I-CSCF		S-CSCF	=	P-CSCF		UE-A		- 1	IE-C
10011	I	1112	IVICOI		1-0001		0-0001		1 -0001		INVITE			,L-0
								+	INVITE					
		+	SETUP	+	INVITE	+	INVITE	_						
		→	ALERT	→	180	→	180	→	180	→	180			
		→	FAC											
		+	REL	_	404	<u>_</u>	404	_	404	→	404			
				→	181 INVITE	→	181 INVITE		181 INVITE	7	181	→	INVITE	
												+	100 Trying	
				+	180	+	180		180	Ţ	100	+	180	
	-			→	180 200 OK	→	180 200 OK		180 200 OK	→	180	+	200 OK	
				÷	ACK	÷	ACK		ACK	1		→	ACK	
				→	200 OK	→	200 OK		200 OK		200 OK			
	-			+	ACK BYE	+	ACK BYE		ACK BYE	+	ACK	+	BYE	
				÷	200 OK BYE	÷	200 OK BYE		200 OK BYE			<u>`</u>	200 OK BYE	
				→	BYE	→	BYE		BYE		BYE			
			L	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE	+	200 OK BYE		l	

SIS_XXS		R 12	ET cla	SI aus	ON reference EN 300 207 es 6.1, 9.2	7-1 .2, <u>9</u>	[i.5], 9.2.5				IGN refer ISI TS 12			
TSS referen					SIP/Supple									
Configuratio	n:				and the u									
														version with
					number" =					eas	ed to the o	dive	rted-to use	er" = No).
					s a point-to									
Selection cri					outing durin									
Test purpos	e:													is notified of
			call dive	ersi	on and not	info	ormed of th	ne d	liverted-to r	num	ber (user	C h	as present	ation
			allowed	l - r	no COLR) a	ınd	user C is r	not i	nformed of	the	forwardin	g ni	umber (us	er B has
			present	atio	on not allov	ved).					•	•	
ISDN Param	neter v	alues	: BC = P	IXI	Τ		•							
SIP Parame	ter va	lues:			parameters	s or	otions=PIX	ΙΤ						
				3										
			PIXIT fo	or s	supported h	ead	der							
					100 rel	out	201.							
					upported: 1	$\cap \cap$	اما							
					upported: 1			cor	dition					
			Case C	, 3	apported. I	UU	iei and pie	COI	idition					
				/ D	IVIT\									
			a = line											
			b = line											
			m = line) (H	21X11)									
Comments:					1				1				1	
ISDN 1	ISD	N 2	MGCF		I-CSCF		S-CSC	F_	P-CSCI		UE-A		U	E-C
<u> </u>	-								INVITE	+	INVITE	-	1	
						+	INVITE	╁	INVIIL	+				
		+	SETUP	+	INVITE									
		→	ALERT FAC					-				-	1	
		+	REL							+				
		→	RLC	→	INVITE	→	INVITE	→	INVITE			→	INVITE	
				+	180	+	180	-	180	_		+	100 Trying 180	
				→	180	→	180		180	→	180	-	100	
				+	200 OK	+	200 OK	+	200 OK	Ė		+	200 OK	
				→	ACK	→	ACK		ACK		200 OK	→	ACK	
	1			→	200 OK ACK	→	200 OK ACK		200 OK ACK	→	200 OK ACK	+	+	
	†			÷	BYE	÷	BYE		BYE	╅		+	BYE	
				→	200 OK BYE	→	200 OK BYE		200 OK BYE			→	200 OK BYE	
	1			→	BYE 200 OK BYE	→	BYE 200 OK BYE		BYE 200 OK BYE		BYE 200 OK BYE	+		
		<u> </u>		Ě	200 ON DIE		200 ON DIE	_ <	200 ON DIE		200 ON DIE		1	l

SIS_X	XSS	CFNR	13	ETS	SI E	N referenc N 300 207 es 6.1, 9.2.	-1 [i.5],			-	IGN refe ISI TS 12			
TSS ref	eren	ce:		SIP-ISDN	1-S	IP/Supplen	nen	tary_servic	ces/	CFNR					
Configu	ratio	n:		The user Configura			kΝ	2 and is p	rovi	ded with C	FNR	. User B	has	s a point-to	-multipoint
Selectio	n crit	teria:		CFNR op	tio	ing by the r n B, immed er determin	liate	release, r	no n	otification					
Test pui	rpose	e:				it a call is rouser B, the									er busy.
ISDN Pa				BC = PIX											
		ter val	ues:	PIXIT for Case a) r Case b) S Case c) S a = line (I b = line (I	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)										
Comme	nts:														
ISDN	1	ISD	N 2	MGCF		I-CSCF		S-CSC	F	P-CSC		UE-A		L	IE-C
										IND ATE	+	INVITE			
		-					+	INVITE	_	INVITE	_		1		
		1	+	SETUP	+	INVITE	+	II 4 VII L	-				1		1
			→	ALERT											
		 	←	DISC REL	→	INVITE	→	INIVATE		INI) /ITE			_	IND/ITE	
		1	7	KEL	7	IINVITE	7	INVITE	7	INVITE	_			INVITE 100 Trying	
					+	486	+	486	+	486	_			486	
					1	ACK	→	ACK	→	ACK				ACK	
					→	486	→	486		486	→	486			
		L		<u> </u>	+	ACK	+	ACK	-	ACK	+	ACK			

SIS_X	XSS	CFN	₹ 14		С	ISDN refe TSI EN 30 lauses 6.1	0 20 , 9.	07-1 [i.5], 2.2, 9.2.5				_	reference to: 'S 124 604 [45]	l
TSS refe	erend	ce:		SIP-ISD	N-S	SIP/Supple	mei	ntary_serv	ices	CFNR				
Configu	ratior	า:		The use Configu			ork I	ا and is	orov	rided with	i CFN	IR. User B	has a point-to-	multipoint
Selectio	n crit	teria:		CFNR s user C i	upp s ne	ding by the ported option etwork dete	on E ermi	3, immedia ined user l	ousy	/				
Test pur	rpose	e :				at a call is s user B, th							ssful. ork determined	l user busy.
ISDN Pa	aram	eter		BC = PI	XIT	•								
SIP Para		eci va	ues.	PIXIT for Case a) Case b) Case c) a = line b = line	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)									
Comme														_
ISDN	1	ISL)N 2	MGC	_	I-CSCI		S-CSC	: <u>-</u>	P-CS	SCF €	UE-A	UE	:-C
-							-		+	INVITE		INVITE		
							+	INVITE						
			←	SETUP	+	INVITE								
			7	ALERT					-					
			+	DISC										
			→	REL	→	INVITE	→	INVITE		INVITE				
		ļ			+	486 ACK	+	486 ACK		486 ACK	_			
					7 →	486	→	486		486	→	486	 	
		1			÷	ACK	÷	ACK		ACK	É	ACK		

SIS_X	XSS	CFNF	R 15		ΕT	ISDN refer SI EN 300 luses 6.1,	20	7-1 [i.5],				_		rence to: 4 604 [4		
TSS ref	feren	ce:		SIP-ISDN	1-S	IP/Supplem	nen	tary_servic	es/	CFNR						
Configu	ıratio	n:		The user Configura			kΝ	2 and is pro	ovi	ded with CF	FNR	. User B	has	a point-t	o-multipoint	
Selection	on cri	teria:		CFNR op user C is	tioi us	er determin	leas led	se, no notifi user busy								
Test pu	rpose	e :		User A ca	alls	user B, the	e ca	ased correct all is forward the forwa	dec	I to user C					ser busy.	
ISDN P values:		eter		BC = PIX												
SIP Par	ramet	ter va	lues:	PIXIT for Case a) r Case b) S	su no 1	oported heal 100 rel oported: 100	ade 0 re	r:	nd	ition						
				a = line (l b = line (l m = line (PIX	IT)										
Comme	ents:															
ISDN	1 1	ISD	N 2	MGCF		I-CSCF		S-CSCF		P-CSCI		UE-A			UE-C	
									L	INVITE	+	INVITE				
							+	INVITE	_	INVITE	-			-		
			+	SETUP	+	INVITE	Ť		1							
			→	ALERT												
							Ļ		Ļ				<u> </u>			
		<u> </u>		 	→	INVITE	→	INVITE		INVITE	_	1	→	INVITE		
-		 		-	→	486 ACK	→	486 ACK		486 ACK	-		→	486 ACK		
			+	CONNECT	,	200 OK	÷	200 OK		200 OK	+	200 OK	ŕ	, tort		
					→	ACK	→	ACK	→	ACK	→	ACK		1		
			+	DISC	+	BYE	+	BYE		BYE	+	BYE				
		<u> </u>	→	REL	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	<u> </u>		1	
		I	+	RLC		1	1	l .	_	1			<u> </u>	1		

		SCFNF	R 16		E1	ISDN refer SI EN 300 auses 6.1,	20 9.2	7-1 [i.5], .2, 9.2.5				NGN re ETSI TS		ence to: 4 604 [45	
TSS r						IP/Supplem									
Config	gurat	ion:		The user Configura			kΝ	2 and is pro	ovi	ded with CF	NF	R. User B h	as	a point-to	o-multipoint
Selec	tion o	criteria:		CFNR su	ıpp	ing by the r orted optior twork deter	ìΑ,	late releas		no notification	on				
Test p	ourpo	se:		User A c	alls	user B, the	ca	ll is forward	dec	if CFNR wa I to user C v to alert to the	vhc	is user			
ISDN values		meter		BC = PIX	= PIXIT										
			lues:	PIXIT for Case a) (Case b) (Case c) (a = line (b = line (Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)										
Comn												1			
ISDI	V 1	ISDN	12	MGCF		I-CSCF		S-CSCF		P-CSCF		UE-A			UE-C
\vdash									_	INVITE	+	INVITE	<u> </u>		
							_	INVITE	_	INVITE					
			+	SETUP	+	INVITE	_	IIIVIIL	<u> </u>		<u> </u>				
				ALERT	_							1			
			→	FAC											
					1	INVITE	→	INVITE		INVITE			→	INVITE	
					۰	486	+	486		486			+	486	
\vdash			_	CONNECT	1	ACK	→ ←	ACK 200 OK		ACK	_	200 OK	→	ACK	
\vdash			+	CONNECT	←	200 OK ACK	←	ACK		200 OK ACK		ACK	 		
 			+	DISC	7 ←	BYE	7 ←	BYE		BYE		BYE	 		
				REL	`	200 OK BYE	÷	200 OK BYE		200 OK BYE	÷	200 OK BYE	1		
				RLC											

SIS_X	XXSS	CFNF	₹ 17		E1	ISDN refe SI EN 300 auses 6.1,	20° 9.2	7-1 [i.5], .2, 9.2.5				_	eference to: 5 124 604 [45]	
TSS re	eferen	ice:				IP/Supple								
Config	uratio	n:		The use Configu			rk N	l2 and is p	rovi	ded witl	h CFN	R. User B I	nas a point-to-point	
Select	ion cr	iteria:		CFNR s	upp	ling by the orted, part twork dete	ial r	erouting (c			mediat	e release)		
Test p	urpos	e:										not succes o is netwo	sful. rk determined user b	usy.
ISDN I values		neter		BC = PI	XIT									
		eter va	ilues:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)										
Comm	ents:													
ISDI	N 1	ISD	N 2	MGC	F I	I-CSCI	F I	S-CSC			SCF €	UE-A	UE-C	
						1	-	INVITE	+	INVITE		+ +		
			+	SETUP	+	INVITE	_	INVITE	-			+	+	
			`	ALERT	Ť		+-		+					
			→	FAC										
			(REL										
			→	RLC	→	INVITE	→	INVITE		INVITE				
	ļ				+	486	+	486		486		1		
	 	 			→	ACK	→	ACK		ACK	+	400	1	
	 	\vdash		 	→	486	→	486 ACK		486	→ ←	486 ACK		
<u></u>		ļ			7	ACK	7	AUN	7	ACK		ACK		

SIS_XXSSCFNR 18	ETSI E	N reference EN 300 207 es 6.1, 9.2.2	-1 [2, 9	i.5], .2.5			-	NGN refero				
TSS reference:	SIP-ISDN-S											
Configuration:	The user B Configuration		k N	2 and is pr	rovi	ded with Cf	FNR	t. User B h	as	a point-to	-point	
Selection criteria:	Call forward CFNR, parti user C is us	al rerouting er determin	(op ed	otion A, late user busy		•						
Test purpose:	To verify that User A calls User B cont	user B, the	ca	ıll is forwar	dec	I to user C					er busy.	
ISDN Parameter values:	BC = PIXIT	C = PIXIT										
SIP Parameter values:	Dial string p	al string parameters options=PIXIT										
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition											
	a = line (PIX b = line (PIX m = line (PIX	(IT)										
Comments:												
ISDN 1 ISDN 2	MGCF	I-CSCF		S-CSCF		P-CSCF		UE-A		UE-C	1	
						INVITE	+	INVITE		1		
			+	INVITE	_	IINVITE				1		
	SETUP 🗲	INVITE	È									
→	ALERT											
→	FAC											
	→	INVITE	→	INVITE		INVITE			→	INVITE		
	+	486	+	486					+	486		
	→	ACK	→	ACK		ACK	4	222 014	→	ACK		
→	CONNECT →	200 OK	→	200 OK		200 OK	→	200 OK	1	+		
├	DISC +	ACK BYE	+	ACK BYE		ACK BYE	+	ACK BYE	1	+		
 	REL →	200 OK BYE	→	200 OK BYE		200 OK BYE	→	200 OK BYE	 	+		
	RLC		Ť		Ť		Ť		1		1	

SISI_XXSSCFNR 19	ISDN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	SIP-ISDN-SIP-ISDN/Supplementar	
Configuration:	The user A and the user C are in ne	etwork N1. The user B is in network N2 and is provided
	with CFNR. User D forwards the ca	Il to back to user B. User B has a point-to-multipoint
	Configuration.	
Selection criteria:	Call forwarding by the network	
	CFNR supported	
Test purpose:	Ensure that when user A calls user	B, the call is forwarded to user C and D.
	User D forwards the call to back to	user B. Ensure that the call is released.
ISDN Parameter	BC = PIXIT	
values:		
SIP Parameter values:	Dial string parameters options=PIX	Т
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and pre	condition
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.3.2.7.2 CFNR - SII

SII_X)	KSSCFN	R 01	ET	SII	N reference EN 300 403 9.2.2, 9.2.	-1	[i.3],			-	IGN reference ISI TS 124 604		
TSS ref	erence:		SIP-ISD	N-I	SDN/Suppl	em	entary_se	rvice	es/CFNR/				
Selection	on criteria	1:	with CFI	٧R		im					r B is in networ tification. User		
Test pu	rpose:		Ensure 1	tha		e c	all state (I	N10	the voice	tran	he call is forwa sfer on the me		
SIP Par values:	ameter		PIXIT fo Case a) Case b)	r si no Su Su (PI)	parameters upported he 100 rel pported: 10 pported: 10 XIT) XIT)	opt add	ions=PIXI er: el	Т					
Comme	ents:		111 – 11110	(' '	7(11)								
ISDN		N 2	MGCF	=	I-CSCF	:	S-CSC	F	P-CSC		UE-A	Į	JE-C
						+	INVITE	+	INVITE	+	INVITE		
		+	SETUP	+	INVITE								
		→	ALERTING REL	→	180	→	180	→	180	-	180		
		>	RLC					-		-			
	SETUP												
→ →	ALERTING CONNECT	-		→	200 OK	→	200 OK	→	200 OK	→	200 OK		
	551111251	<u> </u>		+	ACK	+	ACK	É	ACK	÷	ACK		
	DISC			+	BYE	+	BYE	+	BYE	+	BYE		
→	REL			→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE		
+	RLC												

SII	_XX	(SSCFNI	R 02	ET claus	SI E	N referenc EN 300 403 9.2.2, 9.2.	-1 ∣ 4.4	[i.3], , 9.2.5				NGN refere TSI TS 124			
TSS	refe	rence:		SIP-ISD	N-I	SDN/Suppl	em	entary_se	rvice	es/CFNR/					
Selec	ction	n criteria:		The use with CFI Configur	r A NR ratio	and the us , option A , on.	er (, la t	C are in ne te release	two , no	rk N1. The notification	. U:	ser B has a	point-	to-mul	-
Test	pur	pose:		Ensure to perform	that ed o	in the active correctly (e.	/e d .g. 1	call state (l testing Qo	N10 S pa		ran	the call is for			user C. 3-channels is
SIP F	ara	ameter va	liues.	PIXIT fo Case a) Case b)	r sı no Su Su (PI)	pported: 10 pported: 10 XIT) XIT)	ad 00 r	er: el		dition					
Comr	mer	nts:													
ISI	N	1 ISE	N 2	MGCF		I-CSCF		S-CSC	F	P-CSCF		UE-A			UE-C
									+	INVITE		INVITE			
							+	INVITE							
				SETUP	+	INVITE									
			→	ALERTING	→	180	→	180	→	180	→	180			
	+	SETUP	+	REL											
	÷	ALERTING		RLC											
	→	CONNECT			→	200 OK	→	200 OK		200 OK	→	200 OK			
					+	ACK	+	ACK		ACK	+	ACK			
	(DISC			(BYE	÷	BYE		BYE	_	BYE			
	→	REL			→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			
	+	RLC						1			1				

		CFNR	U 3		ETS	SDN refere SI EN 300 4 S 9.2.2, 9.2.	03	·1 [i.3]				NGN ref				
TSS refere	enc	e:		SIP-ISDN	I-IS	DN/Supple	me	ntary_servi	ces	s/CFNR/						
Configurati	ion			CFNR "ca	allin s re	and the use ig user is no leased to the	otifi	ed of call d	ive	rsion with d	live	rted to num	nber"	= Yes	, "diverting	
Selection of	crite	eria:				orted, optior ons suppor			re	lease						
Test purpo	se:			A is notifi presentat	ed o	when user / of call diver allowed - n ation allowe	sio 10 (n and inform	me	d of the dive	erte	d-to numb	er (u	ser C l	nas	
ISDN Para	me	ter valu	ies:													
SIP Param	ete	er value	s:	Dial string	g pa	arameters o	ptio	ons=PIXIT								
				Case a) r Case b) S	no 1 Sup Sup Sup PIX	ported: 100 ported: 100 IT) IT)) re	I	ndi	tion						
Comments	3:					•										
ISDN	1	IS	DN 2	MGCF		I-CSCF		S-CSCF	=	P-CSCF	=	UE-A			UE-C	
		•									+	INVITE				
 			_				+	INVITE	+	INVITE	-	1				
			+	SETUP	+	INVITE		IINVIIE	╁			+				
			→	ALERTING	→	180	→	180	→	180	→	180				
			+	REL												
-			→	RLC	_	101	L.	101	Ļ	101	4	101				
 	←	SETUP	1	1	→	181	→	181	7	181	7	181				
		ALERTING	3				1		╁		+	†				
<u> </u> -		CONNECT			→	200 OK	→	200 OK		200 OK		200 OK				
			4		+	ACK	+	ACK		ACK		ACK				
		DISC	-	1	←	BYE	←	BYE		BYE	+	BYE				
		REL RLC		1	7	200 OK BYE	7	200 OK BYE	7	200 OK BYE	7	200 OK BYE				

		SSCFN	I R	04			ISDN refe TSI EN 300 lauses 6.1	0 20)7-1 [i.5],					erence to: 24 604 [45]	
TSS re	fere	ence:			SIP-ISE	N-I	ISDN/Supp	lem	entary_se	ervic	es/CFNR				
Configu					The use provide Yes, "di	er A d w ver	and the us	ser call er is	C are in n ing user i	etwo	ork N1. The	l div	er B is in netversion with d ser" = No). U	iverted to no	ımber" =
Selecti	on (criteria					ported, opti			iate	release				
Test pu	urpo	ose:			call dive	ersio - C	on and not	info use	ormed of t or C is not	he d	iverted-to r	numl	rded to user per (user C h warding num	as presenta	ition not
SIP Pa	ıram	neter væ	alu	es:	PIXIT fo Case a) Case b)	or si no Su Su (PI (PI	XIT)	ead	er: ·el		dition				
Comm	ento	s·				,	,								
ISD			SD	N 2	MGC	F	I-CSCF	=	S-CS0	CF	P-CSC		UE-A	U	E-C
	<u> </u>					<u> </u>						+	INVITE		
	<u> </u>		_		+	1-	1	1	IND/ITE	+	INVITE		 	+	
	₩	-	-	+	SETUP	+	INVITE	+	INVITE		 	_	 	+	
	├	-		←	ALERTING		180	→	180		180		180	+	
-	├	1		<u>7</u> ←	REL	17	100	7	180	7	100	7	100	+	
	+	-		<u>₹</u>	RLC	+-	+	+	 		 		 	+	
	+-		-	<u>- </u>	INLO	→	181	→	181		181		181	+	
	+	SETUP	-		+	ť	101	ť	101	+	101	+	101	+	
		ALERTIN	IG		+	+-	†	+	 	-	 	_	 	+	
		CONNEC			+	→	200 OK	→	200 OK		200 OK		200 OK	+	
	ť	CONNEC	,,		+	+	ACK	+	ACK		ACK		ACK	+	
	+	DISC	-		+	+	BYE	+	BYE		BYE	+	BYE	-	
-		REL	_			→	200 OK BYE	<u>→</u>	200 OK BYE		200 OK BYE	→ →	200 OK BYE	+	

		SCFNR 0	5	ETS cla	SI E use	N referen EN 300 20 es 6.1, 9.2	7-1 [2.2, 9	i.5], .2.5			-	IGN reference ISI TS 124 604		
TSS ref	feren	ce:		SIP-ISDN	N-IS	DN/Supp	leme	ntary_serv	ices	CFNR				
Configu				The user with CFN	A a IR " s re	and the us calling us leased to	ser C er is	are in neto	vork call	N1. The u	/ith	B is in network diverted to num B has a point-to	nber" = No, "c	
Selection	on cri	teria:				orted, opti ons supp		immediat	e re	lease				
Test pu	irpose	e:		call diver	sior .R) a	n and not and user	inforr	ned of the	dive	erted-to nur	nbe	ded to user C, u er (user C has p g number (user	resentation a	allowed
SIP Pai	ramet	ter values	:				optio	ons=PIXIT						
				Case a) (no 1 Sup Sup PIX PIX	ported: 10 ported: 10 IT) IT)	00 re		ondi	tion				
Comme	ents:													
ISDN	1 1	ISDN	2	MGCF	=	I-CSC	CF	S-CSC	F	P-CSCF		UE-A	UE-C	
				+	+	+			+	INVITE	+	IIIVIIL		
							+	INVITE	Ť					
			+	SETUP	+	INVITE								
			→	ALERTING	→	180	→	180	→	180	→	180		
			+	REL										
			→	RLC										
	+	SETUP												
	→	ALERTING												
	→	CONNECT			→	200 OK	→	200 OK		200 OK	→	200 OK		
		ļ			+	ACK	+	ACK	+	ACK	+	ACK		
	+	DISC		1	+	BYE	+	BYE		BYE	+	BYE		
	→	REL	1		→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE		
1	+	RLC	1	1									1 1	

SI	I_XX	SSCFNR	06		TSI	ON referen EN 300 40 s 9.2.2, 9.2	3-1	[i.3],				NGN reference TSI TS 124 604		
TSS r	efere	nce:		SIP-ISE	I-NC	SDN/Supp	lem	entary_ser	vic	es/CFNR/				
Config	gurati	ion:									use	r B is provided v	with CF	NR
				"calling	use	r is notified	d of	call diversi	on	with diverte	d to	number" = Yes	, "diver	ting number
				is relea	sed	to the dive	rtec	d-to user" =	: Ye	s). User B	has	a point-to-multip	point C	onfiguration.
Select	tion c	riteria:						A, late rel						· ·
						tions supp								
Test p	urpo	se:		Ensure	tha	t when use	r A	calls user l	B, if	unanswere	ed, t	he call is forwar	ded to	user C. User
	•			A is not	ified	of call div	ersi	on and info	rm	ed of the div	vert	ed-to number (u	iser C h	nas
												ed of the forward		
						tation allov							J	,
ISDN	Para	meter val	ues:											
SIP P	aram	eter value	es:	Dial stri	ing r	parameters	op	tions=PIXI	Т					
					٠.									
				PIXIT fo	or su	apported he	ead	er:						
						100 rel								
				Case b	Su	pported: 10	00 r	el						
								el and pred	con	dition				
				1				•						
				a = line	(PI	XIT)								
				b = line										
				m = line	•	,								
Comn	nents	:			,	,								
ISD		ISDN	12	MGC	F	I-CSCI	=	S-CSCI	F	P-CSCF	=	UE-A		UE-C
												INVITE		
					-		-	INVITE	+	INVITE				
			+	SETUP	+	INVITE	_	IINVITE	+		+			
			→	ALERTING	→	180	→	180	→	180	→	180		
					-				-					
			1		→	181	→	181	→	181	→	181		
	÷	SETUP	(DISC										
	→	ALERTING CONNECT	→	REL	→	200 OK	→	200 OK	-	200 OK	→	200 OK		
					+	ACK	+	ACK	+	ACK	+	ACK		
	+	DISC			+	BYE	+	BYE		BYE	+	BYE		
	→	REL RLC	+		→	200 OK BYE	→	200 OK BYE	7	200 OK BYE	→	200 OK BYE		
		1.120					_!			1				

