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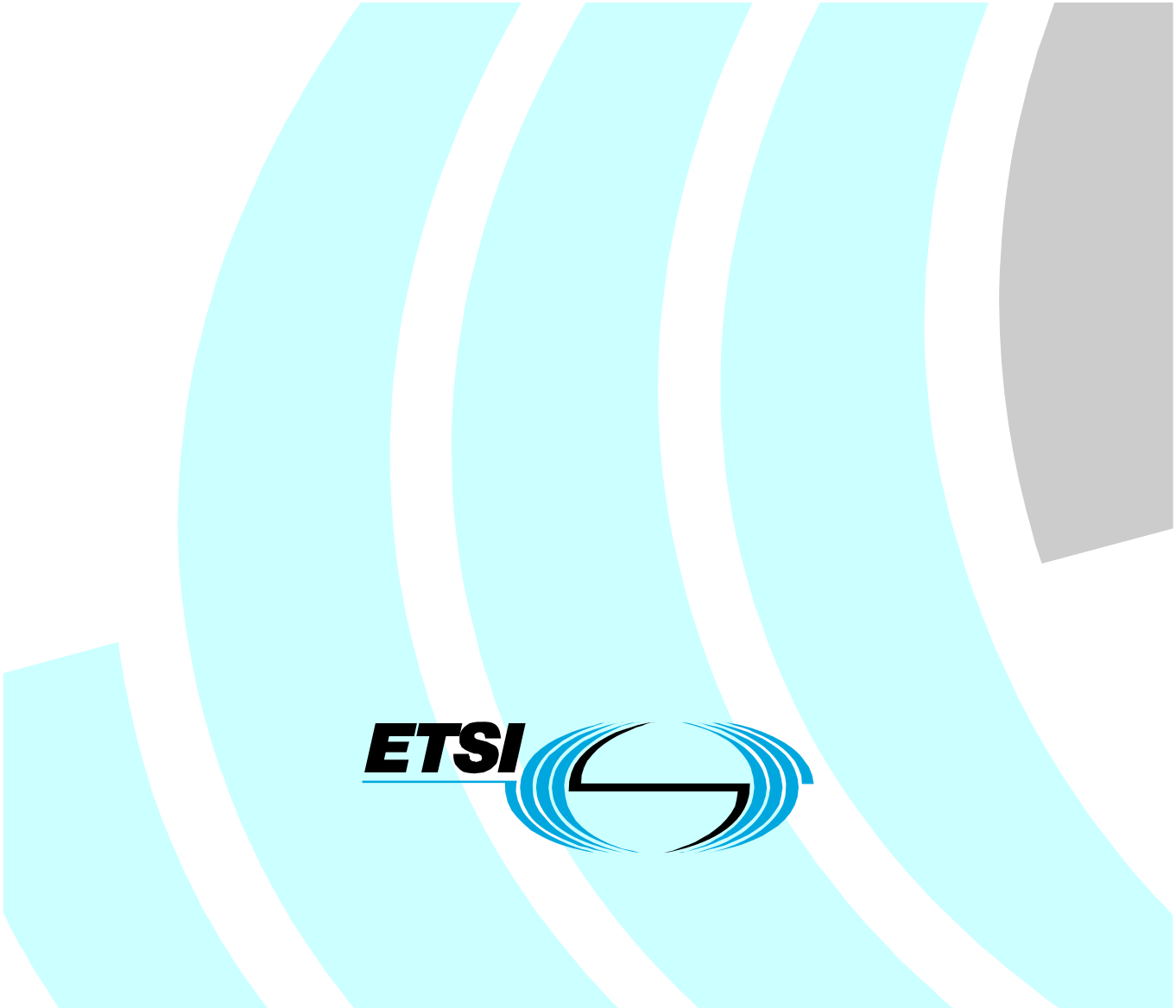
Technical Specification

Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks; Part 1: Protocol Implementation Conformance Statement (PICS)



Reference
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Contents

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 1 of a multi-part deliverable covering the Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control Protocol (BICC) or ISDN User Part (ISUP), as identified below:

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

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

Part 3: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification";

1 Scope

The present document specifies the network PICS (Protocol Implementation Conformance Statement) of the Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control Protocol or ISDN User Part EN 283 027 [20]. The references [20] and [26] are identical.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

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

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

2.1 Normative references

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

[1] ITU-T Recommendations Q.761 to Q.764 (2000): "Signalling System No.7 ISDN User Part (ISUP)".

[2] ITU-T Recommendation Q.731.7 (1997): "Stage 3 description for number identification supplementary services using Signalling System No. 7: Malicious call identification (MCID)".

[3] ITU-T Recommendation Q.732.2 (1999): "Stage 3 description for call offering supplementary services using Signalling System No. 7: Call diversion services".

[4] ITU-T Recommendation Q.732.7 (1996): "Stage 3 description for call offering supplementary services using Signalling System No. 7: Explicit Call Transfer".

[5] ITU-T Recommendation Q.737.1 (1997): "Stage 3 description for additional information transfer supplementary services using Signalling System No. 7: User-to-user signalling (UUS)".

[6] IETF RFC 3261 (2002): "SIP: Session Initiation Protocol".

[7] IETF RFC 3262 (2002): "Reliability of Provisional Responses in the Session Initiation Protocol (SIP)".

[8] ISO/IEC 9646-7 (1995): "Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[9] 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]".