SII_X	XXS	SCFNR	07	E1 cla	rsi E ause	N reference EN 300 207 es 6.1, 9.2.	7-1 .2, 9	i.5], .2.5				NGN reference 124			
TSS ref	ere	nce:		SIP-ISDI	N-IS	DN/Supple	mei	ntary_serv	ices	/CFNR					
Configu	ırati	on:		The user with CFN	· A a IR "o s rel	nd the use calling user leased to th	r C r is r	are in net notified of	vork call	N1. The us	ith o	B is in netw diverted to r B has a poi	numb	er" = Y	es, "diverting
Selection	on c	riteria:				rted, option ons suppor		late relea	se						
Test pu	rpo	se:		diversion	and u	d not inform	ned	of the dive	ertec	l-to numbei	r (us		esen	tation r	notified of call not allowed - ntation not
SIP Par	ram	eter valu	es:	Dial strin PIXIT for Case a) Case b)	g pa sup no 1 Sup Sup PIXI PIXI	ported: 100 ported: 100 T) T)	ader) rel	:		iion					
Comme	ents	:			`										
ISDN	1	ISDN	2	MGC	F	I-CSCI	F	S-CSC		P-CSCI		UE-A			UE-C
									+	INVITE					
<u> </u>			+	SETUP	+	INVITE	+	INVITE	_		-		 		
<u> </u>			→ -	ALERTING	→ →	180	→	180		180		180			
			+	ALLININO	Ť	100	Ť	100	Ť	100	Ť	100			
								<u> </u>			上				
					→	181	→	181	→	181	→	181			
<u> </u>	+	SETUP	+	DISC		 		ļ		ļ			$oxed{oxed}$		
<u> </u>	→	ALERTING	→	REL	_	222 014	+	222 014		222 014	+	222 214	$oxed{oxed}$		
<u> </u>	→	CONNECT	+		→ +	200 OK	→	200 OK		200 OK ACK		200 OK	\vdash		
<u> </u>	+	DISC	+	+	+	ACK BYE	+	ACK BYE		BYE		ACK BYE	\vdash		<u> </u>
	-	0.00	1	1	_		-								
	→	REL			→	200 OK BYE	→	200 OK BYE		200 OK BYE		200 OK BYE			

SII_)	XXS	SCFNR	80	ET	TSI E	N referenc EN 300 207 es 6.1, 9.2.	'-1 [i.5],			E	NGN reference 124			
TSS ref	fere	nce:		SIP-ISDI	N-IS	DN/Supple	mer	ntary_servi	ces	/CFNR					
Configu				The user with CFN	A a IR "o s rel	nd the user calling user eased to th	r C i is r	are in netw	ork all	N1. The us	ith (numb	oer" = 1	is provided No, "diverting pint
Selection	on c	riteria:		CF Notifi	catio	ons support	ted	late releas							
Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified a diversion and not informed of the diverted-to number (user C has presentation allowed - COLR) and user C is not informed of the forwarding number (user B has presentation no allowed). SIP Parameter values: Dial string parameters options=PIXIT													allowed - no		
SIP Par	ram	eter value	es:	PIXIT for Case a) Case b)	sup no 1 Supp Supp PIXI PIXI	ported hea 00 rel corted: 100 corted: 100 T)	der rel	:	ndit	iion					
Comme	ents				(,									
ISDN		ISDN	2	MGC	F	I-CSCF	-	S-CSCF	=	P-CSCI		UE-A			UE-C
					+		+	INVITE	+	INVITE	_	INVITE			
			←	SETUP ALERTING	←	INVITE 180	→	180	→	180	→	180			
	← →	SETUP ALERTING CONNECT	←	DISC REL	→	200 OK	→	200 OK		200 OK	→	200 OK			
	+	DISC			+	ACK BYE	+	ACK BYE	+	ACK BYE	+	ACK BYE			
	→	REL RLC			→	200 OK BYE	→	200 OK BYE	→		→	200 OK BYE			

		SSCFNR	09		С	ISDN refe TSI EN 300 lauses 6.1	0 20 , 9.2	07-1 [i.5], 2.2, 9.2.5					eference to: S 124 604 [45	
TSS r	refe	rence:				ISDN/Supp								
Confi	gura	ation:								ork N1. The t Configura			etwork N2 and	d is provided
Selec	tion	criteria:		Partial r	erc	outing durin	g al	erting - no	no	ification				
Test p	ourp	ose:		Ensure	tha	t when use	r A	calls user	B, t	he call is fo	rwa	rded to use	er C.	
ISDN value		rameter		BC = PI	XΙΊ	Г								
SIP P			lues:	PIXIT fo Case a) Case b)	r s nc Su Su (PI	XIT)	ead	er: ·el		dition				
ISDN	J 1	ISDN	2	MGCI	=	I-CSCF	=	S-CSCI	F	P-CSCF	=	UE-A	l	JE-C
			Ī			1 230.						INVITE		
									+	INVITE				
	1		+	SETUP	+	INVITE	+	INVITE	-					
			→	ALERTING		180	→	180	-	180	→	180	+	
-	 		→	FAC	_	100	+	100	ť	100	ť	100	+	
			-	REL										
			→	RLC										
		SETUP												
<u> </u>	→	ALERTING			_	000 014	_	000 01/		000 014		000 014		
	→	CONNECT		-	→	200 OK ACK	→	200 OK ACK		200 OK ACK	→	200 OK ACK	_	
	+	DISC			+	BYE	+	BYE		BYE	+	BYE	+	
	→	REL			÷	200 OK BYE	⇒	200 OK BYE		200 OK BYE	→	200 OK BYE		
	+	RLC										<u> </u>		

SII_XX	SS	CFNR 10)		ET	SDN references SI EN 300 uses 6.1, 9	207	'-1 [i.5],				NGN refe ETSI TS 12			
TSS refe	ren	CE.				SDN/Supple			vices	CENR					
Configura											ICAT	B is in net	wor	k N2 an	d ie
Cornigura	סווג	11.										sion with d			
							IS I	eleased to	tne	aivertea-to	o us	er = res).	US	er B nas	a point-to-
				point Cor	_										
Selection	_					ting during									
Test purp	ose	e:										ded to user			
				of call div	ers/	ion and inf	orm	ned of the o	live	ted-to nun	nber	and user (C is	informe	ed of the
				forwardir	ng n	umber (us	er B	has prese	entat	ion allowe	d).				
ISDN Pa	ram	eter		BC = PIX	(IT										
values:															
SIP Para	me	ter values	3:	Dial strin	a pa	arameters	opti	ons=PIXIT							
					J 1										
				PIXIT for	SUI	pported he	ade	r·							
				Case a)			uuo	••							
						ported: 10	∩ re	J							
						ported: 10			andi [.]	tion					
				Case c)	Sup	ported. 10	UIE	and prece	Jilui	lion					
				- 1: /		· ·									
				a = line (
				b = line (
				m = line	(PI)	(II)									
Commen															
ISDN ²	1	ISDN	2	MGC	F	I-CSCI	<u> </u>	S-CSC	F	P-CSC		UE-A		l	JĘ-C
							-	1	+	INVITE	+	INVITE		1	
			-		1		+	INVITE	_	INVITE	1				
			+	SETUP	+	INVITE									
			→	ALERTING	→	180	→	180	→	180	→	180			
-			→	FAC REL	1	 	+	-	-	-	+	 		-	-
			→	RLC	→	181	→	181	→	181	→	181			
	+	SETUP													
	→	ALERTING CONNECT	<u> </u>		→	200 OK	→	200 OK	→	200 OK	→	200 OK		-	-
	7	CONNECT			7	ACK	₹	ACK	7	ACK	+	ACK		 	
	+	DISC			+	BYE	+	BYE	+	BYE	+	BYE			
	→	REL			→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE			
	+	RLC	<u> </u>	1	ــــــــــــــــــــــــــــــــــــــ	<u> </u>		1	ч—	<u> </u>	1	<u> </u>		<u> </u>	

SII_X	XS	SCFNR 1	1		E٦	ISDN refer SI EN 300 auses 6.1,	20	7-1 [i.5],				_		rence to: 24 604 [45]
TSS ref	fere	nce:		SIP-ISE	N-	SDN/Suppl	lem	entary_ser	vic	es/CFNR				
Configu	ırati	ion:		The use with CF	r A NR g r	and the us "calling use number is re	er (er is	C are in net s notified of	CE	ork N1. The all diversion	wit	h diverted	to ı	vork N2 and is provide number" = Yes, has a point-to-point
Selection	on c	riteria:		Partial r	ero	uting during	al p	erting						
Test pu	irpo	se:		Ensure call dive allowed	tha rsi - C	t when use on and not i	r A info use	calls user E rmed of the r C is not in	d	verted-to nu	ıml	oer (user C	h	C, user A is notified o as presentation not per (user B has
ISDN P values:		meter		BC = PI										
		otor volu		Dial otri	20	parameters	<u> </u>	tions_DIVIT	-					
SIF Fai	Iaiii	leter valu	es.	Diai Still	ıg	parameters	υþ	uons=Fixi						
				Case a) Case b)	no Su Su (PI (PI	ipported: 10 ipported: 10 XIT) XIT)	00 r	el	on	dition				
Comme	ents	:				,								
ISDN		ISDN	2	MGC	=	I-CSCF		S-CSCF		P-CSCF		UE-A		UE-C
			+						+	INVITE	_	INVITE		
							+	INVITE						
			+	SETUP	4	INVITE			L		L			
			→	ALERTING FAC	→	180	→	180	→	180	→	180		
			7	DISC					-		1			
			=	REL	→	181	→	181	→	181	→	181		1
	+	SETUP	Ť		_		Ť		ŕ		ŕ	.51		
		ALERTING	t											1
		CONNECT			→	200 OK	→	200 OK		200 OK	→	200 OK		
, in the second					+	ACK	+	ACK		ACK	+	ACK		
	+	DISC	↓		+	BYE	+	BYE	+	BYE	+	BYE		
	→	REL	Ь—		→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE		
	+	RLC	Щ.											

		SCFNR 1	12		С	ISDN refe TSI EN 300 lauses 6.1) 2(, 9.:	07-1 [i.5], 2.2, 9.2.5					erence to: 24 604 [45]	
TSS re						ISDN/Supp								
Configu	urati	ion:		with CF	NR ıg r	"calling us number is re	er i	s notified o	of ca	all diversion	wit	h diverted to r	ork N2 and is provinumber" = No, has a point-to-poir	
Selection	on c	criteria:		Partial r	erc	uting during	g al	erting - no	no	tification				
Test pu	ırpo	se:		call dive	rsi LR	on and not) and user	info	rmed of th	e d	iverted-to n	uml	oer (user C ha	C, user A is notified as presentation allo ser B has presenta	owed
ISDN P	ara	meter		BC = PI										
values:				_										
SIP Pa	ram	eter valu	es:	Dial stri	ng	parameters	ор	tions=PIXI	T					
				Case a) Case b)	nc St St (PI (PI	XIT))O ı	rel	con	dition				
Comme														
ISDN	1	ISDN	2	MGC	F L	I-CSCF		S-CSCI		P-CSCI		UE-A	UE-C	
							_	INVITE	+	INVITE				
			+	SETUP	+	INVITE	_	INVITE						
			→	ALERTING		180	→	180	→	180	→	180		
			→	FAC										
			+	REL										
	ļ.,	OFTUD	→	RLC		ļ	<u> </u>				_			
-	←	SETUP ALERTING	1	-					-		-			
	7	CONNECT			→	200 OK	→	200 OK	→	200 OK	→	200 OK		
			t		+	ACK	+	ACK	+		+	ACK		
	+	DISC			+	BYE	+	BYE	+		+	BYE		
	→	REL			→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	1	200 OK BYE		
	+	RLC	<u> </u>	L			<u> </u>			1				

SII_XX	XS	SCFNR 1	13			ISDN re ETSI EN 3 clauses 6	300 2	07-1 [i.5]						eference to: 124 604 [45	
TSS ref	ere	nce:		SIP-ISE	N-I	SDN/Sup	plem	entary_se	ervic	es/CFNF	₹				
Configu	rati	on:		The use Configu			vork i	N2 and is	prov	ided witl	h CFN	R . User	B h	as a point-to	-multipoint
Selection	n c	riteria:		CFNR o	pti	ding by th on B, imr ser deterr	nedia	ate releas		notifica	tion				
Test pu	rpo	se:		User A	call									<mark>sful.</mark> termined use	er busy.
ISDN Pa	ara	meter		BC = PI	XIT	-									
			es:	PIXIT fo Case a) Case b)	or si no Su Su (PI (PI	XIT)	head 100 r	er: el		dition					
Comme	nts	:													
ISDN	1	ISDN	2	MGC	F	I-CSC	F	S-CSC	CF	P-CS		UE-A		UE	E-C
									+	INVITE	+	INVITE			
							+	INVITE							
			←	SETUP ALERTING	+	INVITE 180	→	180		180	→	180			
			+	REL	7	100	7	100	7	100	7	100			
			→	RLC											
	+	SETUP	-										\vdash		
		REL # 17	1				-						\vdash		
		RLC			→	486	→	486		486	→	486			
					+	ACK	+	ACK		ACK		ACK			

SII_XXS	SCFNR	14		Е	ISDN re TSI EN 3			ı				l reference to: TS 124 604 [45]	
				С	lauses 6.	.1, 9.2	2.2, 9.2.5	,					
TSS refer	ence:		SIP-ISD	N-I	SDN/Sup	plem	entary_s	ervic	es/CFNR				
Configura	tion:					work I	N2 and is	prov	ided with	CFN	R. User B	has a point-to-multipo	oint
			Configu										
Selection	criteria:				ding by th								
					orted op					o noti	fication		
- .					etwork de								
Test purpo	ose:										not succe		
100110						tne c	all is forv	varde	a to user	· C wr	io is netw	ork determined user b	ousy.
ISDN Para	ameter		BC = PI	ΧΠ									
values:		l	Diel etei		1 -		DI	/IT					
SIP Parar	neter va	iues:	Diai strii	ng	paramete	ers op	tions=PL	XII					
			DIVIT fo	rc	upported	hood	or:						
			Case a)			Heau	С 1.						
					pported:	100 r	ام						
					pported:			econ	dition				
			Case c)	00	pportou.	1001	ci ana pi	COOII	aition				
			a = line	(PI	XIT)								
			b = line										
			m = line	•	,								
Comment	s:												
ISDN 1	ISDI	V 2	MGCI	=	I-CSC	CF	S-CS	CF	P-CS		UE-A	UE-C	
									INVITE	+	INVITE		
						+	INVITE		II VII L				
		←	SETUP ALERTING	+	INVITE		180		180		180		
		7	ALEKTING	7	180	→	100	7	100	7	100		
		(REL	Ļ									
		→	RLC	→	181	→	181		181		181		
				→	486 ACK	→ ←	486 ACK		486 ACK		486 ACK		
		<u> </u>	1	~	ACK	7	AUN		AUN		AUN		

		SSCFNF	R 15			ISDN refe ETSI EN 30 clauses 6.1	0 2	207-1 [i.5], 0.2.2, 9.2.5					erence to: 24 604 [45]
TSS re	efer	ence:		SIP-IS	DΝ	-ISDN/Supp	olei	mentary_se	rvi	ces/CFNR			
Config	ura	tion:		The us Config			ork	N2 and is	orc	vided with 0	CFI	NR . User B h	as a point-to-multipoint
Selecti	ion	criteria:		Call fo CFNR	rwa op	rding by the	rele	etwork ease, no not ed user bus		ation			
Test p	urpo	ose:		To ver User A	ify t	hat a call is Ils user B, t	re he	leased corre	ect ard	ed to user C		not succes ho is user de	sful. termined user busy.
ISDN I	Para	ameter va	alues	s: BC = F	ΊX	Т							
ISDN Parameter values: BC = PIXIT SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments:													
ISDN		ISDN	2	MGCF		I-CSCF		S-CSCF		P-CSCF		UE-A	UE-C
ISDIN	<u> </u>	IODIN	_	IVIGOR		1-0305		3-0306		F-COCF		INVITE	06-0
									+	INVITE	È		
							+	INVITE					
			+	SETUP	+	INVITE			Ę				
			→	ALERTING	→	180	→	180	→	180	→	180	
	+	SETUP	1		7	181	7	181	→	181	→	181	
-	→	REL # 17	<u> </u>			1						 	
	→	RLC # 17	1	1								1	
			→	CONNECT	→	200 OK	→	200 OK	→	200 OK	→	200 OK	
					+	ACK	+	ACK		ACK	+	ACK	
			←	DISC	+	BYE	+	BYE		BYE	+	BYE	
	1		→	REL	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	
	1		+	RLC									

SII_XXS	SCFNR	16			ISDN ref	ere	ence to:				NGN refe	erence to:	•	
					ETSI EN 30	00 2	207-1 [i.5],				ETSI TS 1	24 604 [4	5]	
					clauses 6.	1, 9	.2.2, 9.2.5							
TSS referen	ice:		SIP-IS	DN	-ISDN/Sup	ple	mentary_se	ervi	ces/CFNR					
Configuratio	n:										NR. User B ha	s a point-f	to-multipoint	
			Config					•				•	•	
Selection cri	iteria:				rding by th	e n	etwork							
							A, late rele	as	e, no notific	catio	n			
							nined user							
Test purpos	e:									was	not successf	ul.		
											ho is network		ed user	
							to alert to the							
ISDN Param	neter val	ues							<u> </u>					
	meter values: Dial string parameters options=PIXIT													
Sil i alameter values. Dial string parameters options—i 17(1)														
			PIXIT	for	supported I	nea	der:							
			Case a	a) n	o 100 rel									
					supported:	100	rel							
				,	• •		rel and pre	co	ndition					
				-, -										
			a = lin	e (F	YIXIT)									
			b = lin	•	,									
			m = lir											
Comments:														
ISDN 1	ISDN	2	MGCI	F	I-CSCF		S-CSCF	=	P-CSC	F	UE-A		JE-C	
											INVITE			
						+	INVITE	+	INVITE					
		+	SETUP	+	INVITE	_	INVITE	+		-				
		→	ALERTING	→	180	→	180	→	180	→	180			
		→	CONNECT	→	200 OK	→	200 OK	-	200 OK	→	200 OK			
		7	CONNECT	+	ACK	+	ACK		ACK		ACK			
			DISC	+	BYE	+	BYE	+	BYE		BYE			
		→	REL	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE		-	
		+	RLC		l									

SII_XX	SSC	CFNR 17			cl	ISDN refe TSI EN 300 auses 6.1	0 20 , 9.2	7-1 [i.5], 2.2, 9.2.5					erence to: 24 604 [45]
TSS refe	rend	ce:		SIP-ISDI	N-IS	SDN/Supple	eme	entary_ser	vices	/CFNR			
Configura	atior	า:				s in netwoi nt-to-point (rovid	ed with (CFNF	R supported,	partial rerouting. User
Selection	crit	eria:		CFNR su	ıpp	ing by the orted, partition	al re	erouting (d			ediat	e release)	
Test purp	ose) :		,					•			not successfu o is network	l. determined user busy.
ISDN Par values:	ram	eter		BC = PIX	ΊT								
values: SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)													
Commen		10011	_	1400	_	1.000		0.00		1 5 00			115.0
ISDN 1		ISDN 2	2	MGCF	- 	I-CSCI	- -	S-CS	<i>)</i> ⊦ ←	P-CS	€ 	UE-A	UE-C
							+	INVITE	_	IINVIIE			+ + + + + + + + + + + + + + + + + + + +
		•		SETUP	+	INVITE							
				ALERT									
				FAC	1		_						
<u> </u>				REL RLC	→	INVITE	→	INVITE	→	INVITE	-	+	
			_	ILLO	+	486	÷	486	+	486	-	+	1
					→	ACK	→	ACK	→	ACK			
					→	486	→	486	→	486	→	486	
					+	ACK	+	ACK	+	ACK	+	ACK	

		SCFNR	18		С	ISDN refe TSI EN 300 lauses 6.1) 2 , 9.	07-1 [i.5], 2.2, 9.2.5					eference to: 6 124 604 [45]					
TSS re	fere	ence:				ISDN/Supp												
Configu	urat	ion:				is in netwo int-to-point				vided with (CFN	IR supporte	ed, partial rerouting. Use					
Selecti	on d	criteria:		CFNR, user C	par is u	ding by the tial reroutin ser determi	g (ine	option A, la d user busy	/									
Test pu	urpo	se:		User A	cal	nat a call is Is user B, th ntinues to al	ne d	call is forwa	ırde	ed to user C			ssful. letermined user busy.					
ISDN F values:		meter		BC = P	IXI	Γ												
SIP Pa	ıram	neter va	lues		al string parameters options=PIXIT XIT for supported header:													
				Case a Case b Case c	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)													
Comm	ents	S:				,												
ISDN	1	ISDN	2	MGCF		I-CSCF		S-CSCF		P-CSCF		UE-A	UE-C					
-									4	INVITE	-	INVITE						
							+	INVITE	+	IIIVIIL	-							
				SETUP	+	INVITE			L									
				ALERTING	→	180	→	180		180	→	180						
			↓	FAC	→	181	→	181	→	181	+	181						
		SETUP							1		-							
-		REL # 17 RLC				-		-	1		-							
—	_	IVEO	→	CONNECT	→	200 OK	→	200 OK	→	200 OK	→	200 OK						
			-		+	ACK	+	ACK		ACK		ACK						
				DISC	+	BYE	+	BYE	+	BYE	+	BYE						
				REL	→	200 OK BYE	→	200 OK BYE	→	200 OK BYE	+	200 OK BYE						
			+	RLC		1		1										

6.3.2.8 Call Deflection

6.3.2.8.1 CD - SIS

SIS_XX	SSC	CD 01		С	TS lau	DN referei I EN 300 20 Ises 6.1, 9.	07- 2.2	1 [i.5], , 9.2.5				_		rence to: 24 604 [45	
TSS refer	ence	e:	SIP-IS	DN-SIP	/Su	pplementa	ry_	services/CD)						
Configura	tion:		Call D		im	mediate re				The user B , immediate					
Selection	crite	ria:	User E	3 has ac	tiva	ited the, Ca	all C	eflection in	nm	ediate respo	ons	e (option E	3, in	nmediate	release)
Test purpo	ose:		Ensure the ac	e that wl tive call	nen sta	user A cal	ls u e vo	iser B, the o	all	l is deflected on the media	l in	mediate to	us	er C. Ens	ure that in
SIP Paran values:			PIXIT Case a Case b Case o a = line b = line	for supp a) no 10 b) Supp	orte Orte orte orte	d: 100 rel		preconditio	n						
Comment		1001		1100		1.0005									
ISDN 2		ISDN	V 1	MGC	-	I-CSCF		S-CSCF		P-CSCF		UE-A		L	IE-C
							4	INVITE	+	INVITE	_	INVITE			
			SETUP	+	+	INVITE	Ì	III VIII L						1	
			FAC	→	→	181	→	181		181	→	181			
			REL	+	→	INVITE	→	INVITE	→	INVITE	<u> </u>		→	INVITE	
			RLC	→	,	100	_	100	Ļ	100	ļ.,	400	+	100 Trying	
\vdash	_				←	180 180	←	180 180		180 180		180 180	+	180	
—	_				7	200 OK	+	200 OK		200 OK	7	100	+	200 OK	
 					÷	ACK	→	ACK		ACK	\vdash		÷	ACK	
					→	200 OK	<u>→</u>	200 OK	<u>→</u>	200 OK	→	200 OK	<u> </u>	1	
					+	ACK	+	ACK	+	ACK		ACK			
					+	BYE	+	BYE					+	BYE	
					→	200 OK BYE	1	200 OK BYE		200 OK BYE	L		→	200 OK BYE	
					→	BYE	→	BYE		BYE		BYE	<u> </u>	ļ	
				l	+	200 OK BYE	+	200 OK BYE	4	200 OK BYE	+	200 OK BYE	<u> </u>		

SIS	_XX	SSCD			ETS cla	SDN refere SI EN 300 2 uses 6.1, 9	207	-1 [i.5], 2, 9.2.5				NGN re			
TSS re						IP/Supplem									
Config	urati	ion:	7	he user	A	and the use	r C	are in net	wor	k N1. The ι	user	B is in ne	two	rk N2 and	is provided
			v	vith Call	De	flection imn	nec	liate respor	nse	(option B,	imn	nediate rel	eas	e)	
			"	calling u	ser	is notified	of o	call diversion	n v	ith diverted	d to	number" =	= Ye	es, "diverti	ng number
			i	s releas	ed t	o the divert	ed	to user" =	Yes	s,). User B	has	a point-to	-mu	Itipoint Co	onfiguration.
Selecti	ion c	criteria:		Jser B h elease)	as :	activated th	e C	Call Deflecti	ion	immediate	res	ponse (op	tion	B, immed	iate
Test po	urpo	se:			nat	when user	Αc	alls user B	. th	e call is det	flect	ed immed	iate	to user C	. user A is
						all diversion									
						TIR) and ι									
						allowed).							. (-		
							ല വ	all state (N	10)	the voice t	rang	sfer on the	me	dia and R	-channels is
			-	erforme	d c	orrectly (e.	n t	esting OoS	na	rameters)	·	011 011 010	1110	ala alla B	onamiolo lo
SIP Pa	ram	eter va				arameters				ramotoroj.					
	ai ai i i	ictor vo	iiucs.	Jiai Stiiii	9 P	arameters	JPt	0113=1 17(11							
			-	PIXIT for	CII	pported hea	ade	ır.							
				Case a)			auc								
						ported: 100	n re	vI							
						ported: 100 ported: 100			ond	ition					
				,	-										
				a = line (
) = line (•									
			r	n = line	(PI)	XIT)									
Comm												,		,	
ISDN	12	ISD	N 1	MGC	F	I-CSCF		S-CSCF	=	P-CSCI		UE-A		L	IE-C
									_	INVITE	+	INVITE			
							+	INVITE	_	INVITE			-	1	
			SETUP	(+	INVITE									
			FAC	→	→	181	→	181		181	→	181	_	IND/ITE	
			REL RLC	←	→	INVITE	→	INVITE	7	INVITE	-		→	INVITE 100 Trying	
					←	180	+	180	+	180	+	180	÷	180	
					→	180	→	180		180	→	180			
	\vdash				←	200 OK ACK	+	200 OK ACK		200 OK ACK	+		←	200 OK ACK	
					→	200 OK	→	200 OK		200 OK	→	200 OK	ť	TON	
					+	ACK	+	ACK	+	ACK		ACK			
					+	BYE	+	BYE		BYE	-		+	BYE	
					→	200 OK BYE BYE	→	200 OK BYE BYE		200 OK BYE BYE	→	BYE	7	200 OK BYE	
						200 OK BYE	+	200 OK BYE		200 OK BYE		200 OK BYE	1	1	

SIS_	XXS	SSCD	03				ISDN refe ISI EN 300 auses 6.1,	20	7-1 [i.5],				GN refer SI TS 12			
TSS ref	erer	nce:		SII	P-IS	DN-	SIP/Suppl	eme	entary_services	/C	D					
Configu									C are in netwo			er B	is in net	vorl	k N2 and is	
				pro	ovide	ed v	vith, Call D	efle	ction immediate	e re	esponse (o	otior	n B, imme	edia	te release)	"calling
									ersion with dive							
									to user" = No).							
Selection	n cı	riteria:							e response (op						<u> </u>	
Test pu									calls user B, tl					ate 1	to user C. u	iser A
	. p o c								n and not infor							
									- TIR) and use							
									not allowed).		, 10 1101 11110		a or ano it	J	aranig mann	
									call state (N10	۱ tk	ne voice tra	nefe	r on the r	nec	lia and R-ch	nannels
									g. testing QoS			11310	,, 011 1110 1	1100		iaiiicis
SID Dar	ame	otor val							otions=PIXIT	Рυ	itameters).					
OII I ai	anne	cici vai	iucs.	סוכ	ai Su	iiig	parameter	3 U	אוטווט–וי ואו ו							
				יום	VIT f	ore	supported h	200	dor:							
							100 rel	Ita	Jei.							
							upported: 1	100	rol							
										-1: 1 :						
				Ca	ise c	:) 5	upportea:	100	rel and precon	aiti	on					
						/ D	13/17)									
							IXIT)									
							IXIT)									
				m	= lin	e (F	PIXIT)									
Comme																
ISDN	2	ISE	<u>N 1</u>		MG	CF	I-CSCF	=	S-CSCF		P-CSCF		UE-A		UE-C	
								-		_	INVITE	+	INVITE			
								+	INVITE	1	INVITE	-		1		
			SETU		(+	INVITE									
			FAC)	→	181	→	181		181		181	_		
			REL RLC		← →	→	INVITE	→	INVITE		INVITE			→	INVITE 100 Trying	
			ILLO			+	180	+	180		180	+	180	È	180	
						→	180	→	180		180	→	180			
			-	_		←	200 OK ACK	←	200 OK		200 OK ACK	-		+	200 OK ACK	
			1	-		7	200 OK	7 →	ACK 200 OK		200 OK	→	200 OK	7	AUN	
						+	ACK	+	ACK		ACK		ACK			
				[+	BYE	+	BYE		BYE			+	BYE	
			-			→	200 OK BYE BYE	→	200 OK BYE BYE		200 OK BYE BYE	→	BYE	→	200 OK BYE	
			1	-			200 OK BYE	÷	200 OK BYE		200 OK BYE		200 OK BYE	1	1	

SIS_			04			ETSI EN 3 clauses 6	00 .1,	ence to: 207-1 [i.5], 9.2.2, 9.2.5				NGN refe ETSI TS 1				
TSS refe	eren	ice:						entary_services								
Configur	atio	n:		provid User (with di No, "s	ed of is iver	with Call De provided w ted to numbed user rec	efle vith oer" eive	C and D are in ction immediate CD immediate r ' = No, "diverting es notification the Configuration.	res g r	esponse (o sponse. "ca number is r	ptioi Illing elea	n B, immed guser is no ased to the	diate tifie div	e release) ed of call div erted-to use	ersion er" =	
Selection				User E releas	3 ha e)	ıs activated	l the	e Call Deflection								
Test pur	Ensure that when user A calls user B, the call is deflected immediate to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation allowed - no TIR) and user C is not informed of the forwarding number (user B has presentation not allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters). BC = PIXIT															
ISDN Pa	ıran	neter					<i>y</i> (-	<u> </u>								
values:				BC = PIXII												
	arameter values: Dial string parameters options=PIXIT															
				Case Case	a) n b) S c) S e (F e (F	PIXIT) PIXIT)	100		diti	ion						
Commer	nts:				(, ,										
ISDN 2		ISI	DN 1	MGC	F	I-CSCF		S-CSCF	-	P-CSCF		UE-A		UE-C		
					Ì		1				+	INVITE				
							_	IND #TE	1	INVITE						
			SETUP	+	+	INVITE	_	INVITE	+		-		-			
			FAC	→	<u> </u>		1		\forall							
			REL	+	→	INVITE	→	INVITE	Ŀ	INVITE			→	INVITE		
			RLC	→	ļ_	100	Ļ	100	Щ	100	-	100	+	100 Trying		
					←	180 180	+	180 180		180 180	←	180 180	+	180		
					7	200 OK	7	200 OK		200 OK	7	100	+	200 OK		
					→	ACK	→	ACK		ACK	1		À	ACK		
					→	200 OK	→	200 OK	1	200 OK		200 OK				
					+	ACK	+	ACK		ACK	+	ACK		->-		
<u> </u>			 	1	+	BYE	4	BYE		BYE 200 OK BYE	-		+	BYE 200 OK BYE		
					→	200 OK BYE BYE	→	200 OK BYE BYE		BYE	→	BYE	7	ZUU OK BYE		
				1	÷	200 OK BYE	-	200 OK BYE		200 OK BYE		200 OK BYE	1			
					<u> </u>		<u> </u>	, · · · · · -			<u>_</u> _			,		

SIS	XXS	SCD (05			N reference N 300 207-		-				IGN refe			
				cla	ıse	s 6.1, 9.2.2	2, 9.	.2.5							
TSS ref	ferenc	e:		SIP-ISDN	I-SI	P/Supplem	ent	ary_service	es/	CD					
Configu	ıratior	า:								ded with Ca is a point-to					ponse
Selection	on crit	eria:								immediate ı					liate
Test pu	irpose):		immediat	e re	elease) was	no	t successf	ιĺ.	if Call Defle to user C w				•	
SIP Pai	ramet	er va	lues:	User A calls user B, the call is forwarded to user C who is user determined user busy. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)											
Comme	ents:			··· – ···· (,	,									
ISDN		ISI	DN 2	MGC	F	I-CSCF	•	S-CSCF	=	P-CSCF	:	UE-A		U	E-C
	Ì							0 000.				INVITE	Ī		_ <u> </u>
									+	INVITE					
			SETUP	+	+	INVITE	+	INVITE	-		1				
			FAC	→ → 181 → 181 → 181 → 181											
			REL	← → INVITE → INVITE → INVITE → INVITE											
			RLC	→		486	+	486		486				486	
	ļ					ACK	→	ACK		ACK	4		→	ACK	
	-					486 ACK	→	486 ACK		486 ACK		486 ACK	<u> </u>		
					•	AON	_	AUN		AON		TON			

SIS_X	XXS	SCD	06			ISDN refe TSI EN 300 lauses 6.1) 2(07-1 [i.5],				NGN ref ETSI TS			I
TSS refe	rence	e:		SIP-ISE	N-	SIP/Supple	me	ntary_servi	ces	s/CD					
Configura	ation:			User B	has	a point-to-	mu	Itipoint Con	fig	uration.					
Selection	crite	eria:		User B release		activated t	the	, Call Defle	ctic	on immediate	e re	esponse (op	tion B, i	imme	ediate
Test purp	ose:			immedi User A	ate	release) wa	as ı	not success	ful			ion immedia no is networ	-		
busy. SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)															
Commen	ts:				,	•									
ISDN ²	1	ISI	DN 2	MGC	F	I-CSCF		S-CSCF		P-CSCF		UE-A		UE	-C
									Ļ			INVITE			
							+	INVITE	+	INVITE	-	 			
			SETUP	-	+	INVITE	È	114411							
			FAC	→	→	181	→	181		181	→	181			
<u> </u>			REL	←	→	INVITE	→	INVITE		INVITE 486					
 			RLC	7	-	486 ACK	←	486 ACK		ACK	<u> </u>	 			
					→	486	→	486		486	→	486			
					+	ACK	+	ACK		ACK		ACK			

6.3.2.8.2 CD - SII

SI	I_XXSS(CD 01					ISDN refer	•			NGN reference to:							
							SI EN 300		E 2'		ETSI TS 124 604 [45]							
							auses 6.1,											
TSS	referenc	e:							entary_services									
Confi	iguration	:		The u	se	r B	is provided	d ha	as activated the	C	ALL DEFLE	CT	ION, optio	n B	s, immediat	te release.		
				User I	3	has	a point-to-	mu	Itipoint Configur	ati	ion.							
Selec	ction crite	eria:		User B has activated the CALL DEFLECTION, option B, immediate release														
Test		Ensure that when user A calls user B, the call is deflected immediate response to user C.																
	Ensure that in the active call state (N10) the voice transfer on the media and B-channels is																	
				performed correctly (e.g. testing QoS parameters).														
SIP F	Paramete	er		Dial string parameters options=PIXIT														
value				2.310	••••	.91		٦٢										
value				PIXIT	PIXIT for supported header:													
					Case a) no 100 rel													
					Case b) Supported: 100 rel													
					Case c) Supported: 100 rel and precondition													
				Case	Dase of Supported. Too retailed precondition													
				o – lin	a – lina (DIXIT)													
				a = line (PIXIT)														
					b = line (PIXIT)													
				m = III	m = line (PIXIT)													
	ments:			<u> </u>	_													
ISD	N 2 I	<u>SDN</u>	1	MG	iC	<u>F</u>	I-CSCF		S-CSCF		P-CSCF		UE-A		UE-	<u>C</u>		
										_	INVITE	+	INVITE					
		-	+-					+	INVITE	Ŧ	INVITE	+						
						+	INVITE											
			FA			→	181	→	181	_	181	→	181					
	SETUP ALERTING	←	RE		<u>+</u>	→	180	→	180	-	180	4	180		 			
CONNECT		-	INL		_	÷	200 OK	÷	200 OK		200 OK	→	200 OK					
						→	ACK	→	ACK		ACK		ACK					
	DISC	+				+	BYE	+	BYE		BYE	+	BYE					
	REL RLC	→	+			→	200 OK BYE	→	200 OK BYE		200 OK BYE	→	200 OK BYE					
	KLC	7					1	1										

SII_XXSSCD 02			E٦	SI	ON reference EN 300 207 ses 6.1, 9.2.	7-1	[i.5],		NGN reference to: ETSI TS 124 604 [45]						
TSS reference:	SIP-ISDN-ISDN/Supplementary_services/CD														
Configuration:	The user B has activated the CALL DEFLECTION, option B, immediate release "calling user is notified of call diversion with diverted to number" = Yes, "diverting number is released to the diverted-to user" = Yes. User B has a point-to-multipoint Configuration.														
Selection criteria:	User B has activated the CD immediate response, option B, immediate release														
Test purpose:	Ensure that when user A calls user B, the call is deflected immediate to user C, user A is notified of call diversion and informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is informed of the forwarding number (user B has presentation allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).														
SIP Parameter		Dial string parameters options=PIXIT													
values:	Dial offing parameters options—1 1/(1)														
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)														
Comments:															
ISDN 2 ISDN	\ 1	1 M	ĢС	F	I-CSCF		S-CSCF		P-CSCF		UE-A	UE-C			
	+							+	INVITE	Ť	IIIVIIL				
						+	INVITE								
		ETUP AC	<u>+</u>	+	INVITE 181	→	181	1	181	-	181	1			
SETUP ←		REL •			101	╀	101	+	101	7	101	+			
		LC		→	180	→	180		180		180				
				→	200 OK	→	200 OK		200 OK		200 OK				
DISC ←	+		-	→	ACK BYE	+	ACK BYE	→	ACK BYE	+	ACK BYE	1			
REL +			+	→	200 OK BYE	7	200 OK BYE	<u>₹</u>	200 OK BYE	7	200 OK BYE	1			
RLC +				Ť		Ė		Ť		Ť		1			

SII_X>				ETS cla	SI us	EN es (eference t 300 207-1 6.1, 9.2.2, 9	[i.5 9.2	.5					N reference ITS 124 60				
TSS refere	ence:			SIP-ISDN-ISDN/Supplementary_services/CD														
Configurat	ion:			immedia "divertin	The user B has activated the CALL DEFLECTION immediate response, option B, immediate release "calling user is notified of call diversion with diverted to number" = Yes, "diverting number is released to the diverted-to user" = No. User B has a point-to-multipoint Configuration.													
Selection (criter	ia:		User B h	าลร	s ac	tivated the	CE) imme	diate	re	sponse, op	tion	B, immedia	ate ı	release)	
Test purpo				User B has activated the CD immediate response, option B, immediate release Ensure that when user A calls user B, the call is deflected immediate response to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation not allowed - COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).									C has ber					
SIP Param	S:	PIXIT fo Case a) Case b)	r s nc St St (PI	upp 10 upp upp upp IXIT	orted: 100 i orted: 100 i -) -)	ler: rel			diti	on								
Comments	S:																	
ISDN :		ISI	NC	1 MG	ЭC	F	I-CSCF	: 	S-C	SCF		P-CSCF		UE-A			UE-	С
											+	INVITE						
				SETUP	Z	_	INVITE	+	INVITE									
				FAC	-		181	→	181		→	181	→	181	_		_	
	+	REL	+	Ť	1.2.	Ť	1.0.		Ė		Ť	1.2.7			-			
	ALER ⁻			RLC	→	→	180	→	180			180	→	180				
	CONN	ECT	→				200 OK	→	200 OK			200 OK	→	200 OK				
DISC +			_		<u> </u>		ACK	→	ACK			ACK	→	ACK				
REL →			<u> </u>		BYE 200 OK BYE	←	BYE 200 OK	RVE		BYE 200 OK BYE	←	BYE 200 OK BYE						
RLC €					\vdash	1	ZUU UN DIE	7	200 OK	חוב	7	ZUU UN DIE	7	200 ON DIE	- 			
L	ILLO		•	<u> </u>	1	Щ.	L	—	1		Щ							

TSS reference: SIP-ISDN-ISDN/Supplementary_services/CD	S	II_XXSSCD	ETSI EN 300 207-1 [i.5], clauses 6.1, 9.2.2, 9.2.5											NGN refe ETSI TS 12			
immediate release "calling user is notified of call diversion with diverted to number" = No, "diverting number is released to the diverted-to user" = No. User B has a point-to-multipoint Configuration. Selection criteria: User B has activated the CALL DEFLECTION immediate response, option B, immediate release Test purpose: Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) Comments: ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C SETUP ← NINVITE NINVITE NINVITE SETUP ← NINVITE NINVITE NINVITE SETUP ← NINVITE NINVITE NINVITE NINVITE ALERTING → REL ← NINVITE NINVI	TSS re	eference:			SIP-	IS	D١	I-ISDN/Sup	ple	mentary_se	erv	rices/CD					
Selection criteria: User B has activated the CALL DEFLECTION immediate response, option B, immediate release Ensure that when user A calls user B, the call is forwarded to user C, user A is notified of call diversion and not informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C SETUP ← REL ← INVITE	Config	uration:			immediate release "calling user is notified of call diversion with diverted to number No, "diverting number is released to the diverted-to user" = No. User B has a point											umber" =	
of call diversion and not informed of the diverted-to number (user C has presentation allowed - no COLR) and user C is not informed of the forwarding number (user B has presentation not allowed). SIP Parameter values: Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Comments: ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C SETUP	Selecti	ion criteria:			Use	r E	3 ha	as activated			FL	ECTION im	me	diate respo	nse	e, option l	3,
PIXIT for supported header:	Test p	urpose:			of ca	all ve	div d -	rersion and no COLR)	no and	t informed o	of t	he diverted-	to	number (use	er (C has pre	sentation
ISDN 2 ISDN 1 MGCF I-CSCF S-CSCF P-CSCF UE-A UE-C	SIP Pa	S :	PIXI Cas Cas Cas a = 1 b = 1	T e a e d in	for a) r o) S c) S e (I e (I	supported no 100 rel Supported: Supported: PIXIT)	hea 100	ader:) rel		ondition							
	Comm	ents:															
SETUP	ISDI	N2 ISD	N 1	1	MG	CF		I-CSCF		S-CSCF		P-CSCF				U	E-C
SETUP C INVITE									-		Ļ	INIV/ITE	+	INVITE	_		
SETUP			1			-			4	INVITE	_	INVIIE	1	+ +			
FAC			1	SETUE	,	6	+	INVITE	<u> </u>		l		T				
ALERTING RLC 180 180 180 180 180																	
CONNECT → 200 OK → 200 OK → 200 OK → 200 OK → 200 OK → 200 OK → 200 OK → ACK → ACK → ACK → ACK → ACK → ACK → ACK → ACK → ACK → BYE EBYE <t< td=""><td></td><td></td><td>+</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			+														
→ ACK → ACK → ACK → ACK DISC ← BYE ← BYE ← BYE ← BYE ← BYE				RLC		→			→								_
DISC		CONNECT	→	ļ		_			→				_				ļ
		DIGG	+	ļ		_			7				_				
				l		4									_		
RLC (+	-			1		\dashv	7	200 ON DIE	7	ZUU UN DIE	╀	200 ON DTE	+~	200 ON DIE			

SII_	xxss	CD	05				-	SDN refere						NGN re				
					ETSI EN 300 207-1 [i.5],									ETSI TS	124	604 [45]]	
								uses 6.1, 9										
TSS refe		:			SIP-ISDN-ISDN/Supplementary_services/CD													
Configur	ation:				the CA to-mul	۱LL tip	_ DI oint	EFLECTIO	N d tion	uring alertir ı.	ng	ded with CD, , option B, ir	nm	ediate rele	ease	. User B	has	a point-
Selection	crite	ria:			User E releas		as a	activated th	ie C	CALL DEFL	EC	CTION during	g a	lerting , op	tion	B, imme	ediate	Э
Test purp	ose:											if CD perfo d to user C v						
SIP Para		PIXIT Case a Case I	for a) (b) (c) (e (su no Sup Sup PIX PIX	pported head 100 rel pported: 100 pported: 100 (IT)	ade 0 re		nd	lition									
Commer	ts:																	
ISDN	2	13	SDN	1	MG	C	F	I-CSCF		S-CSCF	•	P-CSCF		UE-A		L	JE-C	
											Ļ		+	INVITE				
									4	INVITE	_	INVITE		+	+		+	
	S					+	+	INVITE	È		1			† †	+		+	
F						→												
				RE			→	181	→	181	→	181	→	181				
RLC #17 → F				RL	L	→	→	486	→	486	_	486	4	486	-			
							+	ACK	+	ACK		ACK		ACK	_			

SI	I_XXS	SCD 06				С	ISDN refe TSI EN 300 lauses 6.1	0 2 , 9.	07-1 [i 2.2, 9.	i.5], .2.5						erence to: 24 604 [45]
TSS re				SIP-ISDN-ISDN/Supplementary_services/CD												
Config	uration	า:		The user B is in network N2 and is provided with the CALL DEFLECTION during alerting, option B, immediate release. User B has a point-to-multipoint Configuration.												
Select	ion crit	eria:		Jser eleas		nas	s activated	the	CALL	. DEFL	E	CTION du	ring	alerting,	opti	on B, immediate
Test p	urpose) :	ι		A c											was not successful. determined user
SIP Pa	F () ()	PIXIT Case Case Case a = lir	fo a) b) c)	r s nc Su Su (PI		ead	der: rel			dition						
Comm	ents:															
ISD	N 2	ISDN	1	MG	CF		I-CSCF		S-C	CSCF		P-CSC		UE-A		UE-C
											_	INVITE	+	INVITE		
				-+	+			+	INVITE		_	IINVIIE		+ -		
			SETU		- (INVITE									
	FA				> -	>	181	→	181	-	→	181	→	181		
			REL		← → -	-	486	→	486		→	486	-	486		
			ILLO		1		ACK	-	ACK			ACK		ACK		

6.3.2.9 Three Party service 3PTY

SII_xxSS3PTY01	ISDN reference to: ETSI EN 300 188-1 [i.6],	NGN reference to: ETSI TS 129 163 [i.20]						
	clause 9.2							
TSS reference:	SIP-ISDN-ISDN/Supplementary_service	es/3PTY						
Selection criteria:	The user B is in network N1 and is provuser C is in the network N1 User B has	ided with 3PTY. The user A is in network N2 and a point-to-multipoint Configuration.						
Test purpose:	Ensure that user B can establish a three-way conversation call with user A and user C and release the Active-Idle connection (B-C). The call clearing procedure is performed from user A after the Active-Held call has been retrieved.							
ISDN Parameter	BC =PIXIT							
values:								
SIP Parameter values:	Dial string parameters options=PIXIT							
	PIXIT for supported header:							
	Case a) no 100 rel							
	Case b) Supported: 100 rel							
	Case c) Supported: 100 rel and precond	dition						
	a = line (PIXIT)							
	b = line (PIXIT)							
	m = line (PIXIT)							
Comments:								

SII_xxSS3PTY02	ISDN reference to:	NGN reference to:					
	ETSI EN 300 188-1 [i.6],	ETSI TS 129 163 [i.20]					
	clause 9.2, figure A.2						
TSS reference:	ISDN-ISDN/Supplementary_service:	s/3PTY/					
Selection criteria:		provided with 3PTY. The user A is in network N2 and has a point-to-multipoint Configuration.					
Test purpose:	Ensure that user B can establish a three-way conversation call with user A and user and release the Active-Held connection (B-C). The call clearing procedure is perform from user B.						
ISDN Parameter	BC = PIXIT						
values:							
SIP Parameter values:	Dial string parameters options=PIXI	Г					
	PIXIT for supported header:						
	Case a) no 100 rel						
	Case b) Supported: 100 rel						
	Case c) Supported: 100 rel and pred	condition					
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:							

SII_xxSS3PTY03	ISDN reference to:	NGN reference to:								
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI TS 129 163 [i.20]								
TSS reference:	SIP-ISDN-ISDN/Supplementary_servi	SIP-ISDN-ISDN/Supplementary_services/3PTY								
Selection criteria:		The user B is in network N1 and is provided with 3PTY. The user A is in network N2 and ser C is in the network N1 User B has a point-to-multipoint Configuration.								
Test purpose:		nsure that user B can establish a three-way conversation call with user A and user C nd release the Active-Idle connection (A-B). The call clearing procedure is performed								
ISDN Parameter values:	BC =PIXIT									
SIP Parameter values:	Dial string parameters options=PIXIT									
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel									
	Case c) Supported: 100 rel and preco	ndition								
	a = line (PIXIT) b = line (PIXIT)									
	m = line (PIXIT)									
Comments:										

SII_xxSS3PTY04	ISDN reference to:	NGN reference to:								
	ETSI EN 300 188-1 [i.6], clause 9.2	ETSI TS 129 163 [i.20]								
TSS reference:	SIP-ISDN-ISDN/Supplementary_servi	SIP-ISDN-ISDN/Supplementary_services/3PTY								
Selection criteria:		The user B is in network N1 and is provided with 3PTY. The user A is in network N2 and user C is in the network N1 User B has a point-to-multipoint Configuration.								
Test purpose:	and release the Active-Idle connection	insure that user B can establish a three-way conversation call with user A and user C and release the Active-Idle connection (A-B). The call clearing procedure is performed rom user C after the Active-Held call has been retrieved.								
ISDN Parameter values:	BC =PIXIT									
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and preco a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ndition								
Comments:										

SIS_xxSS3PTY05	ISDN reference to:	NGN reference to:								
T00 (ETSI EN 300 188-1 [i.6], clause 9.2	ETSI TS 129 163 [i.20]								
TSS reference:	SIP-ISDN-ISDN/Supplementary_service									
Selection criteria:		The user B is in network N1 and is provided with 3PTY. The user A and user C are in the network N2. User B has a point-to-multipoint Configuration.								
Test purpose:	and B release the Active-Idle connection	Ensure that user B can establish a three-way conversation call with user A and user C and B release the Active-Idle connection (B-C). The call clearing procedure is performed from user A after the Active-Held call has been retrieved.								
ISDN Parameter	BC =PIXIT									
values:										
SIP Parameter values:	Dial string parameters options=PIXIT									
	PIXIT for supported header:									
	Case a) no 100 rel									
	Case b) Supported: 100 rel									
	Case c) Supported: 100 rel and precond	lition								
	a = line (PIXIT)									
	b = line (PIXIT)									
	m = line (PIXIT)									
Comments:										