[10] ITU-T Recommendation Q.1912.5 (03/2004): "Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control or ISDN User Part".

[11] ITU-T Recommendation E.164 (2005): "The international public telecommunication numbering plan".

[12] IETF RFC 768 (1980): "User Datagram Protocol".

[13] IETF RFC 761 (1980): "DoD standard Transmission Control Protocol".

[14] ITU-T Recommendation Q.767 (1991): "Application of the ISDN user part of CCITT signalling system No. 7 for international ISDN interconnections".

[15] ITU-T Recommendation Q.731.1 (1996): "Stage 3 description for number identification supplementary services using Signalling System No. 7: Direct-dialling-In (DDI)".

[16] ITU-T Recommendation Q.731.5 (1993): "Stage 3 description for number identification supplementary services using Signalling System No. 7: Connected line identification presentation (COLP)".

[17] ITU-T Recommendation Q.118 (1997): "Abnormal conditions - Special release arrangements".

[18] ITU-T Technical Report TRQ.2815 / Q.Sup45 (2003): "Requirements for interworking BICC/ISUP network with originating/destination networks based on Session Initiation Protocol and Session Description Protocol".

[19] ITU-T Recommendation Q.1902.4: "Bearer Independent Call Control protocol (Capability Set 2): Basic call procedures".

[20] ETSI ES 283 027 (V2.5.1): "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN) Endorsement of the SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks [3GPP TS 29.163 (Release 7), modified]".

[21] ETSI TS 183 008: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR); Protocol specification".

[22] ETSI TS 183 010: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); NGN Signalling Control Protocol; Communication HOLD (HOLD) PSTN/ISDN simulation services; Protocol specification".

[23] ETSI TS 183 029: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Protocol specification".

[24] ETSI TS 183 005: Telecommunications and Internet Converged Services and Protocols for Advanced Networking (TISPAN); NGN Signalling Control Protocol; Conference (CONF) PSTN/ISDN simulation services.

[25] ETSI TS 183 004: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services: Communication Diversion (CDIV); Protocol specification".

[26] ETSI TS 129 527 (V8.2.0): "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); TISPAN; Endorsement of the SIP-ISUP Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks [3GPP TS 29.163 (Release 7), modified] (3GPP TS 29.527 version 8.2.0 Release 8)".

[27] ITU-T Recommendation Q.1902.2: "Bearer Independent Call control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: General functions of messages and parameters".

[28] IETF RFC 3267: "Real-Time Transport Protocol (RTP) Payload Format and File Storage Format for the Adaptive Multi-Rate (AMR) and Adaptive Multi-Rate Wideband (AMR-WB) Audio Codecs".

[29] ITU-T Recommendation Q.730: "ISDN user part supplementary services".

[30] IETF RFC 3264: "An Offer/Answer Model with the Session Description Protocol (SDP)".

[31] ITU-T Recommendation Q.731.3: "Stage 3 description for number identification supplementary services using Signalling System No. 7 : Calling line identification presentation (CLIP)".

2.2 Informative references

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

Not applicable.

3 Definitions and abbreviations

3.1 Definitions

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

Abstract Test Case (ATC): complete and independent specification of the actions required to achieve a specific test purpose, defined at the level of abstraction of a particular Abstract Test Method, starting in a stable testing state and ending in a stable testing state

Abstract Test Method (ATM): description of how an SUT is to be tested, given at an appropriate level of abstraction to make the description independent of any particular realization of a Means of Testing, but with enough detail to enable abstract test cases to be specified for this method

Abstract Test Suite (ATS): test suite composed of abstract test cases

Implementation Under Test (IUT): implementation of one or more OSI protocols in an adjacent user/provider relationship, being part of a real open system which is to be studied by testing

Means of Testing (MOT): combination of equipment and procedures that can perform the derivation, selection, parameterization and execution of test cases, in conformance with a reference standardized ATS, and can produce a conformance log

PICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes the PICS

PIXIT proforma: document, in the form of a questionnaire, which when completed for the SUT becomes the PIXIT

Point of Control and Observation (PCO): point within a testing environment where the occurrence of test events is to be controlled and observed, as defined in an Abstract Test Method

pre-test condition: setting or state in the SUT which cannot be achieved by providing stimulus from the test environment

Protocol Implementation Conformance Statement (PICS): statement made by the supplier of a protocol claimed to conform to a given specification, stating which capabilities have been implemented

Protocol Implementation eXtra Information for Testing (PIXIT): statement made by a supplier or implementor of an SUT (protocol) which contains or references all of the information related to the SUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the SUT

SIP number: number conforming to the numbering and structure specified in ITU-T Recommendation E.164 [11]

System Under Test (SUT): real open system in which the SUT resides

user: access protocol entity at the User side of the user-network interface where a T reference point or coincident S and T reference point applies

3.2 Abbreviations

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

ATC	Abstract Test Case
ATM	Abstract Test Method
ATS	Abstract Test Suite
BICC	Bearer Independent Call Control protocol
CIC	Circuit Identification Code
ICS	Implementation Conformance Statement
ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
IUT	Implementation Under Test
MOT	Means Of Testing
PCO	Point of Control and Observation
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
SIP	Session Initiation Protocol
SUT	System Under Test
TP	Test Purpose
TSS&TP	Test Suite Structure and Test Purposes
TSS	Test Suite Structure
TTCN	Tree and Tabular Combined Notation