SIS_xxSS3PTY06	ISDN reference to: ETSI EN 300 188-1 [i.6], clause 9.2, figure A.2	NGN reference to: ITU-T Q.1912.5 [51]
TSS reference:	ISDN-ISDN/Supplementary_services/3PTY	//211702
Selection criteria:	The user B is in network N1 and is provided network N2. User B has a point-to-multipoir	d with 3PTY.The user A and user C are in the nt Configuration.
Test purpose:		ay conversation call with user A and user C B-C). The call clearing procedure is performed
ISDN Parameter	BC = PIXIT	
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and preconditio	on .
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SIS_xxSS3PTY07	ISDN reference to:	NGN reference to:								
	ETSI EN 300 188-1 [i.6], clause 9.2	ITU-T Q.1912.5 [51]								
TSS reference:	SIP-ISDN-ISDN/Supplementary_servi	SIP-ISDN-ISDN/Supplementary_services/3PTY								
Selection criteria:		The user B is in network N1 and is provided with 3PTY. The user A and user C are in the network N2. User B has a point-to-multipoint Configuration.								
Test purpose:		Ensure that user B can establish a three-way conversation call with user A and user C and B release the Active-Idle connection (A-B). The call clearing procedure is performed								
ISDN Parameter values:	BC =PIXIT									
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and preco a = line (PIXIT)	ndition								
Comments:	b = line (PIXIT) m = line (PIXIT)									

SIS_xxSS3PTY08	ISDN reference to:	NGN reference to:								
	ETSI EN 300 188-1 [i.6], clause 9.2	ITU-T Q.1912.5 [51]								
TSS reference:	SIP-ISDN-ISDN/Supplementary_servi	ces/3PTY								
Selection criteria:		The user B is in network N1 and is provided with 3PTY. The user A and user C are in the network N2. User B has a point-to-multipoint Configuration.								
Test purpose:	and B release the Active-Idle connecti	Ensure that user B can establish a three-way conversation call with user A and user C and B release the Active-Idle connection (A-B). The call clearing procedure is performed rom user C after the Active-Held call has been retrieved.								
ISDN Parameter	BC =PIXIT									
values:										
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	ndition								
Comments	Case c) Supported: 100 rel and preco a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	naition								
Comments:										

6.3.2.10 TP

SI_XXSSTP01	ISDN reference to: ETSI EN 300 141-1 [i.7], clause 7 ETSI EN 300 196-1 [i.9], clause 7.1			NGN reference to: ITU-T Q.1912.5 [51], annex B.10				
TSS reference:	SIP-ISDN/Supplementa	ary_servic	es/TP					
Selection criteria:	The called user is provi	ded with ⁻	ΓP. User E	has a poi	int-to-multipoint Configuration.			
Test purpose:	Ensure that the user B	can provid	de the sus	pend and	resume procedure			
ISDN Parameter values:	SETUP = 3,1 kHz audio	ο;						
SIP Parameter values:	Dial string parameters of PIXIT for supported hea	Dial string parameters options=PIXIT PIXIT for supported header:						
	Case a) no 100 rel							
	Case b) Supported: 100	o rel						
	Case c) Supported: 100	rel and p	reconditio	n				
	a = line (PIXIT)							
	b = line (PIXIT)							
	m = line (PIXIT)							
Comments:								
	SIP		SUT		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	+		←	ALERT			
	200 OK INVITE	+		←	CONN			
	ACK	→						
	INVITE	+		-	SUSPEND			
	200 OK INVITE	→		→	SUS_ACK			
	ACK	+						
	INVITE	+		+	RESUME			
	200 OK INVITE	→		→	RES_ACK			
	ACK	+						
	BYE	(+	DISC			
	200 OK BYE	→		→	REL			

SI_XXSSTP02	ISDN refere		NGN reference to:			
	ETSI EN 300 141-1 ETSI EN 300 196-1		110-1	Q.1912.5 [51], annex B.10		
TSS reference:	SIP-ISDN/Supplemen		-1			
Selection criteria:	User B has a point-to-	multipoint Configu	ration.			
Test purpose:				resume procedure and that the		
	call can be released fr		er during the	call suspension.		
ISDN Parameter values:	SETUP = 3,1 kHz aud					
SIP Parameter values:	Dial string parameters	options=PIXIT				
	PIXIT for supported he	eader:				
	Case a) no 100 rel					
	Case b) Supported: 10					
	Case c) Supported: 10	00 rel and precond	lition			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP	SI	JT	ISDN		
	INVITE	→	→	SETUP		
	180 Ringing	((ALERT		
	200 OK INVITE	(+	CONN		
	ACK	→				
	INVITE (sendonly)	+	+	SUSPEND		
	200 OK INVITE	→	→	SUS ACK		
	(reconly)			SOS_ACK		
	ACK	+				
	BYE	→				
	200 OK BYE	*				

SI XXSSTP03	ISDN referen	ce to:			NGN reference to:		
01_XX0011 00	ETSI EN 300 141-1 [i.7], clause 7			ITU-T Q.1912.5 [51], annex B.10			
	ETSI EN 300 196-1 [i				Q. 10 1210 [0 1], a.m.ex 2110		
TSS reference:	SIP-ISDN/Supplementa						
Selection criteria:	User B has a point-to-m			ation.			
Test purpose:					nicast media streams if a SUS		
	message (ISDN subscr	iber initiat	ed) was	received. E	Ensure that the connection is		
	cleared after T2 was ex						
ISDN Parameter values:	SETUP = 3,1 kHz audio						
SIP Parameter values:	Dial string parameters of	options=P	IXIT				
	PIXIT for supported hea	ader:					
	Case a) no 100 rel						
	Case b) Supported: 100						
	Case c) Supported: 100) rel and p	recondit	ion			
	a line (DIVIT)						
	a = line (PIXIT) b = line (PIXIT)						
	m = line (PIXIT)						
Comments:							
Comments.	SIP		SUT	-	ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	+		-	ALERT		
	200 OK INVITE	+		+	CONN		
	ACK	→					
	INVITE	+		+	SUSPEND		
	200 OK INVITE	→		→	SUS_ACK		
			T2 expir	y			
	BYE	+					
	200 OK BYE	→					

6.3.2.11 CUG

SI_XXSSCUG01	ISDN reference to:						
	ETSI EN 300 138-1 [i.10],						
T00 t	OID IODNI/O		clauses 9.2.2	, 9.2.4			
TSS reference:	SIP-ISDN/Supplementa				0110		
Selection criteria:	options: not IA; not ICE				g CUG supplementary nt Configuration.		
Test purpose:					h incoming access not		
					G, after the receipt of an		
	INVITE message the ne internal errors.	etwork in	itiate call clearir	ng to the	calling user with 500 Server		
ISDN Parameter values:							
SIP Parameter values:	Dial string parameters	options=F	PIXIT				
	PIXIT for supported he	ader:					
	Case a) no 100 rel						
	Case b) Supported: 10	0 rel					
	Case c) Supported: 100	0 rel and	precondition				
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:			T	1 1			
	SIP		SUT		ISDN		
	INVITE	→					
	500 Server Internal	←					
	Error	1					
	ACK	→					

SI_XXSSCUG02	ISDN reference to:					
	ETSI EN 300 138-1 [i.10], clauses 9.2.2, 9.2.4					
TSS reference:	SIP-ISDN/Supplement	tary carvi		9.2.4		
Selection criteria:	Term: The called user			following	CLIG supplementary	
Selection criteria.	options: not IA; ICB. U					
Test purpose:					incoming access not	
					er the receipt of an INVITE	
	•	initiate cal	I clearing to the	calling us	ser with 500 Server internal	
100110	errors.					
ISDN Parameter values:						
SIP Parameter values:	Dial string parameters	options=F	PIXIT			
	PIXIT for supported he	eader:				
	Case a) no 100 rel					
	Case b) Supported: 10	00 rel				
	Case c) Supported: 10	00 rel and	precondition			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP		SUT		ISDN	
	INVITE	→				
	500 Server Internal	←				
	Error					
	ACK	→				

SI_XXSSCUG03	ISDN reference to: ETSI EN 300 138-1 [i.10], clauses 9.2.2, 9.2.4						
TSS reference:	SIP-ISDN/Supplemen						
Selection criteria:	Term: The called use options: IA; not ICB. I				wing CUG supplementary Configuration.		
Test purpose:		ılls bar	red within the CU	G, afte	with incoming access allowed or the receipt of an INVITE pase.		
ISDN Parameter values:	9						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP		SUT		ISDN		
	INVITE	→					
	100 Trying	←		→	SETUP		
	180 Ringing	(←	ALERT		
	200 OK INVITE	←		←	CON		
	ACK	→	+				
			Conversation				
	BYE	→		→	DISC		
	200 OK BYE	←		←	REL		

SI_XXSSCUG04	ISDN reference to: ETSI EN 300 138-1 [i.10], clauses 9.2.2, 9.2.4							
TSS reference:	SIP-ISDN/Supplemen							
Selection criteria:	Term: The called user options: IA; ICB. Use				wing CUG supplementary onfiguration.			
Test purpose:		arred	within the CUG, a	fter the	with incoming access allowed e receipt of an INVITE message			
ISDN Parameter values:								
SIP Parameter values:	Dial string parameters	Dial string parameters options=PIXIT						
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)							
Comments:	, ,							
	SIP		SUT		ISDN			
	INVITE	→						
	100 Trying	+		→	SETUP			
	180 Ringing	+		+	ALERT			
	200 OK INVITE	+		+	CON			
	ACK	→						
			Conversation					
	BYE	→		→	DISC			
	200 OK BYE	←		←	REL			

6.3.2.12 Hold

SI_XXSSHOLD 01	ISDN refere		NGN reference to: ITU-T Q.1912.5 [51], annex B.10				
TSS reference:	SIP-ISDN/SS/HOLD/						
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams						
ISDN selection criteria:	Support the generic notification procedure for HOLD supplementary service						
Test purpose:	Ensure that a party can put the other party on hold at any time after the call is						
				e that a party can retrieve the call			
	previously put on hold		J	' '			
	The calling party shou						
	The calling party shou						
	The called party shou						
	The called party shou		e the other p	party			
SIP Parameter values:	Dial string parameters	s options=PIXIT					
	PIXIT for supported h Case a) no 100 rel	eader:					
	Case b) Supported: 1	00 rol					
	Case c) Supported: 1		ition				
	,	·	ILIOIT				
	SDP: a=sendonly (pu						
	a=sendrecv or omi		all)				
	o= <version incr<="" td=""><td></td><td></td><td></td></version>						
ISDN Parameter values:	SETUP = 3,1 kHz aud	dio					
Comments:	OID	1 1 10	0=	10011			
	SIP	MG		ISDN			
	INVITE)	→	SETUP			
	180 Ringing		+	ALERTING			
	200 OK INVITE			CONNECT			
	INI\/ITE(aandanh/)		→	NOTIFY Remote HOLD			
	INVITE(sendonly) 200 OK	→	7	NOTIFY Remote HOLD			
	INVITE(recvonly)						
	iivvii L(iecvoilly)						
	INVITE(sendrecv)	→	→	NOTIFY - Remote			
	IIIVII E(Scharcov)			RETRIEVAL			
	200 OK	+	+	TO THE VAL			
	INVITE(sendrecv)						
	(======================================						
	INVITE(sendonly)	(+	HOLD			
	200 OK	→					
	INVITE(recvonly)						
	INVITE(sendrecv)	+	(RETRIEVE			
	200 OK	→					
	INVITE(sendrecv)						

SI_XXSSHOLD 02	ISDN reference to:				NGN reference to:			
T00 (ETSI EN 300 141-1 [i.7] ITU-T Q.1912.5 [51], annex B.10							
TSS reference:	SIP-ISDN/SS/HOLD/	- tl'						
SIP selection criteria:	Support the temporarily							
ISDN selection	Support the generic notif							
criteria:	Support the invocation o							
Test purpose:		Ensure that a party can put the other party on hold in the alerting state. Ensure that the party can retrieve the call previously put on hold.						
	The calling party should							
	The calling party should	be able to re	trieve	the oth	er par	rty		
SIP Parameter values:	Dial string parameters or	otions=PIXIT	•					
	PIXIT for supported head	der:						
	Case a) no 100 rel							
	Case b) Supported: 100	rel						
	Case c) Supported: 100		onditio	n				
	SDP: a=sendonly (put or a=sendrecv or omittee o= <version increm<="" td=""><td>d (retrieve th</td><td>e call)</td><td></td><td></td><td></td></version>	d (retrieve th	e call)					
ISDN Parameter	SETUP = 3.1 kHz audio:							
values:	02101 = 0,1 M 12 addio,							
Comments:								
	SIP		MG	CF		ISDN		
	INVITE	→			→	SETUP		
	180 Ringing	←			+	ALERT		
	UPDATE(sendonly)	→			→	NOTIFY - Remote HOLD		
	200 OK	+						
	UPDATE(recvonly)							
	UPDATE(sendrecv)	→			→	NOTIFY - Remote RETRIEVAL		
	200 OK	+						
	UPDATE(sendrecv)							

SI_XXSSHOLD 03	ISDN referer		ITU T	NGN reference to:				
TSS reference:	ETSI EN 300 141-1 [i.7] ITU-T Q.1912.5 [51], annex B.10 SIP-ISDN/SS/HOLD/							
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams							
ISDN selection criteria:	Support the temporarity							
Test purpose:		Ensure that a party can put the other party on hold at any time after the call is answered and before call clearing has begun. Ensure that a party can retrieve the call previously put on hold.						
	The calling party should							
SIP Parameter values:	The calling party should		ve the other p	oarty				
ISDN Parameter values: Comments:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition SDP: a=sendonly (put on hold) a=sendrecv or omitted (retrieve the call) o= <version incremented=""> SETUP = 3,1 kHz audio</version>							
	SIP	MO	GCF	ISDN				
	INVITE	→	→	SETUP				
	180 Ringing	+	(ALERTING				
	200 OK INVITE	+	+	CONNECT				
	UPDATE(sendonly)	→	→	Notify - Remote HOLD				
	200 OK	(
	INVITE(recvonly)							
	UPDATE(sendrecv)	→	→	Notify - Remote RETRIEVAL				
	200 OK	-						
	UPDATE(recvonly)							

SI_XXSSHOLD 04	ISDN reference to:				GN reference to:			
T00 (ETSI EN 300 141-1 [i.7] ITU-T Q.1912.5 [51], annex B.10							
TSS reference:	SIP-ISDN/SS/HOLD/ Support the temporarily stops sending one or more unicast media streams							
SIP selection criteria:								
ISDN selection criteria:	The MGCF sends the u							
	Support the generic not							
Test purpose:	Ensure that a party can				at a party can retrieve the call			
	previously put on hold.	all cleaning ha	s begun. Li	isule ili	at a party carrietneve the can			
	The called party should	l be able to ou	t the other i	narty on	hold			
	The called party should							
SIP Parameter values:	Dial string parameters of			•	,			
	PIXIT for supported hea	ader:						
	Case a) no 100 rel							
	Case b) Supported: 100							
	Case c) Supported: 100	orel and preco	ndition					
	SDP: a=sendonly (put o a=sendrecv or omitto= <version incre<="" td=""><td>ed (retrieve th mented></td><td>e call)</td><td></td><td></td></version>	ed (retrieve th mented>	e call)					
ISDN Parameter values:	SETUP = 3,1 kHz audio)						
Comments:		1						
	SIP		MGCF		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	+		(ALERT			
	200 OK INVITE	+		+	CONNECT			
	LIDDATE (a an damb)	(+	LIOLD			
	UPDATE(sendonly) 200 OK	-			HOLD			
	INVITE(recvonly)	7						
	INVITE(IECVOINY)							
	UPDATE(sendrecv)	+		+	RETRIEVE			
	200 OK	→						
	UPDATE(recvonly)							

SI_XXSSHOLD 05	ISDN reference to:			NGN reference to:			
T00 (ETSI EN 300	141-1 [I. <i>7</i>]		ITU-T Q.1912.5 [51], annex B.10			
TSS reference:	SIP-ISDN/SS/HOLD/					4 di4	
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams						
ISDN selection criteria:	Support the generic notification procedure for HOLD supplementary service						
Test purpose:	Ensure that a party can put the other party on hold at any time after the call is answered and before call clearing has begun. Ensure that a party in held state can						
						n retrieve the call previously	
	put on hold.	out on noid.	Elisule	ınaı a pa	irty Cai	in retrieve the call previously	
	put on noid.						
	The calling party shou	ıld be able t	o put th	e other n	arty oi	n hold	
	The called party shou						
	The calling party shou						
	The called party shou						
SIP Parameter values:	Dial string parameters	s options=P	IXIT				
	PIXIT for supported h	eader:					
	Case a) no 100 rel						
	Case b) Supported: 1			4.			
	Case c) Supported: 10	oo rei and p	reconai	tion			
	SDP: a=sendonly or a	a-inactive (r	out on h	old)			
	a=sendrecv or a=r	ecvonly or (mitted	(retrieve :	the ca	II)	
	o= <version incr<="" td=""><td></td><td>, integral</td><td>0.00.00</td><td></td><td>,</td></version>		, integral	0.00.00		,	
ISDN Parameter values:	SETUP = 3,1 kHz aud						
Comments:		-					
	SIP		MG	GCF		ISDN	
	INVITE	→			→		
	180 Ringing	+			+		
	200 OK INVITE	+			+		
	INVITE(sendonly)	→			→	NOTIFY- Remote HOLD	
	200 OK	(
	INVITE(recvonly)						
	INIVITE (in a ative)				,	HOLD	
	INVITE(inactive) 200 OK	←			+	HOLD	
	INVITE(inactive)	7					
	iivvii E(iiiaciive)						
	INVITE(recvonly)	→			→	Notify - Remote Retrieval	
	200 OK	/				Notify - Remote Retrieval	
	INVITE(sendonly)						
	······						
	INVITE(sendrecv)	+			(RETRIEVE	
	200 OK	→					
	INVITE(sendrecv)						

SI_XXSSHOLD 06	ISDN refere		NGN reference to:				
	ETSI EN 300 1	141-1 [i.7]	ITU-T Q.1912.5 [51], annex B.10				
TSS reference:	SIP-ISDN/SS/HOLD/						
SIP selection criteria:	Support the temporarily stops sending one or more unicast media streams						
ISDN selection criteria:	Support the generic notification procedure for HOLD supplementary service						
Test purpose:	Ensure that a party can put the other party on hold at any time after the call is answered and before call clearing has begun. Ensure that a party in held state can						
	put the remote party p	ut on noid. Ensure	e tnat a party c	an retrieve the call previously			
	put on noid.						
	The calling party shou	ld he able to nut th	ne other narty	on hold			
	The called party shoul						
	The called party shoul						
	The calling party shou						
SIP Parameter values:	Dial string parameters		•	,			
		·					
	PIXIT for supported he	eader:					
	Case a) no 100 rel						
	Case b) Supported: 10						
	Case c) Supported: 10	00 rel and precond	ition				
	SDP: a=sendonly or a	-inactiva (put on h	old)				
	a=sendrecv or a=re			all)			
	o= <version incre<="" td=""><td></td><td>(retrieve trie c</td><td>aii)</td></version>		(retrieve trie c	aii)			
ISDN Parameter values:	SETUP = 3,1 kHz aud						
Comments:	02.0. 0,						
	SIP	M	GCF	ISDN			
	INVITE	→	→				
	180 Ringing	((
	200 OK INVITE	+	+				
	INVITE(sendonly)	→	→	NOTIFY - Remote HOLD			
	200 OK	-					
	INVITE(recvonly)						
	INVITE(inactive)	-	(HOLD			
	200 OK	→					
	INVITE(inactive)						
	INVITE(recvonly) ← RETRIEVE						
	INVITE(sendonly)						
	INVITE(sendrecv)	→	→	NOTIFY - Remote			
	INVITE(SCHUIECV)			Retrieval			
	200 OK	+		Retileval			
	INVITE(sendrecv)						
	III 4 4 I I E (SCHOLECA)						

6.3.2.13 CONF

SI_XXSSCONF01	ISDN reference ETSI EN 300 185-			NGN reference to: ETSI TS 124 605 [46]					
T00 /	ETSI TS 124 147 [i.11]								
TSS reference:	SIP-ISDN/SS/CONF/ Support that a party can put the other party on hold after then calling user has								
SIP selection criteria:									
1001	provided all the information								
ISDN selection criteria:	Support of service conference								
Test purpose:				op the temporarily sending one or					
				and resume the session after the					
	BeginCONF was received	d due to the Co	JNF sup	plementary service.					
	16.41	41		Harrist and a BANTE 14					
				y" or "inactive" then: INVITE with					
			ed attrib	ute line, else: no mapping					
SIP Parameter values:	Dial string parameters op	tions=PIXII							
	DIVIT for a comported bood								
	PIXIT for supported head	er:							
	Case a) no 100 rel	-1							
	Case b) Supported: 100 r Case c) Supported: 100 r		ition						
	Case c) Supported. 100 h	ei and precond	шоп						
	SDP: a= a_LINE_VA (tab	olo O) or a lino	is omitte	ad					
ISDN Parameter values:	SETUP = 3,1 kHz audio;	ne 9) or a line	15 OIIIILL	cu					
Comments:	3L101 = 3,1 KHZ addio,								
Comments.	SIP	MGCF		ISDN					
	INVITE	→	→	SETUP					
	180 Ringing	(+	ALERTING					
	200 OK INVITE	(+	CONNECT					
		1		1					
			←	BeginCONF					
	BYE	+	+	DISC					
	200 OK BYE	→	→	RELEASE					
			+	REL_COMP					

SI_XXSSCONF03	ISDN reference to: ETSI EN 300 185-1 [i.8]			NGN reference to: ETSI TS 124 605 [46] ETSI TS 124 147 [i.11]			
TSS reference:	SIP-ISDN/SS/CONF/						
SIP selection criteria:	Support that a party can put the other party on hold after then calling user has provided all the information necessary for processing the call						
ISDN selection criteria:	Support of service conferen	nce call	l, add-o	n (conf)			
Test purpose:	Ensure that the SUT in the confirmed dialogue stops the temporarily sending one or more unicast media streams if a FACILITY message isolatedCONF and resume the media stream if reattachedCONF was received due to the CONF supplementary service.						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition						
100110	SDP: a= a_LINE_VA (table	e 10) o	r a line	is omitt	ed		
ISDN Parameter values:	SETUP = 3,1 kHz audio;						
Comments:	OID		1400	_	IODN		
	SIP		MGC		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	+		-	ALERTING		
	200 OK INVITE	–		←	CONNECT		
				1.0	D : OONE		
	INDUTE:			-	BeginCONF		
	INVITE(sendonly)	+			IsolatedCONF		
	200 OK INVITE(recvonly)	→					
	ACK	+			D # 100NE		
	INVITE(sendrecv)	+		-	ReattachCONF		
	200 OK INVITE(sendrecv)	→					
	ACK	←					
	DVE			1.	IDIOO		
	BYE	+		<u>←</u>	DISC		
	200 OK BYE	→		→	RELEASE		
				←	REL_COMP		

SI_XXSSCONF05		ISDN reference to: ETSI EN 300 185-1 [i.8]			NGN reference to: ETSI TS 124 605 [46] ETSI TS 124 147 [i.11]			
TSS reference:	SIP-ISDN/SS/CONF/							
SIP selection criteria:	Conference event pac	ckage sup	ported PICS	3 [43]	1/1			
ISDN selection criteria:								
Test purpose:	Conference notification information is mapped into "conference established" Upon the receipt of a conference information document with the <conference-state-type> element active is set to 'true', the ISDN Network shall send a NOTIFY message with a notification 'conference established'.</conference-state-type>							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition NOTIFY 1: <conference-state></conference-state>							
ISDN Parameter values:	SETUP = 3,1 kHz aud	oib						
Comments:					T			
	SIP		MGCF		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing			(ALERTING			
	200 OK INVITE			+	CONNECT			
	NOTIFY 1 → NOTIFY(conference established 200 OK NOTIFY ←							
	200 OK NOTIFY							
	BYE	-		+	DISCONNECT			
	200 OK BYE	→		→	RELEASE			
				+	RELEASE COMPLETE			

SI_XXSSCONF06	ISDN referer ETSI EN 300 1]	NGN reference to: ETSI TS 124 605 [46] ETSI TS 124 147 [i.11]				
TSS reference:	SIP-ISDN/SS/CONF/							
SIP selection criteria:	Conference event package supported PICS [43] 1/1							
ISDN selection criteria:								
Test purpose:	Conference notification information is mapped into "other party added". Upon the receipt of a conference information document with the <endpoint-type> and the element status of endpoint-status-type is set to 'connected' and it was not set to 'on-hold' before and the Contact URI in the element entity is not the address of the served PSTN/ISDN participant, the ISDN Network shall send a NOTIFY message 'other party added'.</endpoint-type>							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition NOTIFY 1: <conference-state></conference-state>							
ISDN Parameter values:	SETUP = 3,1 kHz audio	0						
Comments:								
	SIP		MGCF		ISDN			
	INVITE	→		→	SETUP			
	180 Ringing	+		+	ALERTING			
	200 OK INVITE	+		+	CONNECT			
	NOTIFY 1	→		→	NOTIFY(conference established)			
	200 OK NOTIFY	+						
	NOTIFY 2 → NOTIFY(other party added)							
	200 OK NOTIFY							
	BYE	+		(DISCONNECT			
	200 OK BYE	→		→	RELEASE			
				+	RELEASE COMPLETE			
	The Connection to SIP	2 is not	shown in t	his mes				