4 Scenarios

4.1 SIP Profile A and B for interworking between SIP and BICC/ISUP

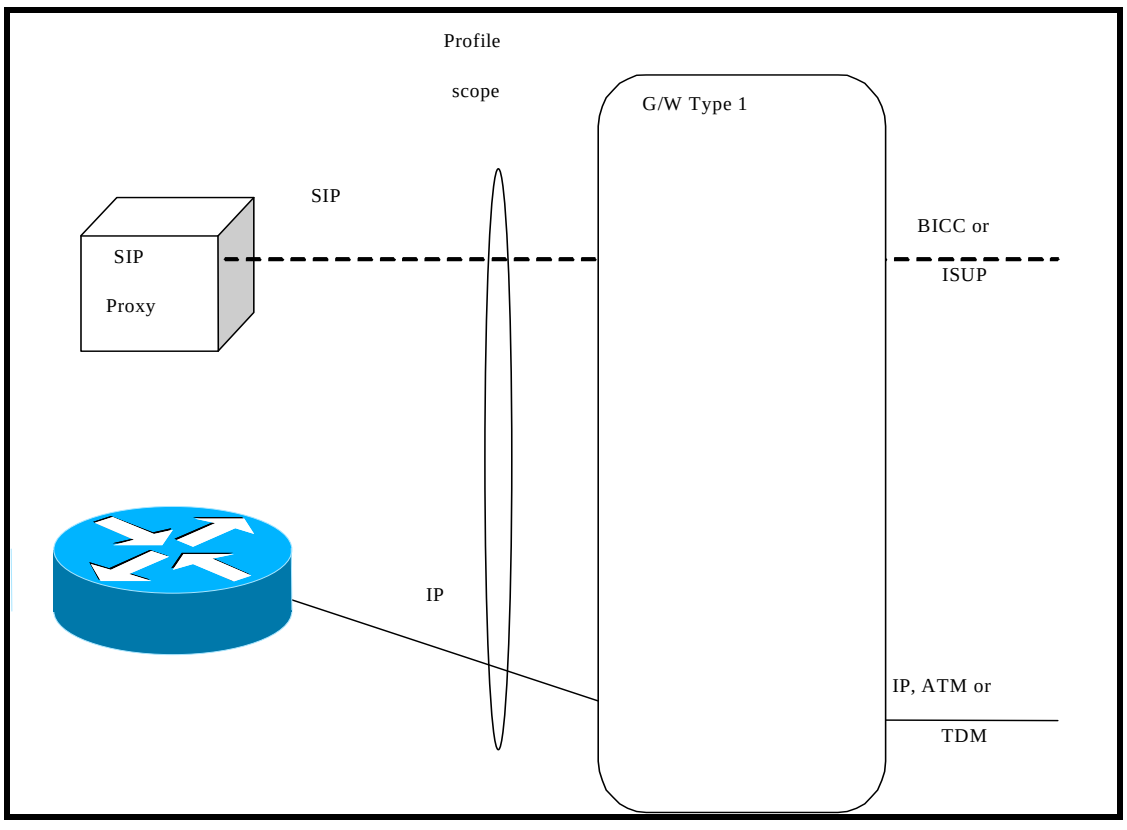

Figure 1: Profile Scope for SIP Interworking with BICC/ISUP with a Type 1 Gateway

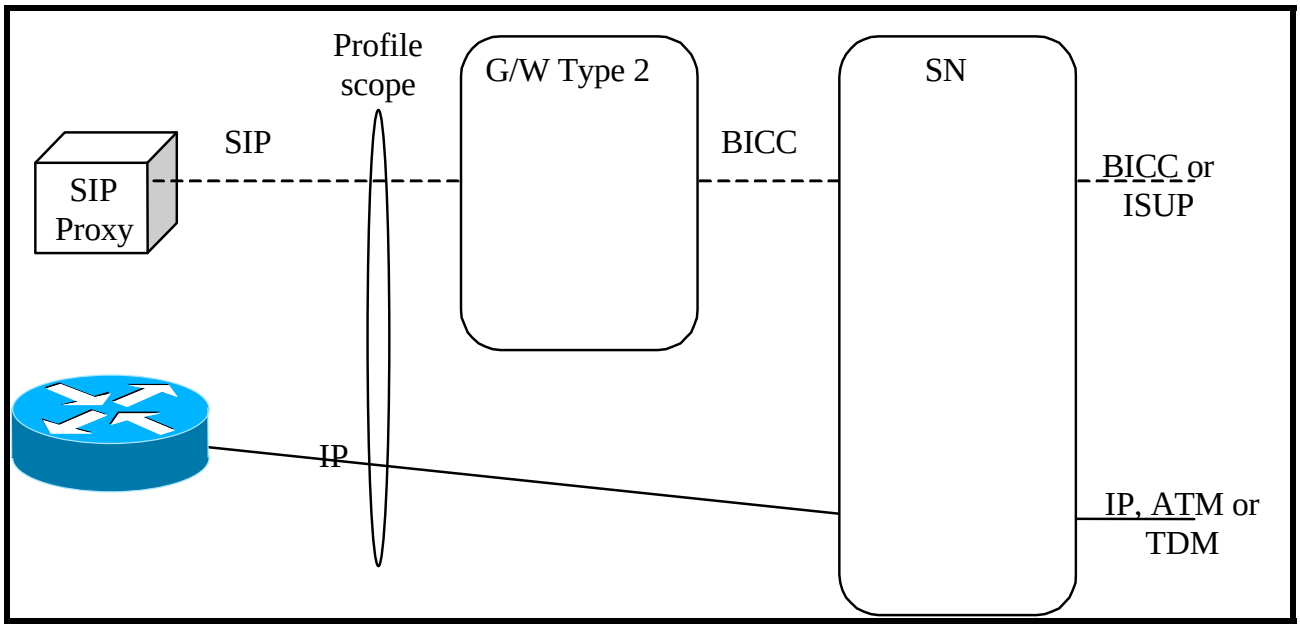

Figure 2: Profile Scope for SIP Interworking with BICC/ISUP with a Type 2 Gateway