SI_XXSSCONF11	ISDN reference to: ETSI EN 300 185-1 [i.8]			NGN reference to: ETSI TS 124 605 [46], clause 4.7.1.1.1 ETSI TS 124 147 [i.11]				
TSS reference:	SIP-ISDN/SS/CONF/							
SIP selection criteria:	Conference event pa	ackage su	pported PI	CS [43	B] 1/1			
ISDN selection criteria:								
Test purpose:	Conference notification information is mapped into "other party disconnected". Upon the receipt of a conference information document with the <endpoint-type> and the element status of endpoint-status-type is set to 'disconnected' and the element joining-method of joining-type is not set to 'focus-owner, the ISDN network shall send a NOTIFY message 'other party disconnected'.</endpoint-type>							
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition NOTIFY 3: <endpoint <status="" entity="endpoint" sipx="" uri="">disconnected</endpoint>							
ICDN Davamatar valuasi	SETUP = 3,1 kHz au		mecteu <td>iaius></td> <td></td>	iaius>				
ISDN Parameter values:	SETUP = 3,1 kHz at	lalo						
Comments:	SIP		MGCF	1	ISDN			
	INVITE	→	MGCF	→	SETUP			
	180 Ringing	-		′	ALERTING			
	200 OK INVITE	`		+	CONNECT			
	200 OK IIVITE			+	CONNECT			
	NOTIFY 1 200 OK NOTIFY	→		→	NOTIFY(conference established)			
	NOTIFY 2	→		→	NOTIFY(other party added)			
	200 OK NOTIFY	+			, , ,			
	NOTIFY 3 → NOTIFY(other party disconnected)							
	200 OK NOTIFY	+		+				
	BYE	+		+	DISCONNECT			
	200 OK BYE	<u>→</u>		→	RELEASE			
		<u> </u>		+	RELEASE COMPLETE			
	The session with SIF	2 is not	shown in th	nis mes				

SI_XXSSCONF12	ISDN referen ETSI EN 300 18			NGN reference to: ETSI TS 124 605 [46] ETSI TS 124 147 [i.11]			
TSS reference:	SIP-ISDN/SS/CONF/						
SIP selection criteria:	Conference event packa	age not s	supported	NOT PI	CS [43] 1/1		
ISDN selection criteria:							
Test purpose:	Conference notification						
					ument the conference notification		
				de. No N	IOTIFY is sent to the ISDN user.		
SIP Parameter values:	Dial string parameters of	ptions=F	PIXIT				
	PIXIT for supported hea	ider:					
	Case a) no 100 rel						
	Case b) Supported: 100						
	Case c) Supported: 100	rel and	precondit	ion			
	NOTIFY 1: <conferent< td=""><td></td><td></td><td>esent</td><td></td></conferent<>			esent			
	NOTIFY 2: <endpoint< td=""><td>connecte</td><td></td><td></td><td>I</td></endpoint<>	connecte			I		
ISDN Parameter values:	SETUP = 3,1 kHz audio);					
Comments:							
	SIP		MGCF		ISDN		
	INVITE	→		→	SETUP		
	180 Ringing	+		+	ALERTING		
	200 OK INVITE	(+	CONNECT		
	NOTIFY 1	→					
	200 OK NOTIFY	+					
	NOTIFY 2						
	200 OK NOTIFY						
	BYE	+		+	DISCONNECT		
	200 OK BYE	→		→	RELEASE		
				+	RELEASE COMPLETE		

SI_XXSSCONF13	SIP reference:			NGN reference:				
	IETF RFC 3261 [28]				ITU-T Q.734.1 [14], clause 2.7			
TSS reference:	SIP-ISUP/SS/CONF/							
SIP selection criteria:	The stop and retrieve o	f media s	treams is no	ot supp	orted			
ISUP selection								
criteria:								
Test purpose:	Ensure that the SUT or		of FACILITY	messa	ages due to the CONF			
	supplementary service,							
	no mapping, no disru			cedure).			
SIP Parameter values:	Dial string parameters	options=F	PIXIT					
	PIXIT for supported hea	ader:						
	Case a) no 100 rel							
	Case b) Supported: 100	o rel						
	Case c) Supported: 100	rel and	precondition	ı				
	No mapping							
ISDN Parameter	SETUP = 3,1 kHz audio	ο;						
values:								
Comments:								
	SIP		MGCF		ISUP			
	INVITE	→		→	SETUP			
	180 Ringing	+		←	ALERTING			
	200 OK INVITE	+		←	CONNECT			
				+	HOLD			
				+	BeginCONF			
				+	IsolatedCONF			
				+	ReattachCONF			
	BYE	+		+	DISCONNECT			
	200 OK BYE	→		→	RELEASE			
	200 OK DIL			/	RELEASE COMPLETE			
	1				INCLUAGE COMIT LETE			

SI_XXSSCONF14	ISDN referer ETSI EN 300 18			NGN reference to: ETSI TS 124 605 [46], clause 4.7.1.1.1 ETSI TS 124 147 [i.11]					
TSS reference:	SIP-ISDN/SS/CONF/								
SIP selection criteria:									
ISDN selection criteria:									
Test purpose:	The referring of MGCF is not possible call is established Ensure that a REFER request received by the MGCF is not successful. The request is rejected with 403 Forbidden. The CS -site is not affected.								
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition REFER: Request URI contained the conference URI Refer-To contains the URI of ISDNx, method=invite Referred-By contains SIP or tel URI of SIPx								
ISDN Parameter values:	SETUP = 3,1 kHz audio				-				
Comments:	·								
	SIP		MGCF		ISDN				
	INVITE	→		→	SETUP				
	180 Ringing								
	200 OK INVITE	+		+	CONNECT				
	REFER	→							
	403 Forbidden	(

SI_XXSSCONF15	ISDN reference	e to:	NGN reference to:					
	ETSI EN 300 185	5-1 [i.8]	ETSI T	S 124 605 [46], clause 4.7.1.1.1				
				ETSI TS 124 147 [i.11]				
TSS reference:	SIP-ISDN/SS/CONF/							
SIP selection criteria:								
ISDN selection criteria:								
Test purpose:	The referring of MGCF is							
				CF is not successful. The request				
	is rejected with 403 Forb		-site is not	affected.				
SIP Parameter values:	Dial string parameters of	otions=PIXIT						
	PIXIT for supported head	der:						
	Case a) no 100 rel							
	Case b) Supported: 100	rel						
	Case c) Supported: 100	rel and precon	dition					
	REFER: Request URI	contained the c	onforence	LIBI				
		ains the URI of						
		ontains SIP or	,					
ISDN Parameter values:	SETUP = 3,1 kHz audio;		ter Orti or S	DIF A				
	SETUP = 3,1 KHZ audio,							
Comments:								
	SIP	MGCI	-	ISDN				
	REFER	→						
	403 Forbidden	-						

6.3.2.14 Call waiting (CW)

SI_XXSSCW01	SIP re			ITI I		SUP reference:	
TSS reference:	SIP-ISDN/SS/CW		1 [20]	110-	ų.	912.5 [51], annex B.9	
SIP selection criteria:	311 -13D14/33/CVV						
ISDN selection criteria:							
Test purpose:	Ensure that when the ISDN SUT indicates that a Call is a waiting call the SIP signalling procedure is not disrupted.						
SIP Parameter values:	Dial string parame						
ISDN Parameter values:	PIXIT for supported Case a) no 100 red Case b) Supported Case c) Supported No mapping SETUP = 3,1 kHz	el d: 100 d: 100) rel) rel and precon	dition			
Comments:			1				
	SIP	 	SUT			ISDN	
	INVITE	→			_	SETUP	
	180 Ringing	+			-	ALERTING	
	200 OK INVITE	←			-	CONN	
	ACK	→					
			Conversation				
	BYE	→			→	DISC	
	200 OK BYE	+			(REL	

6.2.2.15 Anonymous Call Rejection (ACR)

SI_XXSSACR01	SIP reference:	ISUP reference:				
	IETF RFC 3261 [28]	ITU-T Q.1912.5 [51], annex B.8				
TSS reference:	SIP-ISDN/SS/ACR/					
SIP selection criteria:						
ISDN selection criteria:	An implementation according ETSI EN 3	83 001 [49]				
Test purpose:	Ensure that the SUT, if a destination user has subscribed the ACR supplementary service, the call attempt is rejected with a 603 Decline: Reason header field Reason: Q.850 [22];cause=24 due to ACR supplementary service"					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition INVITE: Privacy-header = "id" 603 Decline: Reason header field Reason: Q.850 [22]:cause=24					
ISDN Parameter values:	SETUP = 3,1 kHz audio					
Comments:						

SI_XXSSACR02	SIP reference:	ISUP reference:			
	IETF RFC 3261 [28]	ITU-T Q.1912.5 [51], annex B.8			
TSS reference:	SIP-ISUP/SS/ACR/				
SIP selection criteria:					
ISDN selection criteria:	An implementation according ETSI EN 383 001 [49] Send a Calling Party Number with an Number Presentation restriction Indicator set to "presentation restricted by the network" if no P-Asserted -Identity header field has not been received or not in the format "+"CC+NDC+SN				
Test purpose:	Ensure that the SUT if a destination user has subscribed the ACR supplementary service, the call attempt is successful				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondi	eld and no Privacy header field present			
ISDN Parameter values:	Calling party number Address presentation restriction is set to "Presentation restricted by the network"				
Comments:					

6.4 Test purposes for PSTN - SIP

6.4.1 Basic call

6.4.1.1 Basic call Successful

Successful
PSTN

PS_AU_01	PSTN reference to:			N	GN reference to:		
	ETSI EN 300 899-1 [23], clause 2	2.1.1		<u>IT</u>	U-T Q.1912.5 [51]		
TSS reference:	PSTN-SIP/Basic_call/Successful/3	PSTN-SIP/Basic_call/Successful/3,1 kHz audio					
Selection criteria:							
Test purpose:	Ensure that the PSTN can in the o						
	correctly when the SIP user answer	ers wit	h a Sessi	on Prog	gress message following by a		
	180 Ringing message.						
	Ensure that in the active call state						
	performed correctly (e.g. testing Q						
	SDP rtpmap: <dynamic-pt> is use</dynamic-pt>		codecs in	table 8	applies.		
SIP Parameter values:	Dial string parameters options=PIX	KIT					
	DIVIT for a comparted bands						
	PIXIT for supported header:						
	Case a) no 100 rel Case b) Supported: 100 rel						
	Case c) Supported: 100 rel and pr	acana	lition				
	Case c) Supported. 100 fer and pr	CCOIIC	iitiOii				
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:							
	PSTN		SUT		SIP		
	Off hook						
	Dial number	>		→	INVITE		
				+	183 Session Progress		
	Ringing tone			+	180 Ringing		
				+	200 OK INVITE		
				→	ACK		
	Communication		-	-			
	On hook	→		→	BYE		
				+	200 OK BYE		

PS_AU_02	PSTN reference to:				NGN reference to:			
	ETSI EN 300 899-1 [23], claus				ITU-T Q.1912.5 [51]			
TSS reference:	PSTN-SIP/Basic_call/Successfu	PSTN-SIP/Basic_call/Successful/3,1 kHz audio						
Selection criteria:								
Test purpose:	establishment correctly when the Ensure that in the active call stat testing QoS parameters).	n case when the parameter in the SDP rtpmap: <dynamic-pt> is used the codecs in</dynamic-pt>						
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)						
Comments:								
	PSTN		SUT		SIP			
	Off hook							
	Dial number	→		→	INVITE			
				+	200 OK INVITE			
				→	ACK			
	Communication				In			
	On hook	→		→	BYE			
				←	200 OK BYE			

PS_AU_03	PSTN reference to:				NGN reference to:			
	ETSI EN 300 899-1 [23], clau	se 2.1	1.1		ITU-T Q.1912.5 [51]			
TSS reference:	PSTN-SIP/Basic_call/Successful/3,1 kHz audio /							
Selection criteria:								
Test purpose:	correctly when the calling user The called user shall receive a B The Reason header should containsure that in the Call Delivered B- channel is performed correctly	Ensure that the call establishment and the call clearing procedure are performed correctly when the calling user clears after answering. The called user shall receive a BYE message. The Reason header should contain Cause Value #16. Ensure that in the Call Delivered call state the transfer of tone or announcement on the B- channel is performed correctly. In case when the parameter in the SDP rtpmap: <dynamic-pt> is used the codecs in</dynamic-pt>						
SIP Parameter values:	Dial string parameters options=F PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)						
Comments:								
	PSTN		SUT		SIP			
	Off hook							
	Dial number	→		→	INVITE			
	Ringing tone			+	180 Ringing			
				+	200 OK INVITE			
				→	ACK			
	Communication		,					
	On hook	→		→	BYE			
				←	200 OK BYE			

PS_AU_04	PSTN reference to:				NGN reference to:				
	ETSI EN 300 899-1 [23], clau				ITU-T Q.1912.5 [51]				
TSS reference:	PSTN -SIP/Basic_call/Successful/3,1 kHz audio/								
Selection criteria:									
Test purpose:	clears after answering with a BY clearing" in the Reason header f Ensure that in the Call Delivered	Ensure that the call clearing procedure is performed correctly when the called user clears after answering with a BYE message indicating the Cause value # 16 "normal call clearing" in the Reason header field. Ensure that in the Call Delivered call state U4 and disconnect indication state (N12) the transfer of tone or announcement is performed correctly. In case when the parameter in							
SIP Parameter values:	Dial string parameters options=FPIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)							
Comments:	III = IIIIO (F DATT)								
	PSTN		SUT		SIP				
	Off hook								
	Dial number	→		→	INVITE				
	Ringing tone			←	180 Ringing				
		€ 200 OK INVITE							
				→	ACK				
	Communication		·						
	Special tone or announcement	+		+	BYE				
	On hook			→	200 OK BYE				

Table 7

		m= line		b= line	a= line
	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>:<ba ndwidth-value></ba </modifier>	rtpmap: <payload type=""> <encoding name="">/ <clock rate=""> [/<encoding parameters="">]</encoding></clock></encoding></payload>
VA_01	audio	RTP/AVP	0 and/or 8	AS:64	rtpmap:0 PCMU/8000 and/or rtpmap:8 PCMA/8000
VA_02	audio	RTP/AVP	0 (and possibly 8)	AS:64	rtpmap:0 PCMU/8000 (and possibly rtpmap:8 PCMA/8000)
VA_03	audio	RTP/AVP	8	AS:64	rtpmap:8 PCMA/8000

Table 8: Values of codecs for test purposes PS_AU_01 to PS_AU_04

VARIABLE	PT	Encoding	media type	clock rate	channels
VA_01	0	PCMU	Α	8 000	1
VA_02	3	GSM	Α	8 000	1
VA_03	4	G723	Α	8 000	1
VA_04	5	DVI4	Α	8 000	1
VA_05	7	LPC	Α	8 000	1
VA_06	8	PCMA	Α	8 000	1
VA_07	9	G722	Α	8 000	1
VA_08	12	QCELP	Α	8 000	1
VA_09	13	CN	Α	8 000	1
VA_10	18	G729	Α	8 000	1
VA_11	Dyn	G726-40	Α	8 000	1
VA_12	Dyn	G726-32	Α	8 000	1
VA_13	Dyn	G726-24	Α	8 000	1
VA_14	Dyn	G726-16	Α	8 000	1
VA_15	Dyn	G729D	Α	8 000	1
VA_16	Dyn	G729E	Α	8 000	1
VA_17	Dyn	GSM-EFR	Α	8 000	1

6.4.1.2 Test purposes for PSTN - SIP Basic call Unsuccessful

Unsuccessful	
PSTN	

PS_AU_U01	PSTN reference to:			N	IGN reference to:		
	ETSI EN 300 899-1 [23], clause	2.1.1		IT	U-T Q.1912.5 [51]		
TSS reference:	PSTN-SIP/Basic_call/Unsuccess	PSTN-SIP/Basic_call/Unsuccessful					
Selection criteria:							
Test purpose:	Ensure that when the called SIP information that the called user is		•	calling	g user receives in-band		
SIP Parameter values:	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:							
	PSTN		SUT		SIP		
	Off hook						
	Dial number	→		→	INVITE		
	Special tone or announcement	+		+	486 User Busy		
		→ ACK					
	On hook						

PS_AU_U02	PSTN reference to: ETSI EN 300 899-1 [23], clause 2.1.1		NGN reference to: ITU-T Q.1912.5 [51]			
TSS reference:	PSTN-SIP/Basic_call/Unsuccessf	ul				
Selection criteria:						
Test purpose:	Ensure that when the calling user is cleared	clea	ars before a	nswer	from the called SIP user the call	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	PSTN		SUT		SIP	
	Off hook					
	Dial number)		→	INVITE	
	Ringing tone			+	180 Ringing	
	On hook → CANCEL					
				←	200 OK Cancel	
				+	487 Request Terminated	
				→	ACK	

PS_AU_U03	PSTN reference to:	NGN reference to:
	ETSI EN 300 899-1 [23],	ITU-T Q.1912.5 [51]
	clause 2.1.1	
TSS reference:	PSTN-SIP/Basic_call/Unsuccessful	1
Selection criteria:		
Test purpose:	Ensure that when the called SIP us	er is alerted by not answering before timer Q.18
	expires, the network initiate call clear	aring.
SIP Parameter values:	Dial string parameters options=PIX	Т
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and pre	condition
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PS_XX_U04	PSTN reference to: ETSI EN 300 899-1 [23], clause 2.1.1	NGN reference to: ITU-T Q.1912.5 [51] IETF RFC 3261 [28] IETF RFC 4566 [25]
TSS reference:	PSTN-SIP/Basic_call/Unsuccessfu	
Selection criteria:		
Test purpose:		er from the called user (there is no response from tiate call clearing to the calling user.
SIP Parameter values:	Dial string parameters options=PIX PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and pre a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

PS_XX_U05	PSTN reference to:	NGN reference to:
	ETSI EN 300 899-1 [23],	IETF RFC 3261 [28]
	clause 2.1.1	IETF RFC 4566 [25]
TSS reference:	PSTN-SIP/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that the call will be released network initiates call clearing 484 A	when the called number is incomplete. The SIP ddress Incomplete message.
SIP Parameter values:	Dial string parameters options=PIX PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and pre a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

6.4.2 Test purposes for PSTN - SIP Supplementary services

6.4.2.1 CLIP

PS_XXSSCLIP01	PSTN reference to:				reference to:	
	ETSI EN 300 001 [i.12 ETSI TS 300 648 [i.13				2.5 [51], clause 7.1.3	
	ETSI EN 300 659 [i.15		ETSI EN 383 001 [49], clause 7.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.2.2.3			
TSS reference:	ISDN-SIP/Supplementary_services/CLIP					
Selection criteria:	The called user is provided					
Test purpose:	Ensure that when the Calling party number is provided by the network , the Calling					
	party number information ele	ements is	correctly delivered	ed t	o the called (served) with	
	following mapping rules:		Davis and frame Co	-11:		
	Address Signal	neader is	Derived from Ca	allir	ng party information element	
	The Calling Party Number is	s mapped i	nto the SIP Fron	n h	eader	
PSTN Parameter:		арроа.				
values:						
SIP Parameter values:	Dial string parameters option	ns=PIXIT				
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:		1				
	PSTN	,	SUT		UA S	
	Off hook, Dial		-	→	INVITE	
	number Ringing tone			F	180 Ringing	
	Connection			<u> </u>	200 OK INVITE	
	→ ACK					
		Conversa	tion			
	On hook			>	BYE	
	OTTTOOK			<u> </u>	200 OK BYE	
]			•	200 OIL DIE	

	Display_Options_PA	Display name
VA_1	"display-name" is supported in the P-Asserted header	Presented
VA_2	"display-name" is not supported in the P-Asserted header	Not presented
VA_3	"display-name" is supported in the From header	Presented
VA_4	"display-name" is not supported in the From header	Not presented

6.4.2.2 CLIR

PS_XXSSCLIR01	PSTN reference to: ETSI EN 300 001 [i.12] ETSI TS 300 648 [i.13] ETSI EN 300 659 [i.15]	ETSI EN ETSI TS 12	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.3 ETSI EN 383 001 [49], clause 7.1.3 'SI TS 129 163 [i.20], clause 7.2.3.2.2.3 IETF RFC 3323 [33] IETF RFC 3325 [34]		
TSS reference:	ISDN-SIP/Supplementary_servi				
Selection criteria:	The calling user is provided with				
Test purpose:	Ensure that when the Calling pa Sends a INVITE message where "unavailable" and no P-Asserted	e the SIP From head	der f	ield is set to "anonymous" or	
PSTN Parameter: values:					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:	5071	0.1.7			
	PSTN	SUT		UA S	
	Off hook, Dial number		→	INVITE	
	Ringing tone		(180 Ringing	
	Connection		(200 OK INVITE	
			→	ACK	
		nversation		D)/5	
	On hook		<u>→</u>	BYE	
			←	200 OK BYE	

PS_XXSSCLIR02	PSTN reference ETSI EN 300 001 [i ETSI TS 300 648 [i ETSI EN 300 659 [i	i.12] i.13]	ITU-T O ETSI EN ETSI TS 12 I	NGN reference to: ITU-T Q.1912.5 [51], clause 7.1.3 ETSI EN 383 001 [49], clause 7.1.3 ETSI TS 129 163 [i.20], clause 7.2.3.2.2.3 IETF RFC 3323 [33] IETF RFC 3325 [34]		
TSS reference:	ISDN-SIP/Supplementary					
Selection criteria:	The calling user is provide					
Test purpose:	Ensure that when the Calling party number is provided by the network, Sends a INVITE message where the SIP From header field is set to "anonymous" or "unavailable" and no P-Asserted-Identity header is received					
PSTN Parameter: values:						
SIP Parameter values:	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition					
Comments:						
	PSTN		SUT		UA S	
	Off hook, Dial number			→	INVITE	
	Ringing tone			+	180 Ringing	
	Connection			←	200 OK INVITE	
				→	ACK	
		Conve	rsation			
	On hook			→	BYE	
				+	200 OK BYE	

6.4.2.3 CFU

PSP_XXSSCFU 01	NGN reference to:			
	ITU-T Q.1912.5 [51] annex B.6.			
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFU			
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFU			
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported			
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.			
PSTN Parameter: values:				
SIP Parameter values:	Dial string parameters options=PIXIT			
	PIXIT for supported header:			
	Case a) no 100 rel			
	Case b) Supported: 100 rel			
	Case c) Supported: 100 rel and precondition			
	a = line (PIXIT)			
	b = line (PIXIT)			
	m = line (PIXIT)			
Comments:				

PSP_XXSSCFU 02	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFU
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFU
Selection criteria:	User B has activated the CALL DEFLECTION service
	Call forwarding unconditional supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
PSTN Parameter:	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSP_XXSSCFU 03	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
	user C is user determined user busy
Test purpose:	To verify that a call is released correctly if CFU was not successful .
	User A calls user B, the call is forwarded to user C who is busy.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
_	m = line (PIXIT)
Comments:	

PSP_XXSSCFU 04	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding unconditional supported
	user C is network determined user busy
	User B has activated the CALL DEFLECTION service
Test purpose:	To verify that a call is released correctly if CFU was not successful.
	User A calls user B, the call is forwarded to user C who is busy.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSPP_XXSSCFU 05	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-PSTN-ISDN/Supplementary_services/CFU		
Configuration:	The user A and the user C and D are in network N1. The user B is in network N2 and is		
	provided with CFU. User D forwards the call to back to user B.		
Selection criteria:	Call forwarding by the network		
	Call forwarding unconditional supported		
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D.		
	User D forwards the call to back to user B. Ensure that the call is released.		
PSTN Parameter			
values:			
SIP Parameter values:	Dial string parameters options=PIXIT		
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:	III – IIIIe (1 1741)		

PSPP_XXSSCFU 06	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN-ISDN/Supplementary_services/CFU
Configuration:	The user A and the user C and D are in network N1. The user B is in network N2 and is provided with CFU. User D forwards the call to back to user B.
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported Network option: hop counter supported N<5
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D. User D forwards the call to back to user B. Ensure that the call is released.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT) m = line (PIXIT)
Comments:	

PSS_XXSSCFU 07	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	The user B is provided with CFU
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSS_XXSSCFU 08	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	The user B is provided with CFU ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = Yes).
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is informed of the forwarding number (user B has presentation allowed). User B is notified of call diversion.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

PSS_XXSSCFU 09	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	The user B is provided with CFU ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = No).
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is informed of the forwarding number (user B has presentation allowed). User B is not notified of call diversion.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

PSS_XXSSCFU 10	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	User B is provided with CFU ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = No, "served user receives notification that the call has been forwarded" = no).
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSS_XXSSCFU 11	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported
Test purpose:	To verify that a call is released correctly if CFU was not successful . User A calls user B, the call is forwarded to user C who is busy.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

PSS_XXSSCFU 12	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
	User B has activated the CALL DEFLECTION service
Test purpose:	To verify that a call is released correctly if CFU was not successful.
	User A calls user B, the call is forwarded to user C who is busy .
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSSP_XXSSCFU 13	NGN reference to:
PSSP_AASSCEU IS	
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP-PSTN/Supplementary_services/CFB
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided
	with CFU. User D forwards the call to back to user B.
Selection criteria:	Call forwarding busy by the network
	Call forwarding busy supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D.
	User D forwards the call to back to user B. Ensure that the call is released.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSSP_XXSSCFB 14	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP-PSTN/Supplementary_services/CFU
Selection criteria:	The user is A in network N1. The user B and the user C are in network N2. User B is
	provided with CFU. User E forwards the call to back to user B.
	Network option: hop counter supported N<5
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C, C to D. User D
	forwards the call to back to user B.
	User D forwards the call to back to user B. Ensure that the call is released.
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

6.4.2.4 CFB

PSP_XXSSCFB 01	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFB
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFB.
Selection criteria:	Call forwarding by the network Call forwarding busy supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
PSTN Parameter:	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSP_XXSSCFB 02	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFB
Configuration:	The user B is in network N2 and is provided with CFB
Selection criteria:	Call forwarding by the network
	Call forwarding busy supported
	user C is user determined user busy
Test purpose:	To verify that a call is released correctly if CFB was not successful.
	User A calls user B, the call is forwarded to user C who is busy.
PSTN Parameter	
values:	
SIP Parameter values:	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
Comments:	Odse of Supported. 100 fet and precondition
Comments.	

PSS_XXSSCFB 03	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	The user B is provided with CFB
· ·	
Selection criteria:	Call forwarding by the network
	Call forwarding busy supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSS XXSSCFB 04	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	The user B is provided with CFB ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = Yes).
Selection criteria:	Call forwarding by the network Call forwarding busy supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is informed of the forwarding number (user B has presentation allowed). User B is notified of call diversion.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSS_XXSSCFB 05	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	The user B is provided with CFB ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = Yes, "served user receives notification that the call has been forwarded" = No).
Selection criteria:	Call forwarding by the network Call forwarding busy supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is informed of the forwarding number (user B has presentation allowed). User B is not notified of call diversion.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSS_XXSSCFB 06	NGN reference to:
_	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	User B is provided with CFB ("Served user allows the presentation of forwarded to URI to originating user in diversion notification" = Yes, "diverting number is released to the diverted-to user" = No, "served user receives notification that the call has been forwarded" = no).
Selection criteria:	Call forwarding by the network Call forwarding busy supported CF Notifications supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C which is not informed of the forwarding number (user B has presentation not allowed). User B is not notified of call diversion.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

PSS_XXSSCFB 07	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	The user B is in network N2 and is provided with CFB
Selection criteria:	Call forwarding by the network
	Call forwarding busy supported
Test purpose:	To verify that a call is released correctly if CFB was not successful.
	User A calls user B, the call is forwarded to user C who is user determined user busy.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	DIVIT for automorted bandon
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSSP_XXSSCFB 08	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFB
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFU. User D forwards the call to back to user B.
Selection criteria:	Call forwarding busy by the network Call forwarding busy supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D. User D forwards the call to back to user B. Ensure that the call is released.
PSTN Parameter	
values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSSP_XXSSCFB 09	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-SIP-PSTN/Supplementary services/CFU
Selection criteria:	The user is A in network N1. The user B and the user C are in network N2. User B is provided with CFU. User E forwards the call to back to user B. Network option: hop counter supported N<5
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C, C to D. User D forwards the call to back to user B. User D forwards the call to back to user B. Ensure that the call is released.
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

6.4.2.5 CFNR

PSP_XXSSCFNR01	PSTN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3],	ETSI TS 124 604 [45]
	clauses 9.2.2, 9.2.4.4 and 9.2.5	
TSS reference:	PSTN-SIP-PSTN/Supplementary_service	s/CFNR/
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR. Served user communication retention on invocation of diversion	
	(forwarding or deflection) = No.	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C.	
PSTN Parameter		
values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondit	ion
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSP_XXSSCFNR02	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNR/	
Configuration:	The user A and the user C are in network N1. The user B is provided with CFNR,	
	Served user communication retention on invocation of diversion (forwarding or	
	deflection) = Yes	
Selection criteria:	CFNR supported	
	CF Notifications supported	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C	
	The diverting user accepts the communication after sending the INVITE request, the	
	communication path towards the diverted to user shall be released according to the	
	rules and procedures in IETF RFC 3261 [28].	
PSTN Parameter values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSP_XXSSCFNR 03	PSTN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2 and 9.2.5	(0.5)
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provide	
	Served user communication retention on invocation of diversion (forwarding or	
	deflection) = No [Clear call to the served	user on invocation of call diversion],
	Served user communication retention wh	en forwarding is rejected at forwarded-to
	user = No action at the forwarding user.	
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
	user C is user determined user busy	
Test purpose:	To verify that a call is released correctly i	f CFNR was not successful.
	User A calls user B, the call is forwarded	to user C who is busy.
PSTN Parameter values:		
SIP Parameter values: Dial string parameters options=PIXIT		
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondi	tion
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSP_XXSSCFNR 04	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provided with CFNR Served user communication	
	retention on invocation of diversion (forwarding or deflection) = Yes.	
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
	user C is user determined user busy	
Test purpose:	User A calls user B, the call is forwarded to user C who is network determined user	
	busy. The forwarding user User B continues to alert.	
PSTN Parameter values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSP XXSSCFNR 05	NGN reference to:
I SI _XXSSSI NIK 03	
	ETSI TS 124 604 [45]
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNR
Configuration:	The user B is in network N2 and is provided with CFNR Served user communication
	retention on invocation of diversion (forwarding or deflection) = Yes.
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
	user C is user determined user busy
Test purpose:	User A calls user B, the call is forwarded to user C who is user determined user
	busy. The forwarding user User B continues to alert.
PSTN Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	DIVIT for supported header:
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

PSPP_XXSSCFNR 06	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNR	
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is	
	provided with CFNR. User D forwards the call to back to user B.	
Selection criteria:	Call forwarding by the network	
	CFNR supported	
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D.	
	User D forwards the call to back to user B. Ensure that the call is released.	
PSTN Parameter values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	DIVIT (
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSS_XXSSCFNR 07	PSTN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5]	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2, 9.2.5	
TSS reference:	PSTN-SIP-SIP/Supplementary_services	/CFNR
Configuration:	The user B is provided with CFNR.	
	Served user communication retention on deflection) = No	invocation of diversion (forwarding or
Selection criteria:	Call forwarding by the network	
	CFNR supported	
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.	
PSTN Parameter values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precond	ition
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

PSS_XXSSCFNR 08	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR	
Configuration:	The user B is provided with CFNR.	
	Served user communication retention on invocation of diversion (forwarding or	
	deflection) = Yes	
Selection criteria:	Call forwarding by the network	
	CFNR supported	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C	
	The diverting user accepts the communication after sending the INVITE request, the	
	communication path towards the diverted to user shall be released according to the	
	rules and procedures in IETF RFC 3261 [28].	
PSTN Parameter values:		
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a line (DIVIT)	
	a = line (PIXIT)	
	b = line (PIXIT)	
Comments:	m = line (PIXIT)	
Comments.	J	

PSS_XXSSCFNR 09	NGN reference to: ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR		
Configuration:	The user B is provided with CFNR		
Selection criteria:	User B has activated the CALL DEFLECTION service CFNR supported		
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			

PSS_XXSSCFNR 10	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR		
Configuration:	The user B is in network N2 and is provided with CFNR		
	Served user communication retention on invocation of diversion (forwarding or		
	deflection) = No [Clear call to the served user on invocation of call diversion], Served		
	user communication retention when forwarding is rejected at forwarded-to user = No		
	action at the forwarding user).		
Selection criteria:	Call forwarding by the network		
	Call forwarding unconditional supported		
Test purpose:	To verify that a call is released correctly if CFNR was not successful .		
	User A calls user B, the call is forwarded to user C who is user determined user		
	busy.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT		
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			

PSS_XXSSCFNR 11	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR		
Configuration:	The user B is in network N2 and is provided with CFNR		
	Served user communication retention on invocation of diversion (forwarding or		
	deflection) = No [Clear call to the served user on invocation of call diversion], Served		
	user communication retention when forwarding is rejected at forwarded-to user = No		
	action at the forwarding user).		
Selection criteria:	Call forwarding by the network		
	Call forwarding unconditional supported		
Test purpose:	To verify that a call is released correctly if CFNR was not successful.		
	User A calls user B, the call is forwarded to user C who is network determined user		
	busy.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT		
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			

PSS_XXSSCFNR 12	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR		
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR.		
	Served user communication retention on invocation of diversion (forwarding or deflection) = Yes.		
Selection criteria:	Call forwarding by the network CFNR supported		
Test purpose:	User A calls user B, the call is forwarded to user C who is user determined user busy. The forwarding user User B continues to alert.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT		
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			

PSS_XXSSCFNR 13	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNR		
Configuration:	The user A and the user C are in network N1.		
	Served user communication retention on invocation of diversion (forwarding or		
	deflection) = Yes.		
Selection criteria:	Call forwarding by the network		
	Call forwarding unconditional supported		
Test purpose:	User A calls user B, the call is forwarded to user C who is network determined user		
	busy. The forwarding user User B continues to alert.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT		
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	Case of Supported. 100 fet and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			

PSPP_XXSSCFNR 14	NGN reference to: ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-PSTN-PSTN/Supplementary_services/CFNR		
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR. User D forwards the call to back to user B.		
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported		
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C and D. User D forwards the call to back to user B. Ensure that the call is released.		
PSTN Parameter values:			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)		
Comments:			

6.4.2.6 CFNL

PSP_XXSSCFNL 01	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNL		
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNL		
Selection criteria:	Call forwarding by the network CFNL supported		
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.		
PSTN Parameter values:			
SIP Parameter values:			
Comments:			

PSP_XXSSCFNL 02	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNL		
Configuration:	The user B is in network N2 and is provided with CFNL		
Selection criteria:	Call forwarding by the network		
	CFNL supported		
	user C is user determined user busy		
Test purpose:	To verify that a call is released correctly if CFNL was not successful.		
	User A calls user B, the call is forwarded to user C who is user determined user busy.		
PSTN Parameter values			
SIP Parameter values:			
Comments:			

PSP_XXSSCFNL 03	NGN reference to:		
	ETSI TS 124 604 [45]		
TSS reference:	PSTN-SIP-PSTN/Supplementary_services/CFNL		
Configuration:	The user B is in network N2 and is provided with CFNL		
Selection criteria:	Call forwarding by the network		
	CFNL supported		
	user C is network determined user busy		
Test purpose:	To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy. User A is notified of call diversion and user C is informed of the forwarding number (user B has presentation allowed).		
PSTN Parameter			
values:			
SIP Parameter values:			
Comments			

PSS_XXSSCFNL 04	NGN reference to: ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNL	
Configuration:	The user B is provided with CFNL	
Selection criteria:	Call forwarding by the network CFNL supported	
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.	
PSTN Parameter		
values:		
SIP Parameter values:	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
Comments:		

PSS_XXSSCFNL 05	NGN reference to: ETSI TS 124 604 [45]	
TSS reference:	PSTN-SIP-SIP/Supplementary_services/CFNL	
Configuration:	The user B is in network N2 and is provided with CFNL	
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
Test purpose:	To verify that a call is released correctly if CFNL was not successful.	
	User A calls user B, the call is forwarded to user C who is user determined user busy.	
PSTN Parameter		
values:		
SIP Parameter values:	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
Comments:		

PSS_XXSSCFNL 06	PSTN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]	
	clauses 6.1, 9.2.2, 9.2.5	210110 124 004 [40]	
TSS reference:	PSTN-SIP-SIP/Supplementary_services	CFNL CFNL	
Configuration:	The user B is in network N2 and is provide	ded with CFNL	
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported	Call forwarding by the network	
Test purpose:	To verify that a call is released correctly if CFNL was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy.		
PSTN Parameter values:			
SIP Parameter values:	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Case a) no 100 rel Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
Comments:			

6.5 Test purposes for SIP-PSTN

6.5.1 Test purposes for SIP-PSTN, Basic call

6.5.1.1 Test purposes for SIP-PSTN, Basic call, Successful

SP_AU_01	PSTN reference to: ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3	
TSS reference:	SIP-PSTN /Basic_call/Successful/3,1 kH	z audio	
Selection criteria:			
Test purpose:	Ensure that call establishment and the mapping of the parameters defined in table 9 between INVITE message and the PSTN is performed correctly. Ensure that in the confirmed state the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).		
SIP Parameter values:	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)		
	Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition		
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].		

SP_AU_02	PSTN reference to: ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3	
TSS reference:	SIP-PSTN/Basic_call/Successful/3,1 kHz a	udio	
Selection criteria:	FAX G3		
Test purpose:	Ensure that call establishment and the mapping of the defined parameters between INVITE message and PSTN is performed correctly Ensure that in the active call state (N10) the voice transfer on the media and B-channels is performed correctly (e.g. testing QoS parameters).		
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line Based on T.38. b = line AS: 64 m = line: udptl; T38		
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].		

SP_AU_03	PSTN reference to: ETSI EN 300 899-1 [23], clause 3.1.1	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11
TSS reference:	SIP-PSTN/Basic_call/Successful/3,1 kHz a	udio
Selection criteria:	On 1 OTTA/Basio_call/Odecessial/o,1 KHz a	dalo
Test purpose:	Ensure that the call establishment and the call clearing procedure are performed correctly when the calling user clears after answering with a BYE message. Ensure that in the confirmed state the transfer of tone or announcement on the media channel is performed correctly. In case when the parameter in the SDP rtpmap: <dynamic-pt> is used the codecs in</dynamic-pt>	
SIP Parameter values:	table 10 applies. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

SP_AU_04	PSTN reference to: ETSI EN 300 899-1 [23],	NGN reference to: ITU-T Q.1912.5 [51], clause 6.11	
	clause 3.1.1	110 1 Q. 1012.5 [01], clause 0.11	
TSS reference:	SIP-PSTN/Basic_call/Successful/3,1 kHz a	udio	
Selection criteria:			
Test purpose:	Ensure that the call clearing procedure is policiears after answering The calling user sha	•	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and preconditio a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].		

Table 9: Values for test purposes SP_AU_01 to SP_AU_04

m= line				b= line	a= line
VA	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>: <bandwidth-value> (see note)</bandwidth-value></modifier>	rtpmap: <payload type=""> <encoding name="">/ <clock rate=""> [/<encoding parameters="">]</encoding></clock></encoding></payload>
VA_01	audio	RTP/AVP	0	N/A or up to 64 kbit/s	N/A
VA_02	audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMU/8000</dynamic-pt>
VA_03	audio	RTP/AVP	8	N/A or up to 64 kbit/s	N/A
VA_04	audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>
VA_05	image	Udptl	t38	N/A or up to 64 kbit/s	Based on T.38
VA_06	image	Tcptl	t38	N/A or up to 64 kbit/s	Based on T.38
NOTE: <bandwidth value=""> for <modifier> of AS is evaluated to be B kbit/s.</modifier></bandwidth>					

Table 10: Values for test purposes SP_AU_01 and SP_AU_04

VARIABLE	PT	Encoding	media type	clock rate	channels
VA_01	0	PCMU	Α	8,000	1
VA_02	3	GSM	Α	8,000	1
VA_03	4	G723	Α	8,000	1
VA_04	5	DVI4	Α	8,000	1
VA_05	7	LPC	Α	8,000	1
VA_06	8	PCMA	Α	8,000	1
VA_07	9	G722	Α	8,000	1
VA_08	12	QCELP	Α	8,000	1
VA_09	13	CN	Α	8,000	1
VA_10	18	G729	Α	8,000	1
VA_11	Dyn	G726-40	Α	8,000	1
VA_12	Dyn	G726-32	Α	8,000	1
VA_13	Dyn	G726-24	Α	8,000	1
VA_14	Dyn	G726-16	Α	8,000	1
VA_15	Dyn	G729D	Α	8,000	1
VA_16	Dyn	G729E	Α	8,000	1
VA_17	Dyn	GSM-EFR	A	8,000	1

6.5.1.2 Test purposes for SIP-PSTN, Basic call, Unsuccessful

Unsuccessful

SP_XX_U01	NGN reference to: ITU-T Q.1912.5 [51]	
TSS reference:	SIP-PSTN/Basic call/Unsuccessful	
Selection criteria:	CIT TOTTY Busic_sull Cited Coccount	
Test purpose:	Ensure that, when calling to unallocated number , the network initiate call clearing to the	
	calling user with a 404Not Found message. If the Reason Header field is implemented the cause value #1 should be set in the Reason Header field.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT) m = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

SP_XX_U02	NGN reference to:	
	ITU-T Q.1912.5 [51]	
TSS reference:	SIP-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that the call will be released when there is no route to destination . The network initiates call clearing to the calling user with a 503 Service unavailable message. If the Reason Header field is implemented the cause value # 3 should be set in the Reason Header field.	
SIP Parameter values:	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

SP_XX_U03	NGN reference to: ITU-T Q.1912.5 [51]	
TSS reference:	SIP-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that, when the called user is busy the network initiates call clearing to the calling user with a 486 Busy Here message.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition	
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

SP_XX_U04	NGN reference to: ITU-T Q.1912.5 [51]	
TSS reference:	SIP-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that when there is no answer from the called user (but user alerted), the network initiate call clearing to the calling user with a CANCEL or 408 Request Timeout message.	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

SP_XX_U05	NGN reference to: ITU-T Q.1912.5 [51]	
TSS reference:	SIP-PSTN/Basic_call/Unsuccessful	
Selection criteria:		
Test purpose:	Ensure that the call will be released when the called number is incomplete. The network initiates call clearing to the calling user with final response code in SIP_MESSAGE_VA. The cause value should be mapped to the Reason Header field.	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].	

Test case variable for test case SP_XX_U05			
	SIP_MESSAGE_VA Unsuccessful destination (Address incomplete)		
VA_1	404 Not Found	"Unassigned (unallocated) number"	
VA_2	503 Service unavailable	"No route to destination"	
VA_3	410 Gone	"Number changed"	
VA_4	484 Address Incomplete	"Invalid number format (incomplete number")	

SP_XX_U06	NGN reference to: ITU-T Q.1912.5 [51]
TSS reference:	SIP-PSTN/Basic_call/Unsuccessful
Selection criteria:	
Test purpose:	Ensure that the call will be released when the calling user clears the call with a CANCEL or BYE before answer from called user.
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)
	b = line (PIXIT) m = line (PIXIT)
Comments:	In the Request-URI a sip: URI with the user=phone parameter, and the user info part of that URI is an E.164 number encoded as specified by the telephone-subscriber rule of IETF RFC 3966 [26].

Table 11: Values for test purposes SP_XX_U01 to SP_XX_U06

		m= line		b= line	a= line
VA	<media></media>	<transport></transport>	<fmt-list></fmt-list>	<modifier>: <bandwidth-value> (see note)</bandwidth-value></modifier>	rtpmap: <payload type=""> <encoding name="">/ <clock rate=""> [/<encoding parameters="">]</encoding></clock></encoding></payload>
VA_01	audio	RTP/AVP	0	N/A or up to 64 kbit/s	N/A
VA_02	audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMU/8000</dynamic-pt>
VA_03	audio	RTP/AVP	8	N/A or up to 64 kbit/s	N/A
VA_04	audio	RTP/AVP	Dynamic PT	N/A or up to 64 kbit/s	rtpmap: <dynamic-pt> PCMA/8000</dynamic-pt>
VA_05	image	Udptl	t38	N/A or up to 64 kbit/s	Based on T.38
VA_06	image	Tcptl	t38	N/A or up to 64 kbit/s	Based on T.38
NOTE:	<bandwidt< td=""><td>h value> for <m< td=""><td>odifier> of AS</td><td>is evaluated to be B kbi</td><td>t/s.</td></m<></td></bandwidt<>	h value> for <m< td=""><td>odifier> of AS</td><td>is evaluated to be B kbi</td><td>t/s.</td></m<>	odifier> of AS	is evaluated to be B kbi	t/s.

Table 12: Values for test purposes SP_XX_U01 to SP_XX_U06

VARIABLE	PT	Encoding	media type	clock rate	channels
VA_01	0	PCMU	Α	8 000	1
VA_02	3	GSM	Α	8 000	1
VA_03	4	G723	Α	8 000	1
VA_04	5	DVI4	Α	8 000	1
VA_05	7	LPC	Α	8 000	1
VA_06	8	PCMA	Α	8 000	1
VA_07	9	G722	Α	8 000	1
VA_08	12	QCELP	Α	8 000	1
VA_09	13	CN	Α	8 000	1
VA_10	18	G729	Α	8 000	1
VA_11	Dyn	G726-40	Α	8 000	1
VA_12	Dyn	G726-32	Α	8 000	1
VA_13	Dyn	G726-24	Α	8 000	1
VA_14	Dyn	G726-16	Α	8 000	1
VA_15	Dyn	G729D	Α	8 000	1
VA_16	Dyn	G729E	Α	8 000	1
VA_17	Dyn	GSM-EFR	Α	8 000	1

6.5.2 Test purposes for SIP - PSTN Supplementary services

6.5.2.1 OIP/CLIP

SP_XXSSOIP01	PSTN reference	e to:	NGN reference to:			
	ETSI EN 300 001	l [i.12]	ITU-T	Q.1912.5 [51], clause 6.1.3.6		
	ETSI TS 300 648	3 [i.13]	ETSI E	N 383 001 [49], clause 6.1.3.6		
	ETSI EN 300 659		ETSI TS	129 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:						
Test purpose:				INVITE message where:		
			a SIP URI (P	IXIT) with an identity in the format of		
	a tel URI has not been					
	the priv-value componer					
		ld containing a	URI with an id	dentity in the format of a tel URI has		
	not been received					
			n the P-Assert	ed-Identity Header is correctly		
	delivered to the called (s					
SIP Parameter	Dial string parameters o	ptions=PIXIT				
values:		_				
	PIXIT for supported hea	der:				
	Case a) no 100 rel					
	Case b) Supported: 100		11.1			
	Case c) Supported: 100	rel and precor	ndition			
	a line (DIVIT)					
	a = line (PIXIT) b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
Comments.	SIP		SUT	PSTN		
	INVITE	→		Ringing		
	180 Ringing	+		Off Hook		
	200 OK INVITE					
	ACK →					
	BYE	→		On hook		
	200 OK BYE	+				

SP_XXSSOIP02	PSTN reference to: NGN reference to: ETSI EN 300 001 [i.12] ITU-T Q.1912.5 [51], clause 6.1.						
	ETSI TS 300 648			EN 383 001 [49], clause 6.1.3.6			
	ETSI EN 300 659			S 129 163 [i.20], clause 7.2.3.1.2.6			
TSS reference:		Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:	The user subscribes OIR	"temporar	y mode" defaul	t "not restricted"			
	No priv value is sent						
	Special arrangement app						
Test purpose:				a INVITE message where:			
				SIP URI (PIXIT) with an identity in the			
	format of a tel U		t been received	3			
	no priv value is i						
			containing a U	RI with an identity in the format of a tel			
	URI has been re						
			mapped from th	ne From Header is correctly delivered			
OID Demonstra	to the called (se						
SIP Parameter values:	Dial string parameters op	tions=PIXI	I				
values.	PIXIT for supported head	or:					
	Case a) no 100 rel	CI.					
	Case b) Supported: 100 r	el					
	Case c) Supported: 100 r		condition				
	, , , ,						
	a = line (PIXIT)						
	b = line (PIXIT)						
	m = line (PIXIT)						
Comments:		1					
	SIP		SUT	PSTN			
	INVITE	→		Ringing			
	100 Din nin n			Office			
		180 Ringing ← Off Hook					
	200 OK INVITE ACK	←					
	AOR						
	BYE	→		On hook			
	200 OK BYE	,		Offficor			
	LOG ON DIL	.00 OK BYE					

SP_XXSSOIP03	PSTN reference ETSI EN 300 001			ITI L	NGN reference to: T Q.1912.5 [51], clause 6.1.3.6	
	ETSI TS 300 648				EN 383 001 [49], clause 6.1.3.6	
	ETSI EN 300 659				S 129 163 [i.20], clause 7.2.3.1.2.	6
TSS reference:	Private Extensions to SIP		serted Ide			
Selection criteria:	The user subscribes OIR '					
	No priv value is sent	•	•			
	No special arrangement a	pplies				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received no priv value is received the SIP From header field containing a URI with an identity in the format of a tel 					
	URI has been red	ceived	I		·	
	 the Calling Party to the called (ser 			d from the	e P-Asserted ID is correctly deliver	red
SIP Parameter values:	Dial string parameters opti	ions=F				
	PIXIT for supported heade Case a) no 100 rel	er:				
	Case b) Supported: 100 re Case c) Supported: 100 re		preconditi	on		
	a = line (PIXIT) b = line (PIXIT)					
0	m = line (PIXIT)					
Comments:	SIP			SUT	PSTN	
	INVITE	→		01	Ringing	
	INVIIL				Kinging	
	180 Ringing	(Off Hook	
	200 OK INVITE					
	ACK	→				
	-					
	BYE	→			On hook	
	200 OK BYE	+				

SP_XXSSOIP04	PSTN reference to: ETSI EN 300 001 [i.12 ETSI TS 300 648 [i.13 ETSI EN 300 659 [i.15	5] 5]	ETSI E ETSI TS	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 129 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for				
Selection criteria:	The user subscribes OIR "ten No priv value is sent	nporary mo	ode" default	"not restricted"	
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received no priv value is received the SIP From header field containing a URI with an identity in the format of a tel URI has not been received the Calling Party Number mapped from the P-Asserted-Identity Header is				
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
	INVITE →			Ringing	
	180 Ringing ←			Off Hook	
	200 OK INVITE				
	BYE → 200 OK BYE ←				
	ZUU UN DIE				