4.2 SIP Profile C for Interworking Between SIP with MIME Encoding of ISUP and BICC/ISUP

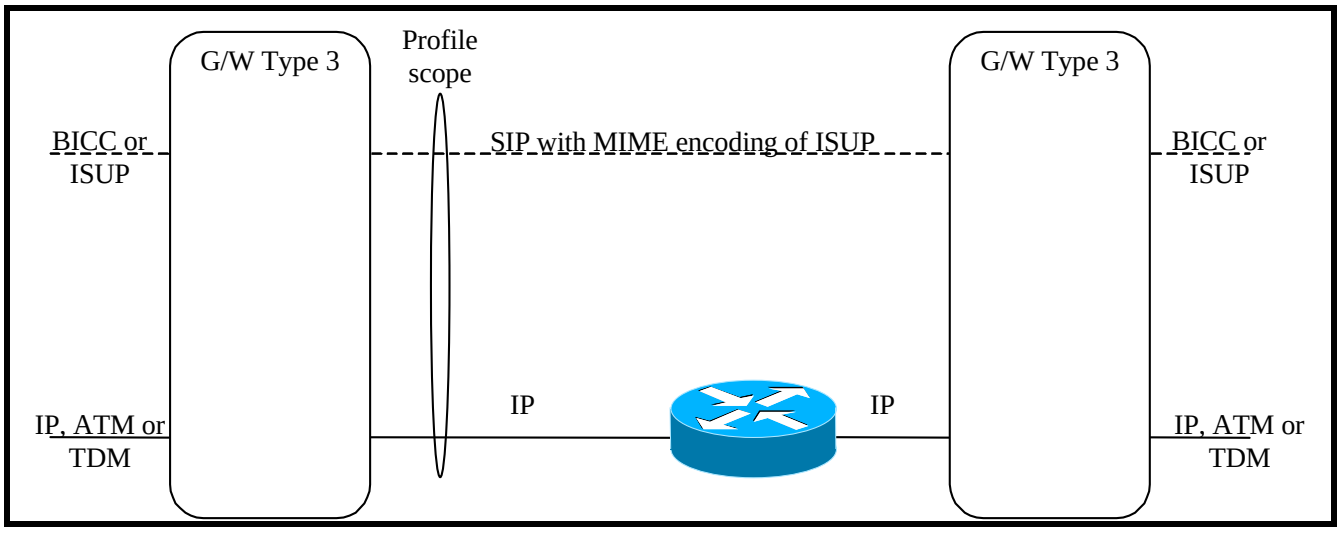

Figure 3: Profile Scope for SIP with MIME encoding of ISUP Interworking with BICC/ISUP with Type 3 Gateways

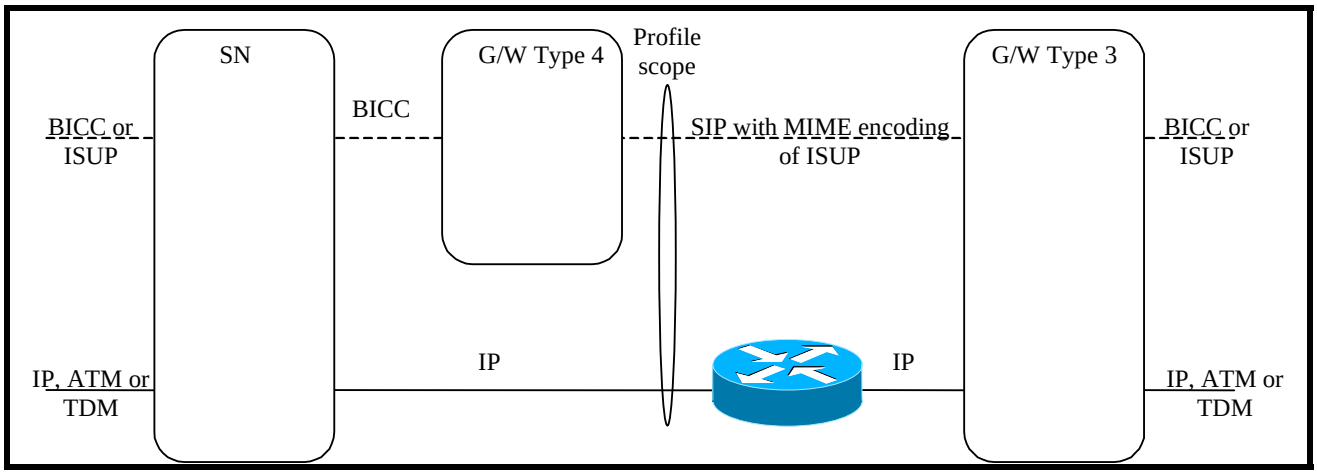

Figure 4: Profile Scope for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 3 and 4 Gateways

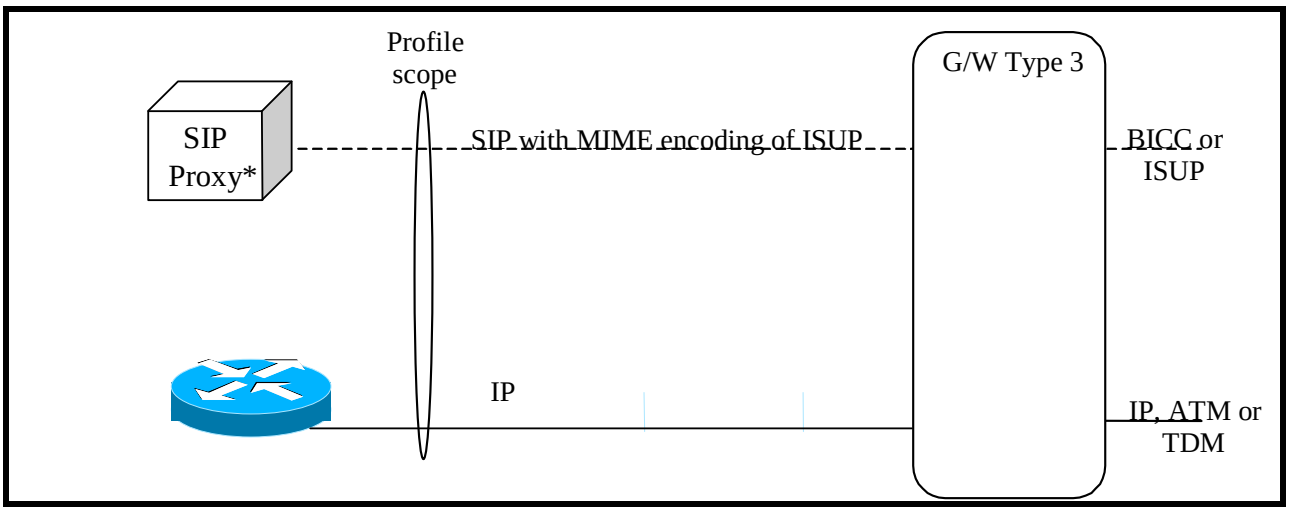

Figure 5: Profile Scope for SIP with MIME encoding of ISUP Interworking with BICC/ISUP with Type 3 Gateways

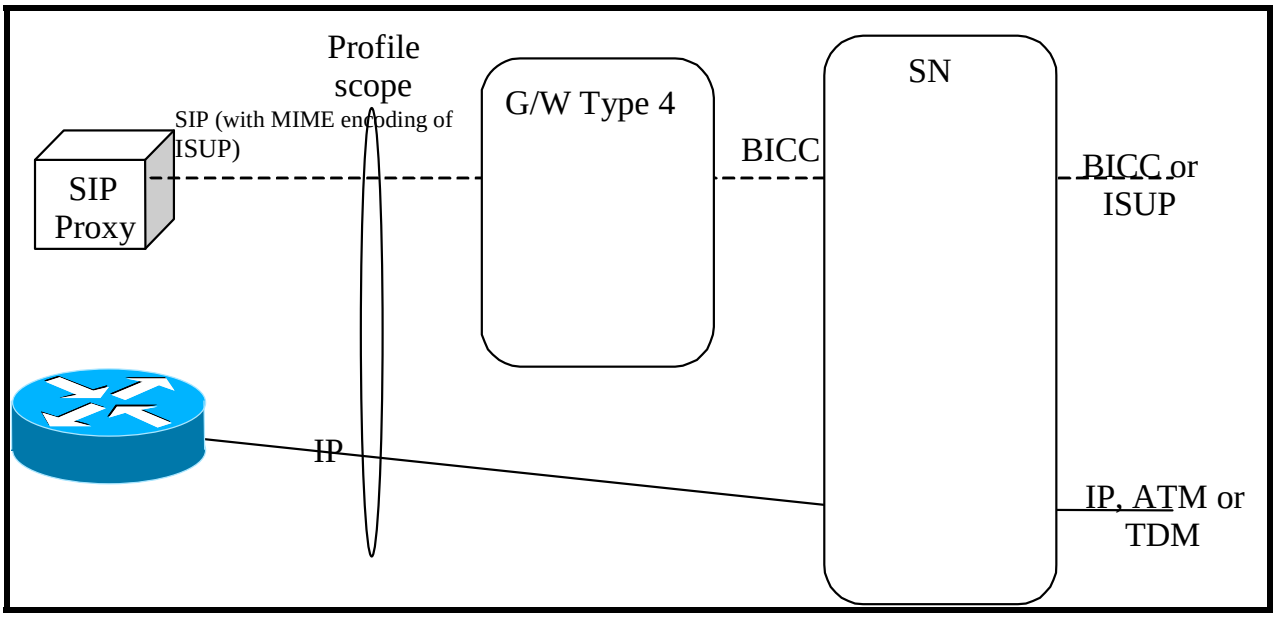

Figure 6: Profile Scope for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 4 Gateway