SP_XXSSOIP05	PSTN refere			GN reference to:		
	ETSI EN 300 0 ETSI TS 300 6			912.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6		
TSS reference:	ETSI EN 300 659 [i.15] ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6 Private Extensions to SIP for Asserted Identity within Trusted Networks					
Selection criteria:	The user subscribes Of					
Selection chiena.	Special arrangement a		e deladit flot i	estricted		
Test purpose:	Ensure that the SUT in	the Idle state, on I	eceipt of a INVI	TE message where:		
	 the SIP From 	header field conta	ning a SIP URI	(PIXIT) with an identity in the		
	format of a tel	URI has been red	eived			
	 the priv-value 	component is set	to "none"			
	 the Calling Pa 	rty Number mappe	ed from the Fron	n Header is correctly delivered		
	to the called (s	served) user		•		
SIP Parameter	Dial string parameters	options=PIXIT				
values:						
	PIXIT for supported hea	ader:				
	Case a) no 100 rel					
	Case b) Supported: 100					
	Case c) Supported: 100	orel and precondit	ion			
	(D) (IT)					
	a = line (PIXIT)					
	b = line (PIXIT)					
Comments:	m = line (PIXIT)					
Comments.	SIP	SL	ı r	PSTN		
	INVITE	→	/1			
				Ringing Off Hook		
	180 Ringing 200 OK INVITE	-		OII HOOK		
	ACK	→				
	AUN	7				
	BYE	→		On hook		
	200 OK BYE	(

SP_XXSSOIP06	PSTN reference to: ETSI EN 300 001 [i.12] ETSI TS 300 648 [i.13] ETSI EN 300 659 [i.15]		NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6			
TSS reference:	Private Extensions to SIP	for Asserted Id	lentity within Trus	ted Networks		
Selection criteria:	The user subscribes OIR No Special arrangement a	applies				
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number mapped from the P-Asserted-Identity Header is					
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT	PSTN		
	INVITE	→		Ringing		
	180 Ringing	+		Off Hook		
	200 OK INVITE ←					
	ACK	→				
	BYE	→		On hook		
	200 OK BYE	+				

SP_XXSSOIP07	PSTN reference ETSI EN 300 001 [ETSI TS 300 648 [ETSI EN 300 659]	i.12] i.13] i.15]	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3 ETSI EN 383 001 [49], clause 6.1. ETSI TS 129 163 [i.20], clause 7.2.3.			
TSS reference:	Private Extensions to SIP	for Asserted	Identity within Tru	usted Networks		
Selection criteria:	The user subscribes OIR Special arrangement appl		ode" default "not	restricted"		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received no priv value is received the Calling Party Number mapped from the From Header is correctly delivered to the called (served) user					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:	,					
	SIP		SUT	PSTN		
	INVITE	→		Ringing		
	180 Ringing	+		Off Hook		
	200 OK ĬNVITE ←					
	ACK	→				
	BYE	→		On hook		
	200 OK BYE	←				

SP_XXSSOIP08	PSTN reference to ETSI EN 300 001 [i. ETSI TS 300 648 [i. ETSI EN 300 659 [i.	12] 13]	ITU-T Q.19 ETSI EN 38	GN reference to: 112.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for	or Asserted	Identity within Trus	sted Networks	
Selection criteria:	The user subscribes OIR "to No Special arrangement ap		ode" default "not r	estricted"	
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received • no priv value is received • the Calling Party Number mapped from the P-Asserted-Identity Header is				
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
		→		Ringing	
		(Off Hook	
		←			
	ACK -	→			
	BYE -	→		On hook	
	200 OK BYE	(

SP_XXSSOIP09	PSTN reference to ETSI EN 300 001 [i.1 ETSI TS 300 648 [i.1 ETSI EN 300 659 [i.1	2] 3] 5]	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6 ETSI EN 383 001 [49], clause 6.1.3.6 ETSI TS 129 163 [i.20], clause 7.2.3.1.2.			
TSS reference:	Private Extensions to SIP fo					
Selection criteria:	The user subscribes OIR "te Special arrangement applies		ode" default "	not restricted"		
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the From Header is correctly delivered to the called (served) user 					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT	PSTN		
	INVITE -			Ringing		
	180 Ringing			Off Hook		
	200 OK INVITE ←					
	ACK	ACK →				
	BYE -			On hook		
	200 OK BYE	-				

SP_XXSSOIP10	PSTN reference t ETSI EN 300 001 [i	i.12]	ITU-T Q.191	I reference to: 2.5 [51], clause 6.1.3.6	
	ETSI TS 300 648 [i			001 [49], clause 6.1.3.6	
T00 (ETSI EN 300 659 [i		ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6		
TSS reference: Selection criteria:	Private Extensions to SIP				
Selection chiena.	The user subscribes OIR "temporary mode" default "not restricted" No Special arrangement applies				
Test purpose:			n receipt of a INIVITE	message where:	
rest purpose.	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user 				
SIP Parameter	Dial string parameters options=PIXIT				
values:	PIXIT for supported header:				
	Case a) no 100 rel	••			
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and precondition				
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP	_	SUT	PSTN	
	INVITE	→		Ringing	
	180 Ringing	(Off Hook	
	200 OK INVITE ←				
	ACK →				
	BYE	→		On hook	
	200 OK BYE ←				

SP_XXSSOIP11	PSTN reference to ETSI EN 300 001 [i.			NGN reference to: 1912.5 [51], clause 6.1.3.6	
	ETSI TS 300 648 [i.	-		383 001 [49], clause 6.1.3.6	
	ETSI EN 300 659 [i.			9 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for	or Asserted	Identity within T	rusted Networks	
Selection criteria:	The user subscribes OIR "temporary mode" default "not restricted"				
	Special arrangement applies				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received No priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the From Header is correctly delivered 				
	to the called (served) user				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:		ı			
	SIP		SUT	PSTN	
		}		Ringing	
	180 Ringing				
	ACK →				
	BYE → On hook				
	200 OK BYE ←				

SP_XXSSOIP12	PSTN reference t			NGN reference to:	
	ETSI EN 300 001 [i	-		1.1912.5 [51], clause 6.1.3.6	
	ETSI TS 300 648 [i	-		383 001 [49], clause 6.1.3.6	
TSS reference:	ETSI EN 300 659 [i.15] ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6 Private Extensions to SIP for Asserted Identity within Trusted Networks				
Selection criteria:					
Coloculori critoria:	The user subscribes OIR "temporary mode" default "not restricted" No Special arrangement applies				
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where:				
	the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel				
	URI has not been	n received		•	
	 no priv value is re 				
				JRI (PIXIT) with an identity in the	
	format of a tel UR				
	the Calling Party Number mapped from the content of the P-Asserted Header is				
SIP Parameter	correctly delivered to the called (served) user Dial string parameters options=PIXIT				
values:	Diai stillig parameters options=FIATI				
	PIXIT for supported heade	r:			
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and precondition				
	- Kara (DIVIT)				
	a = line (PIXIT) b = line (PIXIT)				
	m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
		→		Ringing	
	180 Ringing ← Off Hook				
	200 OK INVITE				
	ACK →				
	BYE	→		On hook	
	200 OK BYE				
	200 ON BIL				

SP_XXSSOIP 13	PSTN referen ETSI EN 300 00 ETSI TS 300 64	01 [i.12]	ITU-T Q.19	6N reference to: 12.5 [51], clause 6.1.3.6 3 001 [49], clause 6.1.3.6
	ETSI EN 300 6			63 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to S		dentity within Trus	sted Networks
Selection criteria:	The user subscribes O			
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has not been received the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	+		Off Hook
	200 OK INVITE ACK	←		
	BYE	→		On hook
	200 OK BYE ←			

SP_XXSSOIP14	PSTN reference ETSI EN 300 001 ETSI TS 300 648 ETSI EN 300 659	[i.12] [i.13] [i.15]	ITU-T Q.191 ETSI EN 383 ETSI TS 129 16	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 i3 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP				
Selection criteria:	The user subscribes OIR				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received: no priv value is received the SIP From header field containing a SIP URI (PIXIT) in the format of a tel URI has not been received the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user 				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
	INVITE	→		Ringing	
	180 Ringing	-		Off Hook	
	200 OK INVITE	-			
	ACK →				
	BYE	→		On hook	
	200 OK BYE ←				

SP_XXSSOIP15	PSTN reference		_	NGN reference to:
	ETSI EN 300 001 [i ETSI TS 300 648 [i			1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6
	ETSI EN 300 659 [i			9 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP			
Selection criteria:	The user subscribes OIR "			
	Special arrangement appli			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the From Header is correctly delivered 			
	to the called (serv			
SIP Parameter values:	Dial string parameters opti	ions=PIXIT		
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:	OID		OUT	DOTN
	SIP INVITE	_	SUT	PSTN
	180 Ringing	→		Ringing Off Hook
	200 OK INVITE	(On Hook
	ACK	→		
	BYE	→		On hook
	200 OK BYE	-		On Hook

SP_XXSSOIP16	PSTN reference to: ETSI EN 300 001 [i.12] ETSI TS 300 648 [i.13] ETSI EN 300 659 [i.15]		ETSI E ETSI TS	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 29 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP for			
Selection criteria:	The user subscribes OIR "ten		mode" defaul	"not restricted"
- .	No Special arrangement appl			IN OTE
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user 			
SIP Parameter	Dial string parameters options			
values:				
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)			
	b = line (PIXIT) m = line (PIXIT)			
Comments:	- -			
Commond.	SIP		SUT	PSTN
	INVITE ->			Ringing
	180 Ringing ←			Off Hook
	200 OK ĬNŬITE ←			
	ACK →			
	BYE →			On hook
	200 OK BYE ←			

SP_XXSSOIP17	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ETSI EN ETSI TS 12	NGN reference to: .1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 !9 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for A			
Selection criteria:	The user subscribes OIR "tem Special arrangement applies	porary mode" default "	not restricted"	
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a URI (PIXIT) in the format of a tel URI has been received no priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the Calling Party Number mapped from the From Header is correctly delivered to the called (served) user.			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP	SUT	PSTN	
	INVITE →		Ringing	
	180 Ringing ←		Off Hook	
	200 OK INVITE ←			
	ACK →			
	BYE →		On hook	
	200 OK BYE ←			

SP_XXSSOIP17	PSTN reference to: ETSI EN 300 001 [i.12		ITILT	NGN reference to: Q.1912.5 [51], clause 6.1.3.6
	ETSI TS 300 648 [i.13		ETSI E	N 383 001 [49], clause 6.1.3.6
	ETSI EN 300 659 [i.15			29 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP for			
Selection criteria:	The user subscribes OIR "te		ry mode" defaul	t "not restricted"
	No Special arrangement ap			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a URI (PIXIT) in the format of a tel URI has been received no priv value is received the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received and the Calling Party Number mapped from the P-Asserted-Identity Header is 			
	correctly delivered			iser
SIP Parameter values:	Dial string parameters optio	ns=PIX	H	
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:	CID		CUT	DOTN
	SIP INVITE	<u> </u>	SUT	PSTN Ringing
	180 Ringing			Off Hook
	200 OK INVITE			OII TIOON
	ACK -			
	BYE =	>		On hook
	200 OK BYE	-		

SP_XXSSOIP18	PSTN reference to: ETSI EN 300 001 [i.12],	= =	GN reference to: 912.5 [51], clause 6.1.3.6			
	ETSI TS 300 648 [i.13],		33 001 [49], clause 6.1.3.6			
	ETSI EN 300 659 [i.15]					
TSS reference:	Private Extensions to SIP for A					
Selection criteria:	The user subscribes OIR "tem	oorary mode" default "n	ot restricted"			
	Special arrangement applies	,				
Test purpose:	Ensure that the SUT in the Idle	state, on receipt of a l	NVITE message where:			
			JRI (PIXIT) with an identity in the			
	format of a tel URI ha					
	the priv-value composition					
	 the Calling Party Nun 	nber mapped from the F	From Header is correctly delivered			
	to the called (served)					
SIP Parameter	Dial string parameters options	=PIXIT				
values:	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and	d precondition				
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:	OID	O. I.T.	DOTN			
	SIP	SUT	PSTN			
	INVITE →		Ringing Off Hook			
	180 Ringing ← 200 OK INVITE ←		OII HOOK			
	ACK →					
	ACR 9					
	BYE →		On hook			
	200 OK BYE ←					

SP_XXSSOIP19	PSTN reference to ETSI EN 300 001 [i.1: ETSI TS 300 648 [i.1: ETSI EN 300 659 [i.1	2], 3],	ITU-T Q ETSI EN	NGN reference to: .1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 9 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP f	or Assert		
Selection criteria:	The user subscribes OIR "t No Special arrangement ap	temporar		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
		→	-	Ringing
	3 3	(-	Off Hook
	200 OK INVITE	(
	ACK	→		
	BYE	→		On hook
		-		

SP_XXSSOIP20	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ETS	NGN reference to: -T Q.1912.5 [51], clause 6.1.3.6 I EN 383 001 [49], clause 6.1.3.6 S 129 163 [i.20], clause 7.2.3.1.2.6				
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR "tem Special arrangement applies						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received no priv value is received the Calling Party mapped from the set to the content of the From Header Number is correctly delivered to the called (served) user						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP	SUT	PSTN				
	INVITE →		Ringing				
	180 Ringing ←		Off Hook				
	200 OK INVITE ← ACK →	200 OK INVITE ←					
	BYE →		On hook				
	200 OK BYE ←						

SP_XXSSOIP21	PSTN reference to ETSI EN 300 001 [i.1	· -	NGN reference to: ITU-T Q.1912.5 [51], clause 6.1.3.6			
	ETSI TS 300 648 [i.1	3],	ETSI EN 383 001 [49], clause 6.1.3.6			
	ETSI EN 300 659 [i.1	15]	ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6			
TSS reference:	Private Extensions to SIP to					
Selection criteria:	The user subscribes OIR "		mode" defaul	t "not restricted"		
	No Special arrangement a					
Test purpose:				a INVITE message where:		
				P URI (PIXIT) with an identity in the		
	format of a tel UR		n received			
	 no priv value is re 					
				ne P-Asserted-Identity Header is		
	correctly delivere			ıser		
SIP Parameter	Dial string parameters opti	ons=PIXI	Γ			
values:						
	PIXIT for supported heade	r:				
	Case a) no 100 rel					
	Case b) Supported: 100 re		andition			
	Case c) Supported: 100 re	i and pred	orialion			
	a = line (PIXIT)					
	b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
	SIP		SUT	PSTN		
	INVITE -	>		Ringing		
	180 Ringing ←	•		Off Hook		
	200 OK INVITE ►	•				
	ACK -	·				
	BYE =	<u> </u>		On hook		
	200 OK BYE			OHTIOOK		
<u> </u>	200 OR DIL					

SP_XXSSOIP22	PSTN reference to:			reference to:
	ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13],		FTSI FN 383 0	.5 [51], clause 6.1.3.6 01 [49], clause 6.1.3.6
	ETSI EN 300 659 [i.15]			[i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP for			
Selection criteria:	The user subscribes OIR "ten			
Test purpose:	Ensure that the SUT in the Idl			
			aining a SIP URI	(PIXIT) in the format of a tel
	URI has not been re			
	the priv-value compo			
	the SIP From heade		-	
	 the Calling Party Nu correctly delivered to 			serted-Identity Header is
SIP Parameter	Dial string parameters options		,	
values:	DIVIT (
	PIXIT for supported header:			
	Case a) no 100 rel Case b) Supported: 100 rel			
	Case c) Supported: 100 rel ar	nd precondition	าท	
	Case of Supported. 100 for all	na proconant	511	
	a = line (PIXIT)			
	b = line (PIXIT)			
	m = line (PIXIT)			
Comments:				
	SIP	S	UT	PSTN
	INVITE -			Ringing
	180 Ringing ← 200 OK INVITE ←			Off Hook
	ACK +			
	AGR 9			
	BYE →			On hook
	200 OK BYE ←			

SP_XXSSOIP23	PSTN reference t ETSI EN 300 001 [i. ETSI TS 300 648 [i. ETSI EN 300 659 [i	.12], .13], .15]	ETSI E ETSI TS	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 EN 383 001 [49], clause 6.1.3.6 129 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP			
Selection criteria:	The user subscribes OIR			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received no priv value is received the SIP From header is set to anonymous the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user 			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP INVITE	>	SUT	PSTN Ringing
	180 Ringing			Off Hook
	200 OK INVITE	+		
		>		On hook
	200 OK BYE	+		

SP_XXSSOIP24	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ITU-T Q.191 ETSI EN 383 ETSI TS 129 16	N reference to: 2.5 [51], clause 6.1.3.6 001 [49], clause 6.1.3.6 63 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for Ass			
Selection criteria:	The user subscribes OIR "tempo	rary mode" default "resti	ricted"	
	Special arrangement applies			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has been received the Calling Party Number set to the content of the From Header is correctly delivered to the called (served) user 			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP	SUT	PSTN	
	INVITE →		Ringing	
	180 Ringing ←		Off Hook	
	200 OK INVITE			
	ACK →			
	BYE →		On hook	
	200 OK BYE ←			

SP_XXSSOIP25	PSTN referer ETSI EN 300 00 ETSI TS 300 64 ETSI EN 300 6	01 [i.12], 18 [i.13], 59 [i.15]	ITU-T Q. ETSI EN : ETSI TS 129	NGN reference to: 1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 9 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to			
Selection criteria:	The user subscribes C		mode" default "	restricted"
	No Special arrangeme			
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has been received the Calling Party Number mapped from the P-Asserted-Identity Header is			
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	+		Off Hook
	200 OK INVITE	+		
	ACK	→		
	BYE	→		On hook
	200 OK BYE	-		

SP_XXSSOIP26	PSTN reference to: ETSI EN 300 001 [i.12 ETSI TS 300 648 [i.13 ETSI EN 300 659 [i.15]	2], 3], 5]	ETSI EN ETSI TS 12	NGN reference to: .1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 9 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP for			
Selection criteria:	The user subscribes OIR "t			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has not been received the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user 			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
		→		Ringing
	3 3	(Off Hook
		(
	ACK -	→		
	BYE -	>		On hook
	200 OK BYE	(

SP_XXSSOIP27	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ETSI EN ETSI TS 1	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 29 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for A			
Selection criteria:	The user subscribes OIR "temp Special arrangement applies	orary mode" default	"restricted"	
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number mapped from the From Header is correctly delivered to the called (served) user 			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP	SUT	PSTN	
	INVITE →		Ringing	
	180 Ringing ←		Off Hook	
	200 OK INVITE ←			
	ACK →			
	BYE →		On hook	
	200 OK BYE ←			

SP_XXSSOIP28	PSTN reference to ETSI EN 300 001 [i.1 ETSI TS 300 648 [i.1 ETSI EN 300 659 [i.1	2], 3],	ETSI EN	NGN reference to: 0.1912.5 [51], clause 6.1.3.6 0.383 001 [49], clause 6.1.3.6 0.29 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP f			
Selection criteria:	The user subscribes OIR " No Special arrangement a	tempor		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received the priv-value component is set to "none" the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user			
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
		→		Ringing
	3 3	+		Off Hook
		(
	ACK	→		
	BYE	→		On hook
	200 OK BYE	(

SP_XXSSOIP29	PSTN reference			NGN reference to:
	ETSI EN 300 001 [ETSI TS 300 648 [Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6
	ETSI EN 300 659			29 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIF			
Selection criteria:	The user subscribes OIR			
	Special arrangement app			
Test purpose:				a INVITE message where:
			containing a S	SIP URI (PIXIT) in the format of a tel
	URI has not be			
	the priv-value c the SID From b			P URI (PIXIT) with an identity in the
	format of a tel U			
	 the Calling Part the called (serv 		apped to the F	rom Header is correctly delivered to
SIP Parameter values:	Dial string parameters or	otions=PIXIT		
	PIXIT for supported head	der:		
	Case a) no 100 rel	ral		
	Case b) Supported: 100 Case c) Supported: 100		andition	
	Case of Supported. 100	iei and prece	ridition	
	a = line (PIXIT)			
	b = line (PIXIT)			
	m = line (PIXIT)			
Comments:				
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	(Off Hook
	200 OK INVITE	+		<u> </u>
	ACK	→		
	BYE	→		On hook
	200 OK BYE	-		OTTTOOK
	200 OK DIL	•		

SP_XXSSOIP30	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ITU-T Q. ETSI EN 3	NGN reference to: 1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 3 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for A				
Selection criteria:	The user subscribes OIR "temp No Special arrangement applie		estricted"		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received and the Calling Party Number mapped from the P-Asserted-Identity Header is correctly delivered to the called (served) user				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP	SUT	PSTN		
	INVITE → Ringing 180 Ringing ← Off Hook 200 OK INVITE ← ACK				
	BYE → On hook 200 OK BYE ←				

SP_XXSSOIP31	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ETSI I ETSI TS	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 EN 383 001 [49], clause 6.1.3.6 129 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for				
Selection criteria:	The user subscribes OIR "ten				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has not been received the Calling Party Number mapped from the P-Asserted-Identity Header is 				
	correctly delivered to				
SIP Parameter values:		Dial string parameters options=PIXIT			
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP	SUT	PSTN		
	INVITE ->		Ringing		
	180 Ringing ←		Off Hook		
	200 OK INVITE ←				
	ACK →				
	BYE →		On hook		
	200 OK BYE ←				

SP_XXSSOIP32	PSTN reference to: ETSI EN 300 001 [i.12] ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	,	ETSI EI	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 29 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for				
Selection criteria:	The user subscribes OIR "ter Special arrangement applies		mode" default	"restricted"	
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received: the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) with an identity in the format of a tel URI has been received: the Calling Party Number mapped from the From Header is correctly delivered to the called (served) user 				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
	INVITE → Ringing 180 Ringing ← Off Hook 200 OK INVITE ← ACK				
	BYE → 200 OK BYE ←			On hook	

SP_XXSSOIP33	PSTN reference to:	NGN	reference to:		
	ETSI EN 300 001 [i.12],		.5 [51], clause 6.1.3.6		
	ETSI TS 300 648 [i.13],		001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i.15]		3 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for Ass				
Selection criteria:	The user subscribes OIR "tempo	ary mode" default "restric	cted"		
_	No Special arrangement applies				
Test purpose:	Ensure that the SUT in the Idle s				
		ntity containing a SIP UR	I (PIXIT) in the format of a tel		
	URI has been received				
	the priv-value compone		DIVITY OF THE STATE OF THE		
	the SIP From header file format of a tel URI has I		PIXIT) with an identity in the		
	the Calling Party Number correctly delivered to the	er mapped from the P-Ass	serted-identity Header is		
SIP Parameter	Dial string parameters options=P				
values:	Diai string parameters options=F	IAH			
values.	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and p	recondition			
	a = line (PIXIT)				
	b = line (PIXIT)				
	m = line (PIXIT)				
Comments:	OID I	OUT	DOTN		
	SIP	SUT	PSTN		
	INVITE →		Ringing		
	180 Ringing ← Off Hook				
	200 OK INVITE ← ACK →				
	ACR 7				
	BYE →		On hook		
	200 OK BYE		OTTTOOK		
	200 OR DIL				

SP_XXSSOIP34	PSTN reference to:			NGN reference to:	
	ETSI EN 300 001 [i.12]			0.1912.5 [51], clause 6.1.3.6	
	ETSI TS 300 648 [i.13]		ETSI EN 383 001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i.15]		ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for				
Selection criteria:	The user subscribes OIR "ter				
Test purpose:	Ensure that the SUT in the Id				
				IP URI (PIXIT) in the format of a tel	
	URI has not been r				
	the priv-value comp				
	the SIP From heade		•		
	 the Calling Party Nu correctly delivered t 			P-Asserted-Identity Header is ser	
SIP Parameter	Dial string parameters option			-	
values:					
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel a	nd prec	ondition		
	II (DI)(IT)				
	a = line (PIXIT)				
	b = line (PIXIT) m = line (PIXIT)				
Comments:					
Comments.	SIP		SUT	PSTN	
	INVITE =	>	001	Ringing	
	180 Ringing			Off Hook	
	200 OK INVITE				
	ACK -	>			
	BYE	>		On hook	
	200 OK BYE €	•			

SP_XXSSOIP35	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TSI 300 648 [i.13],	ETSI EN	NGN reference to: .1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6		
TSS reference:	ETSI EN 300 659 [i.15] Private Extensions to SIP for As		29 163 [i.20], clause 7.2.3.1.2.6		
Selection criteria:					
Test purpose:	The user subscribes OIR "temporary mode" default "not restricted" Ensure that the SUT in the Idle state, on receipt of a INVITE message where: • the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received • the priv-value component is set to "none" • the SIP From header is set to anonymous • the Calling Party Number set to the content of the P-Asserted-Identity Header is correctly delivered to the called (served) user				
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP	SUT	PSTN		
	INVITE → Ringing 180 Ringing ← Off Hook				
	200 OK INVITE ← ACK →				
	BYE →		On hook		
	200 OK BYE ←				

SP_XXSSOIP36	PSTN reference ETSI EN 300 001 [i ETSI TS 300 648 [i ETSI EN 300 659 [i	.12], .13], i.15]	ETSI EI ETSI TS 1	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 29 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP			
Selection criteria:	The user subscribes OIR "			
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received No priv value is received the SIP From header is set to anonymous the Calling Party Number mapped from the P-Asserted-Identity Header is 			
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)			
Comments:	1			
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	←		Off Hook
	200 OK INVITE	←		
	ACK	→		
	BYE	→		On hook
	200 OK BYE	+		

SP_XXSSOIP37	PSTN reference to ETSI EN 300 001 [i.1			NGN reference to: 1912.5 [51], clause 6.1.3.6	
	ETSI TS 300 648 [i.1			383 001 [49], clause 6.1.3.6	
	ETSI EN 300 659 [i.			9 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP	for Asse	rted Identity within	Trusted Networks	
Selection criteria:	The user subscribes OIR '				
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) in the format of a tel URI has been received the priv-value component is set to "none" the SIP From header is set to anonymous the Calling Party Number mapped from the P-Asserted-Identity Header is 				
SIP Parameter values:	correctly delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)				
Comments:					
	SIP		SUT	PSTN	
	INVITE	→		Ringing	
	180 Ringing ← Off Hook				
	200 OK INVITE ACK	←			
	AUN				
	BYE	→		On hook	
	200 OK BYE	+			