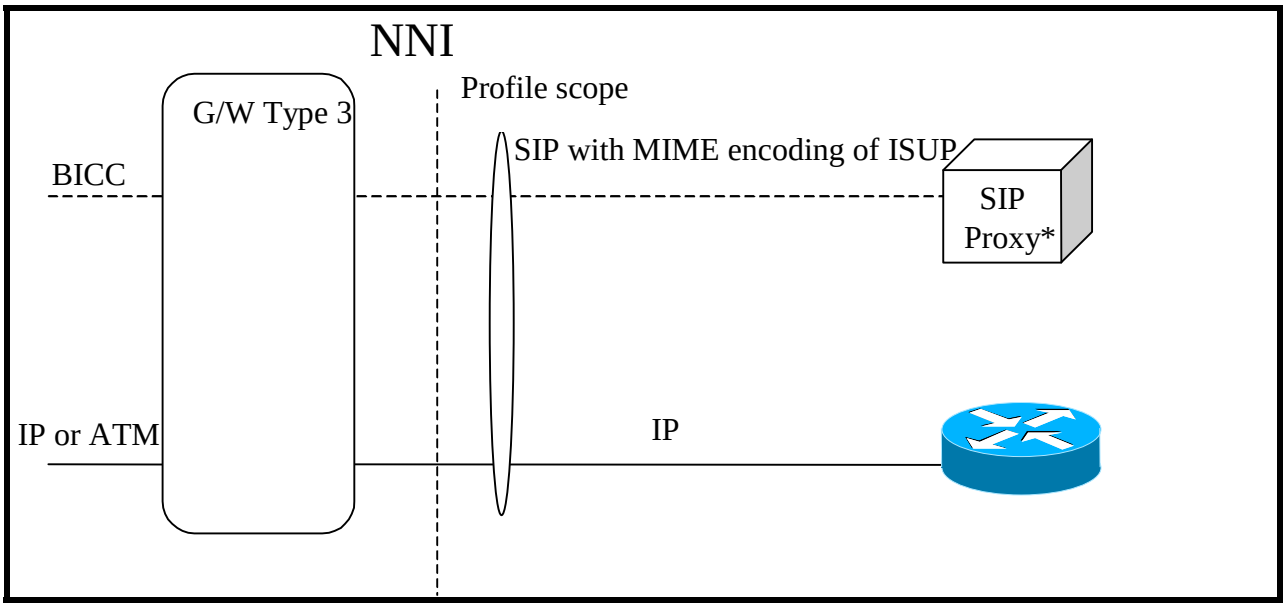

Figure 7: Profile for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 3 Gateway

5 PICS proforma

5.1 Instructions for completing the PICS proforma

5.1.1 Other information

More detailed instructions are given at the beginning of the different clauses of the PICS proforma.

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided. If necessary, the supplier may provide additional comments separately in clause 5.4.

5.1.2 Purposes and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in reference specification [1] to [25] may provide information about the implementation in a standardized manner.

The PICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the PICS proforma;
- identification of the implementation;
- identification of the reference protocol specification;
- PICS proforma tables (containing the global statement of conformance).

5.1.3 Conventions

The PICS proforma is composed of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [8].

Item column

It contains a number that identifies the item in the table.

Item description column

It describes each respective item (e.g. parameters, timers, etc.).

Reference column

It gives reference to the specification(s) [1] to [25], except where explicitly stated otherwise.

Status column

The following notations, defined in ISO/IEC 9646-7 [8], are used for the status column:

m	mandatory - the capability is required to be supported.
n/a	not applicable - in the given context, it is impossible to use the capability. No answer in the support column is required.
o	optional - the capability may be supported or not.
o.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies a unique group of related optional items and the logic of their selection which is defined immediately following the table.
ci	conditional - the requirement on the capability ("m", "o" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression that is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities. If an ELSE clause is omitted, "ELSE n/a" shall be implied.

NOTE: Support of a capability means that the capability is implemented in conformance to the specification(s) [1] to [25].

Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [8], are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A or n/a or "no answer required" (allowed only if the status is N/A, directly or after evaluation of a conditional status).

Values allowed column

This column contains the values or the ranges of values allowed.

Values supported column

The support column shall be filled in by the supplier of the implementation. In this column the values or the ranges of values supported by the implementation shall be indicated.

References to items

For each possible item answer (answer in the support column) within the PICS proforma, a unique reference exists. It is defined as the table identifier, followed by a slash character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.) respectively.

EXAMPLE: 5/4 is the reference to the answer of item 4 in table 5.

5.2 Identification of the implementation

Identification of the Implementation Under Test (IUT) and the system in which it resides - the System Under Test (SUT) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

5.2.1 Date of the statement

Date of the statement:	

5.2.2 Implementation Under Test (IUT) identification

IUT name:	
IUT version:	

5.2.3 System Under Test (SUT) identification

SUT name:	
Hardware configuration:	
Operating system:	

5.2.4 Product supplier

Name:	
Address:	
Telephone number:	
Facsimile number:	
Additional information:	

5.2.5 Client

Name:	
Address:	
Telephone number:	
Facsimile number:	
Additional information:	

5.2.6 PICS contact person

Name:	
Telephone number:	
Facsimile number:	
Additional information:	

5.3 PICS proforma tables

5.3.1 Global statement of conformance

	(Yes/No)
Are all mandatory capabilities implemented?	

NOTE: Answering "No" to this question indicates non-conformance to the reference protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming.

5.3.2 Roles

Table 1: Roles

Item	Item description column	Reference	Status	Support
1	The SUT is a SIP-I implementation?	ITU-T RecommendationTRQ.2815 [18]	o	
2	connected with a BICC Network?	ITU-T Recommendation Q.1902.2 [27]	o.12	
3	connected with a ISUP Network?	ITU-T Recommendation Q.764 [1]	o.12	
4	Is the SUT connected with a µ-law network?	ES 283 027, clauses 7.2.3.1.2.5 and 7.2.3.2.2.2 [20]	o	
5	Is the SUT an outgoing international exchange?	ITU-T Recommendation Q.764 [1]	o	
6	Is the SUT an incoming international exchange?	ITU-T Recommendation Q.764 [1]	o	
o.12: It is mandatory to support one of these items.				

5.3.3 Connection types

Table 2: Connection types

Item	Item description column	Reference	Status	Support
1	The SUT support the media type "audio" and media format 0, 8?	ES 283 027, clause 7.2.3.1.2.5 [20]	o.21	
2	The SUT support the media type "audio" and media format 9?	ES 283 027, clause 7.2.3.1.2.5 [20]	o.21	
3	The SUT support the media type "audio" and attribute value CLEARMODE?	ES 283 027, clause 7.2.3.1.2.5 [20]	o.21	
4	The SUT support the media type "image" and media format t38?	ES 283 027, clause 7.2.3.1.2.5 [20]	o.21	
5	The SUT support the dynamic assignment for codec?	ES 283 027, clause 7.2.3.1.2.5 [20]	o.21	
6	The SUT use the transport protocol udptl?	RFC 768 [12]	o	
7	The SUT use the transport protocol tcptl?	RFC 761 [13]	o	
8	Support the transcoding of the AMR codec to G.711 PCM	RFC 3267 [28]	o	
o.21: It is mandatory to support at least one of these items.				

5.3.4 Forward address signalling

Table 3: Forward address signalling

Item	Item description column	Reference	Status	Support
1	**SIP** use the *en bloc* operation in the forward address signalling (sending)?	ES 283 027, clause 7.2.3.2.1 [20]	o.31	
2	**SIP** use the overlap operation in the forward address signalling (sending)?	ES 283 027, clause 7.2.3.2.1a [20]	o.31	
3	**SIP** support the *en bloc* operation in the forward address signalling (receiving)?	ES 283 027, clause 7.2.3.1.1 [20]	o	
4	**SIP** support the overlap operation in the forward address signalling (receiving)?	ES 283 027, clause 7.2.3.1.1 [20]	o	
5	**ISUP** use the *en bloc* operation in the forward address signalling (sending)?	ES 283 027, clause 7.2.3.1.1 [20]	o.31	
6	**ISUP** use the overlap operation in the forward address signalling (sending)?	ES 283 027, clause 7.2.3.1.1 [20]	o.31	
7	**ISUP** support the *en bloc* operation in the forward address signalling (receiving)?	ES 283 027, clause 7.2.3.2.1 [20]	o	
8	**ISUP** support the overlap operation in the forward address signalling (receiving)?	ES 283 027, clause 7.2.3.2.1 [20]	o	
9	**SIP** support INVITE requests without determining the end of address signalling.	ES 283 027, clause 7.2.3.2.1a [20]	o	
o.31: It is mandatory to support at least one of these items.				

5.3.5 Role independent capabilities

Table 4: Role independent capabilities

Item	Item description column	Reference	Status	Support
1	The SUT use the Continuity check procedures during call setup?	ES 283 027 [20], clause 7.2.3.1.1	o	
2	The SUT support the Continuity check procedures during call setup?	ES 283 027 [20], clause 7.2.3.2.1	m	
3	The SUT support hop counter procedure?	ES 283 027 [20], clause 7.2.3.1.2.9	o	

Item	Item description column	Reference	Status	Support
4	The SUT support internal resource reservations (preconditions used)?	ES 283 027 [20], clause 7.2.3.2.1	o	
5	The SUT support the reliability of provisional responses?	RFC 3262 [7]	o	
6	The SUT perform the automatic repeat attempt?	Clause 2.8.1 of ITU-T Rec Q.764 [1]; Clause 12.4 of ITU-T Recommendation Q.1902.4 [19]	o	
7	The SUT support the propagation delay determination procedure?	Clause 2.6 of ITU-T Recommendation Q.764; clause 8.5 of ITU-T Recommendation Q.1902.4 [19]	o	
8	The SUT perform the automatic repeat attempt in case of dual seizure?	Clause 2.9.1 of ITU-T Recommendation Q.764 [1]; clause 13.2 of ITU-T Recommendation Q.1902.4 [19]	o	
9	The SUT send ACM after determination of end of address signalling?	Network option	o	
10	The SUT is control exchange for the Suspend procedure?		o	
11	The SUT use internal resource reservations (preconditions used)?	ES 283 027 [20], clause 7.2.3.2.1	o	
12	The SUT controls charging?	Clause 2.1.4.2 of ITU-T Recommendation Q.764 [1]	o	
13	The SUT satisfy the call using a new address provided in a Contact header field received in a 3xx response?	Clause 13.2.2.2 of RFC 3261 [6]	o	
14	The SUT perform transcoding of media stream at the I-MGCF?	ES 283 027 [20], clause 7.2.3.2.2.2	o	
15	Does the MGCF provides the interworking of an ACM or CPG with the indication “inband info available” in a 183 response AND the interworking of a 183 response with P-Early-Media-Media header authorizing early media in a early ACM or CPG with “inband info available” indication?	ES 283 027 [20], clause 2.7.3.1 and 7.2.3.2	o	
16	Does the SUT sends the IAM FCi interworking indicator set to “0” and the IAM FCi ISDN user part/BICC indicator set to “1” and the IAM FCi ISDN access indicator is set to “1” and the Nature of connection indicators, Satellite indicator set to “00”, if the TMR is sent with 64 kBit/s?	ES 283 027 [20], clause 7.2.3.1.2.3	c41	
17	Does the SUT sends the ACM BCi Interworking indicator set to “0” and and the ACM BCi ISDN user part/BICC indicator set to “1” and the ACM BCi ISDN access indicator set to “1”if the INVITE was sent with CLEARMODE codec?	ES 283 027 [20], clause 7.2.3.2.5.1/	c41	
18	Is the PSTN XML mime extension used to carry DSS1 information elements?	ES 283 027, annex F.3 [20]	o	
19	The signalling procedures for connection type allowing fallback are supported	2.5/Q.764 [1]	o	
20	Does the SUT support the Information request procedure?	ES 283 027 [20], clause 7.2.3.2.1.3	o	
c41: IF 2/3 THEN o ELSE n/a.				