6.5.2.2 OIR/CLIR

SP_XXSSOIR01	PSTN reference to:	e to: NGN reference to:				
	ETSI EN 300 001 [i.12],	ITU-T Q.19	12.5 [51], clause 6.1.3.6			
	ETSI TS 300 648 [i.13],	ETSI EN 383	3 001 [49], clause 6.1.3.6			
	ETSI EN 300 659 [i.15]	ETSI TS 129 1	63 [i.20], clause 7.2.3.1.2.6			
TSS reference:	Private Extensions to SIP for Ass					
Selection criteria:	The user subscribes OIR "tempor					
Test purpose:	Ensure that the SUT in the Idle st					
			IRI (PIXIT) has been received			
	 the priv-value componer 	t is set to "id"				
	 the SIP From header fie 	d containing a SIP UR	I (PIXIT) has been received			
	 the Calling Party Number 	r is not delivered to the	e called (served) user			
SIP Parameter	Dial string parameters options=PI	XIT				
values:						
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and p	econdition				
	a – lina (DIVIT)					
	a = line (PIXIT) b = line (PIXIT)					
	m = line (PIXIT)					
Comments:						
Commonto.	SIP	SUT	PSTN			
	INVITE →		Ringing			
	180 Ringing ←		Off Hook			
	200 OK ĬNVITE ←	3 3				
	ACK →					
	BYE →		On hook			
	200 OK BYE ←					

SP_XXSSOIR02	PSTN reference to:		NGN reference to:		
	ETSI EN 300 001 [i.12],		ITU-T Q.1912.5 [51], clause 6.1.3.6		
	ETSI TS 300 648 [i.13],		ETSI EN 383 001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i.15]		ETSI TS 12	9 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIP for				
Selection criteria:	The user subscribes OIR "ter				
Test purpose:	Ensure that the SUT in the Id				
	 the SIP P-Preferred 	-Identity	y containing a SI	P URI (PIXIT) has been received	
	 the priv-value not pr 				
	 the SIP From heade 	er field o	containing a SIP	URI (PIXIT) has been received	
	 the Calling Party Nu 	ımber is	not delivered to	the called (served) user	
SIP Parameter	Dial string parameters options	s=PIXI7	Γ		
values:					
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel a	nd prec	ondition		
	a – lina (DIVIT)				
	a = line (PIXIT) b = line (PIXIT)				
	m = line (PIXIT)				
Comments:					
Commonto.	SIP		SUT	PSTN	
	INVITE ->			Ringing	
	180 Ringing Conf. Off Hook				
	200 OK INVITE ←				
	ACK →				
	BYE →			On hook	
	200 OK BYE ←				

SP_XXSSOIR03	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ITU-T Q. ETSI EN ETSI TS 12	NGN reference to: .1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 9 163 [i.20], clause 7.2.3.1.2.6				
TSS reference:	Private Extensions to SIP for A						
Selection criteria:	The user subscribes OIR "tem						
Test purpose:	the SIP P-Preferred-Ipriv-value componentthe SIP From header	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is set to "id" the SIP From header is set to anonymous					
SIP Parameter values:	 the Calling Party Number is not delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT) 						
Comments:							
	SIP	SUT	PSTN				
	INVITE →		Ringing				
	180 Ringing ←		Off Hook				
	200 OK INVITE ←						
	ACK →						
	BYE →		On hook				
	200 OK BYE ←						

SP_XXSSOIR04	PSTN reference	e to:		NGN reference to:			
	ETSI EN 300 001	[i.12],	ITU-	Γ Q.1912.5 [51], clause 6.1.3.6			
	ETSI TS 300 648	i[i.13],		EN 383 001 [49], clause 6.1.3.6			
	ETSI EN 300 659	9 [i.15]	ETSI TS 129 163 [i.20], clause 7.2.3.1.2.6				
TSS reference:	Private Extensions to S						
Selection criteria:	The user subscribes OI						
Test purpose:				f a INVITE message where:			
				SIP URI (PIXIT) has been received			
	 priv-value com 						
	the SIP From I	header is set t	o anonymo	us			
	 the Calling Pa 	rty Number is	not delivered	d to the called (served) user			
SIP Parameter	a = line (PIXIT)						
values:	b = line (PIXIT)						
	m = line (PIXIT)						
	Coop o) no 100 rol						
	Case a) no 100 rel Case b) Supported: 100) rol					
	Case c) Supported: 100		ndition				
	Case c) Supported. Too	rei and preco	ilallion				
	SIP URI PIXIT:						
	Case a)						
	sip: local-number-digits	; phone-contex	kt=nat @hos	stportion; user=phone			
	Case b)						
	sip: global -number-digi	ts @hostportio	on: user=pho	one			
Comments:		•	,				
	SIP		SUT	PSTN			
	INVITE	→		Ringing			
		180 Ringing ← Off Hook					
		200 OK INVITE ←					
	ACK	→					
	BYE	→		On hook			
	200 OK BYE	←					
	•			1 1			

SP_XXSSOIR05	PSTN reference to:	NGI	N reference to:		
	ETSI EN 300 001 [i.12],	ITU-T Q.191	2.5 [51], clause 6.1.3.6		
	ETSI TS 300 648 [i.13],		001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i.15]	ETSI TS 129 16	33 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for Ass				
Selection criteria:	The user subscribes OIR tempor				
Test purpose:	Ensure that the SUT in the Idle s				
	 the SIP P-Preferred-Ide 	ntity containing a SIP UI	RI (PIXIT) has been received		
	 the priv-value compone 				
	 the SIP From header field 	ld containing a SIP URI	(PIXIT) has been received		
	the Calling Party Number	er is not delivered to the	called (served) user		
SIP Parameter	Dial string parameters options=P	IXIT			
values:					
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel and p	recondition			
	a = line (PIXIT)				
	b = line (PIXIT)				
2 .	m = line (PIXIT)				
Comments:	CID	OUT	DOTN		
	SIP →	SUT	PSTN		
			Ringing		
			Off Hook		
	200 OK INVITE ←				
	ACK →				
	BYF →		On heads		
			On hook		
	200 OK BYE ←				

SP_XXSSOIR06	PSTN reference to: ETSI EN 300 001 [i.12] ETSI TS 300 648 [i.13] ETSI EN 300 659 [i.15]	j,]	ETSI EI ETSI TS 1	NGN reference to: Q.1912.5 [51], clause 6.1.3.6 N 383 001 [49], clause 6.1.3.6 29 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for					
Selection criteria:	The user subscribes OIR ter					
Test purpose:	 Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is set to "id" the SIP From header is set to anonymous the Calling Party Number is not delivered to the called (served) user 					
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT)					
Comments:	m = line (PIXIT)					
	SIP		SUT	PSTN		
	INVITE →	·		Ringing		
	180 Ringing ←			Off Hook		
	200 OK INVITE ← ACK →					
	BYE → 200 OK BYE ←			On hook		

SP_XXSSOIR07	PSTN reference to:		NGN reference to:		
	ETSI EN 300 001 [i.12], ITU-T Q.1912.5 [51], clause 6.7		Q.1912.5 [51], clause 6.1.3.6		
	ETSI TS 300 648 [i.13],		ETSI EN 383 001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i.15]		129 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to SIP for		hin Trusted Networks		
Selection criteria:	The user subscribes OIR perr				
Test purpose:	Ensure that the SUT in the Idl				
			SIP URI (PIXIT) has been received		
	 the priv-value compo 				
	 the SIP From heade 	r field containing a S	IP URI (PIXIT) has been received		
	 the Calling Party Null 	mber is not delivered	to the called (served) user		
SIP Parameter	Dial string parameters options	=PIXIT			
values:					
	PIXIT for supported header:				
	Case a) no 100 rel				
	Case b) Supported: 100 rel				
	Case c) Supported: 100 rel ar	nd precondition			
	a line (DIVIT)				
	a = line (PIXIT)				
	b = line (PIXIT) m = line (PIXIT)				
Comments:	III = IIIIe (FIXII)				
Comments.	SIP	SUT	PSTN		
	INVITE -		Ringing		
	180 Ringing ←		Off Hook		
	200 OK INVITE				
	ACK →				
	BYE →		On hook		
	200 OK BYE ←				

SP_XXSSOIR08	PSTN reference to: ETSI EN 300 001 [i.12], ETSI TS 300 648 [i.13], ETSI EN 300 659 [i.15]	ETSI EN	NGN reference to: 0.1912.5 [51], clause 6.1.3.6 0.1 383 001 [49], clause 6.1.3.6 0.29 163 [i.20], clause 7.2.3.1.2.6				
TSS reference:	Private Extensions to SIP for						
Selection criteria:	The user subscribes OIR per						
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received the priv-value component is not present the SIP From header field containing a SIP URI (PIXIT) has been received the Calling Party Number is not delivered to the called (served) user						
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)						
Comments:							
	SIP	SUT	PSTN				
	INVITE ->		Ringing				
	180 Ringing ←						
	200 OK INVITE						
	ACK →						
	BYE →		On hook				
	200 OK BYE ←						

SI_XXSSOIR09	PSTN reference to: ETSI EN 300 001 [i.12 ETSI TS 300 648 [i.13	2],],	ITU-T Q. ETSI EN 3	NGN reference to: 1912.5 [51], clause 6.1.3.6 883 001 [49], clause 6.1.3.6		
TCC votovonos	ETSI EN 300 659 [i.15	-		163 [i.20], clause 7.2.3.1.2.6		
TSS reference: Selection criteria:	Private Extensions to SIP for			n Trusted Networks		
	The user subscribes OIR pe			INIVITE management with a resi		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) has been received priv-value component is set to "id" the SIP From header is set to anonymous					
				o the called (served) user		
SIP Parameter values:	Dial string parameters option	ns=PIX	Т			
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT	PSTN		
		→		Ringing		
		-		Off Hook		
		-				
	ACK -	>				
	BYE -	>		On hook		
	200 OK BYE	-				

SP_XXSSOIR10	PSTN reference to:		NGN reference to:		
	ETSI EN 300 001 [i.12], ITU-T Q.1912.5 [51], c		.1912.5 [51], clause 6.1.3.6		
	ETSI TS 300 648 [i.	.13],	ETSI EN 383 001 [49], clause 6.1.3.6		
	ETSI EN 300 659 [i			29 163 [i.20], clause 7.2.3.1.2.6	
TSS reference:	Private Extensions to SIF			Trusted Networks	
Selection criteria:	The user subscribes OIR				
Test purpose:				INVITE message where:	
	 the SIP P-Prefe 	rred-Identi	ty containing a SI	P URI (PIXIT) has been received	
	 priv-value comp 				
	 the SIP From he 	eader is se	t to anonymous		
	 the Calling Part 	y Number	s not delivered to	the called (served) user	
SIP Parameter	Dial string parameters op	tions=PIXI	T		
values:					
	PIXIT for supported head	ler:			
	Case a) no 100 rel				
	Case b) Supported: 100		1.4.		
	Case c) Supported: 100 i	rei and pre	condition		
	a = line (PIXIT)				
	b = line (PIXIT)				
	m = line (PIXIT)				
Comments:	(1.15.17)				
	SIP		SUT	PSTN	
	INVITE	→		Ringing	
	180 Ringing ← Off Hook				
	200 OK ĬNVITE ←				
	ACK	→			
	BYE	→		On hook	
	200 OK BYE	←			

SP_XXSSOIR11	PSTN reference ETSI EN 300 00 ETSI TS 300 64 ETSI EN 300 65	1 [i.12], 8 [i.13], 9 [i.15]	ITU-T Q. ETSI EN : ETSI TS 129	NGN reference to: 1912.5 [51], clause 6.1.3.6 383 001 [49], clause 6.1.3.6 9 163 [i.20], clause 7.2.3.1.2.6		
TSS reference:	Private Extensions to S					
Selection criteria:	SIP URI or SIPS URI is The user subscribes OI			у		
Test purpose:	Ensure that the SUT in the Idle state, on receipt of a INVITE message where: the SIP P-Preferred-Identity containing a SIP URI (PIXIT) with an identity in the format of a tel URI has not been received the priv-value component is set to "none" the SIP From header field containing a SIP URI (PIXIT) not in the format of a tel URI has been received					
SIP Parameter values:	the Calling Party Number is not delivered to the called (served) user Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)					
Comments:						
	SIP		SUT	PSTN		
	INVITE	→		Ringing		
	180 Ringing	+		Off Hook		
	200 OK INVITE ← ACK →					
	BYE	→		On hook		
	200 OK BYE	-		Off floor		

SP_XXSSOIR12	PSTN reference to:	NG	N reference to:			
	ETSI EN 300 001 [i.12],		12.5 [51], clause 6.1.3.6			
	ETSI TS 300 648 [i.13],		3 001 [49], clause 6.1.3.6			
	ETSI EN 300 659 [i.15]		63 [i.20], clause 7.2.3.1.2.6			
TSS reference:	Private Extensions to SIP for Ass		usted Networks			
Selection criteria:	The user subscribes OIR "perma					
Test purpose:	Ensure that the SUT in the Idle s					
			RI (PIXIT) with an identity in the			
		not been received the p	oriv-value component is set to			
	"none"					
			I (PIXIT) not in the format of a tel			
	URI has not been rece					
	 the Calling Party Number 		e called (served) user			
SIP Parameter	Dial string parameters options=P	IXIT				
values:						
	PIXIT for supported header:					
	Case a) no 100 rel					
	Case b) Supported: 100 rel					
	Case c) Supported: 100 rel and p	recondition				
	a – line (DIVIT)					
	a = line (PIXIT) b = line (PIXIT)					
	m = line (PIXIT)					
Comments:	= (1 1)					
	SIP	SUT	PSTN			
	INVITE ->		Ringing			
	180 Ringing ← Off Hook					
	200 OK INVITE					
	ACK 🗦					
	BYE →		On hook			
	200 OK BYE ←					

SP_XXSSOIR13	PSTN reference to ETSI EN 300 001 [i.1 ETSI TS 300 648 [i.1 ETSI EN 300 659 [i.1	2], 3],	ITU-T Q.19 ETSI EN 38	GN reference to: 012.5 [51], clause 6.1.3.6 03 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP			
Selection criteria:	The user subscribes OIR "			usica retworks
Test purpose:	Ensure that the SUT in the the SIP From heaformat of a tel UR the priv-value cor	e Idle stat ader field RI has be mponent	e, on receipt of a IN' containing a SIP UF en received is set to "none"	VITE message where: RI (PIXIT) with an identity in the e called (served) user
SIP Parameter values:	Dial string parameters opti PIXIT for supported heade Case a) no 100 rel Case b) Supported: 100 re Case c) Supported: 100 re a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ons=PIX r: el	Т	
Comments:				
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	+		Off Hook
	200 OK INVITE	+		
	ACK	→	_	
	BYE	→		On hook
	200 OK BYE	(

SP_XXSSOIR14	PSTN reference to:	NGN	l reference to:
	ETSI EN 300 001 [i.12],		2.5 [51], clause 6.1.3.6
	ETSI TS 300 648 [i.13],		001 [49], clause 6.1.3.6
	ETSI EN 300 659 [i.15]		3 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to SIP for Asse		sted Networks
Selection criteria:	The user subscribes OIR "permane		
Test purpose:	Ensure that the SUT in the Idle sta		
		ity containing a SIP UF	RI (PIXIT) in the format of a tel
	URI has been received		
	 the priv-value component 		
			(PIXIT) with an identity in the
	format of a tel URI has be		
	 the Calling Party Number 		called (served) user
SIP Parameter	Dial string parameters options=PIX	IT	
values:	DIVIT (
	PIXIT for supported header:		
	Case a) no 100 rel		
	Case b) Supported: 100 rel		
	Case c) Supported: 100 rel and precondition		
	a = line (PIXIT)		
	b = line (PIXIT)		
	m = line (PIXIT)		
Comments:			
	SIP	SUT	PSTN
	INVITE ->		Ringing
	180 Ringing ←		Off Hook
	200 OK INVITE ←		
	ACK →		
	BYE →		On hook
	200 OK BYE ←		

SP_XXSSOIR15	PSTN reference ETSI EN 300 001 ETSI TS 300 648 ETSI EN 300 659	l [i.12], ß [i.13], ß [i.15]	ITU-T Q.19 ETSI EN 38 ETSI TS 129	GN reference to: 912.5 [51], clause 6.1.3.6 33 001 [49], clause 6.1.3.6 163 [i.20], clause 7.2.3.1.2.6
TSS reference:	Private Extensions to S			rusted Networks
Selection criteria:	The user subscribes OI			
Test purpose:	URI has beenthe priv-valuethe SIP From	ferred-Identity received component is header is set to	containing a SIP I set to "none" o anonymous	URI (PIXIT) in the format of a tel
OID D			not delivered to th	e called (served) user
SIP Parameter values:	PIXIT for supported hear Case a) no 100 rel Case b) Supported: 100 Case c) Supported: 100 a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	ader: O rel	ndition	
Comments:	,			
	SIP		SUT	PSTN
	INVITE	→		Ringing
	180 Ringing	+		Off Hook
	200 OK INVITE ACK	←		
	BYE	→		On hook
	200 OK BYE	(

6.5.2.3 CFU

SPS_XXSSCFU 01	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFU
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network Call forwarding unconditional supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition
	a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

SPS_XXSSCFU 02	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
	User C is user determined user busy
Test purpose:	To verify that a call is released correctly if CFU was not successful.
	User A calls user B, the call is forwarded to user C who is user determined user
	busy.
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPS_XXSSCFU 03	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary services/CFU
Configuration:	The user B is in network N2 and is provided with CFU
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
	User C is network determined user busy
Test purpose:	To verify that a call is released correctly if CFU was not successful.
	User A calls user B, the call is forwarded to user C who is network determined user busy.
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPP_XXSSCFU 04	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-PSTN/Supplementary_services/CFU
Configuration:	The user B is provided with CFU
Selection criteria:	Call forwarding by the network
	Call forwarding unconditional supported
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)
Comments:	

SPP_XXSSCFU 05	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-PSTN/Supplementary_services/CFU	
Configuration:	The user B is in network N2 and is provided with CFU	
Selection criteria:	Call forwarding by the network	
	Call forwarding unconditional supported	
Test purpose:	To verify that a call is released correctly if CFU was not successful .	
	User A calls user B, the call is forwarded to user C who is busy.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.5.2.4 CFB

SPS_XXSSCFB01	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFB
Configuration:	The user A and the user C are in network N1. The user B is in network N2 and is provided
	with CFB- (network determined).
Selection criteria:	Call forwarding by the network
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
SIP Parameter values:	
SIP Parameter values:	Dial string parameters options=PIXIT
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPS_XXSSCFB 02	NGN reference to: ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFB
Configuration:	The user B is in network N2 and is provided with CFB
Selection criteria:	Call forwarding by the network
	CFB supported
	User C is user determined user busy
Test purpose:	To verify that a call is released correctly if CFU was not successful .
	User A calls user B, the call is forwarded to user C who is user determined user busy.
SIP Parameter values:	Dial string parameters options=PIXIT
	DIVIT (
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPS_XXSSCFB 03	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFB
Configuration:	The user B is in network N2 and is provided with CFB
Selection criteria:	Call forwarding by the network
	CFB supported
	User C is network determined user busy
Test purpose:	To verify that a call is released correctly if CFB was not successful.
	User A calls user B, the call is forwarded to user C who is network determined user busy.
SIP Parameter	Dial string parameters options=PIXIT
values:	
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPP_XXSSCFB 04	NGN reference to:
	ETSI TS 124 604 [45]
TSS reference:	SIP-PSTN-PSTN/Supplementary_services/CFB
Configuration:	The user B is provided with CFB
Selection criteria:	Call forwarding by the network
	Call forwarding busy
Test purpose:	Ensure that when user A calls user B, the call is forwarded to user C.
SIP Parameter	Dial string parameters options=PIXIT
values:	
	PIXIT for supported header:
	Case a) no 100 rel
	Case b) Supported: 100 rel
	Case c) Supported: 100 rel and precondition
	a = line (PIXIT)
	b = line (PIXIT)
	m = line (PIXIT)
Comments:	

SPP_XXSSCFB 05	NGN reference to: ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-PSTN/Supplementary_services/CFB	
Configuration:	The user B is in network N2 and is provided with CFB	
Selection criteria:	Call forwarding by the network	
	CFB supported	
	User C is network determined user busy	
Test purpose:	To verify that a call is released correctly if CFB was not successful.	
	User A calls user B, the call is forwarded to user C who is busy.	
SIP Parameter	Dial string parameters options=PIXIT	
values:		
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

6.5.2.5 CFNR

SPS_XXSSCFNR01	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR/	
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option B, immediate release, no notification	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPS_XXSSCFNR02	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR/	
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option A, late release, no notification	
Test purpose:	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPS_XXSSCFNR 03	NGN reference to: ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provided with CFNR	
Selection criteria:	Call forwarding by the network	
	CFNR option B, immediate release, no notification	
	User C is user determined user busy	
Test purpose:	To verify that a call is released correctly if CFNR was not successful .	
	User A calls user B, the call is forwarded to user C who is user determined user busy.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPS_XXSSCFNR 04	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provided with CFNR	
Selection criteria:	Call forwarding by the network	
	CFNR supported option B, immediate release, no notification	
	User C is network determined user busy	
Test purpose:	To verify that a call is released correctly if CFNR was not successful.	
	User A calls user B, the call is forwarded to user C who is network determined user	
	busy.	
SIP Parameter values:	: Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	II. (DIVIT)	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPS_XXSSCFNR 05	NGN reference to:	
	ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provided with CFNR	
Selection criteria:	Call forwarding by the network	
	CFNR option A late release, no notification	
	User C is user determined user busy	
Test purpose:	To verify that a call is released correctly if CFNR was not successful.	
	User A calls user B, the call is forwarded to user C who is user determined user busy.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPS_XXSSCFNR 06	NGN reference to: ETSI TS 124 604 [45]	
TSS reference:	SIP-PSTN-SIP/Supplementary_services/CFNR	
Configuration:	The user B is in network N2 and is provided with CFNR	
Selection criteria:	Call forwarding by the network CFNR supported option A, late release, no notification	
	User C is network determined user busy	
Test purpose:	To verify that a call is released correctly if CFNR was not successful. User A calls user B, the call is forwarded to user C who is network determined user busy.	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

SPP_XXSSCFNR 07	PSTN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3],	ETSI TS 124 604 [45]
	clauses 9.2.2, 9.2.4.4 and 9.2.5	
TSS reference:	SIP-PSTN-PSTN/Supplementary_serv	ices/CFNR/
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option B, immediate release, no notification	
Test purpose:	Ensure that when user A calls user B, i	f unanswered, the call is forwarded to user C.
	Ensure that when user A calls user B, if unanswered, the call is forwarded to user C. Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

SPP_XXSSCFNR 08	PSTN reference to:	NGN reference to:
	ETSI EN 300 403-1 [i.3],	ETSI TS 124 604 [45]
	clauses 9.2.2, 9.2.4.4 and 9.2.5	
TSS reference:	SIP-PSTN-PSTN/Supplementary_se	rvices/CFNR/
Selection criteria:	The user A and the user C are in network N1. The user B is in network N2 and is provided with CFNR, option A, late release, no notification	
Test purpose:	Ensure that when user A calls user B	, if unanswered, the call is forwarded to user C.
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT)	
	b = line (PIXIT) m = line (PIXIT)	
Comments:		

SPP_XXSSCFNR 09	PSTN reference to:	NGN reference to:
	ETSI EN 300 207-1 [i.5],	ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2 and 9.2.5	
TSS reference:	SIP-PSTN-PSTN/Supplementary_se	rvices/CFNR
Configuration:	The user B is in network N2 and is pr	ovided with CFNR
Selection criteria:	Call forwarding by the network	
	CFNR option B, immediate release, r	no notification
	User C is user determined user busy	
Test purpose:	To verify that a call is released correct	ctly if CFNR was not successful.
	User A calls user B, the call is forwarded to user C who is busy.	
SIP Parameter values:	Dial string parameters options=PIXIT	
	PIXIT for supported header:	
	Case a) no 100 rel	
	Case b) Supported: 100 rel	
	Case c) Supported: 100 rel and precondition	
	a = line (PIXIT)	
	b = line (PIXIT)	
	m = line (PIXIT)	
Comments:		

SPP_XXSSCFNR 10	PSTN reference to: ETSI EN 300 207-1 [i.5],	NGN reference to: ETSI TS 124 604 [45]
	clauses 6.1, 9.2.2 and 9.2.5	213113 124 004 [43]
TSS reference:	SIP-PSTN-PSTN/Supplementary_se	rvices/CFNR
Configuration:	The user B is in network N2 and is pr	ovided with CFNR
Selection criteria:	Call forwarding by the network CFNR option A, late release, no notification User C is user determined user busy	
Test purpose:	To verify that a call is released correctly if CFNR was not successful . User A calls user B, the call is forwarded to user C who is busy. User B continues to alert to the forwarding user.	
SIP Parameter values:	Dial string parameters options=PIXIT PIXIT for supported header: Case a) no 100 rel Case b) Supported: 100 rel Case c) Supported: 100 rel and precondition a = line (PIXIT) b = line (PIXIT) m = line (PIXIT)	
Comments:		

Annex A (informative): Bibliography

ETSI TS 103 189: "Core Network and Interoperability Testing (INT); Assessment of end-to-end Quality for VoLTE and RCS".

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 ETSI TS 29.163 Release 10)".

History

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