5.3.6 Supplementary Services Major Capabilities

Table 5: Supplementary Services Major Capabilities

Item	Item description column	Reference in ITU-T Rec Q.1912.5 [10]	Status	Support
1	The SUT support the service Calling Line Identification Presentation (CLIP)?	7.4.1	m	
2	The SUT support the service Calling Line Identification Restriction (CLIR)?	7.4.1	m	
3	The SUT support the service Connected Line Identification Presentation (COLP)?	7.4.2	o	
4	The SUT support the service Connected Line Identification Restriction (COLR)?	7.4.2	o	
5	The SUT support the service Call Hold (HOLD)?	7.4.10	o	
6	The SUT support the service Terminal Portability (TP)?	7.4.13	o	
7	The SUT support the service Closed User Group (CUG)?	7.4.16	o	
8	The SUT support the service Sub-addressing (SUB)?	7.4.5	o	
9	The SUT support the service Malicious Call Identification (MCID)?	7.4.4	o	
10	The SUT support the service Conference Call, add-on (CONF)?	7.4.14	o	
11	The SUT support the service Explicit Call Transfer (ECT)?	7.4.8	o	
12	The SUT support the service Call Forwarding Busy (CFB)?	7.4.6	o	
13	The SUT support the service Call Forwarding No Reply (CFNR)?	7.4.6	o	
14	The SUT support the service Call Forwarding Unconditional (CFU)?	7.4.6	o	
15	The SUT support the service Call Deflection (CD)?	7.4.7	o	
16	The SUT support the service Call Waiting (CW)?	7.4.9	o	
17	The SUT support the service Completion Call to busy subscriber The SUT (CCBS)?	7.4.11	o	
19	The SUT support the Three-Party (3PTY) service?	7.4.14	o	
20	The SUT support the service Completion Call on No Reply (CCNR)?	7.4.12	o	
21	The SUT support the service Anonymous Call Rejection (ACR)?	7.4.23	c.51	
22	The SUT support the generic notification procedure for supplementary services	1.3.4 / ITU-T Rec. Q.730 [29]	o	
c.51: IF 1/9 THEN o ELSE n/a.				

Table 6: Calling Line Identification (CLI)

Item	Item description column	Reference	Status	Support
1	The SUT include a network provided E.164 calling party number if the P-Asserted -Identity header field has not been received or not in the format '+'CC+NDC+SN; address signal: network provided?	Table 3 [20]	o	
2	The SUT include a network provided E.164 calling party number if the P-Asserted -Identity header field has not been received or not in the format '+'CC+NDC+SN, the From header field is in the format '+'CC+NDC+SN; address signal: derived from the From header field?	Table 3 [20]	o	
3	The SUT include an additional calling party number if a From header field has been received in the format '+'CC+NDC+SN; address signal: derived from the From header field?	Table 3 [20]	o	
4	The SUT discard the calling party number in case of bilateral agreements if it is "presentation restricted"?	Clause 3.5.2.3.1 of ITU-T Rec. Q.731.1 [15]	o	
5	The SUT discard the additional calling party number in case of bilateral agreements if it is "presentation restricted"?	Clause 3.5.2.3.1 of ITU-T Rec. Q.731.1 [15]	o	
6	The SUT discard the calling party number, if the address is marked not available?	3.5.2.3.1/ITU-T Rec. Q.731.3 [31]	o	
7	The SUT discard the additional calling party number in case of bilateral agreements if it is "presentation allowed"?	Network option	o	
8	The SUT discard the calling party number in case of bilateral agreements if it is "presentation allowed"?	Network option	o	

Item	Item description column	Reference	Status	Support
9	The SUT send a Calling Party Number with an Number Presentation restriction Indicator set to "presentation allowed" if no P-Asserted - Identity header field has not been received or not in the format '+'CC+NDC+SN?	Table 3 [20]	o	
10	The SUT send a Calling Party Number with an Number Presentation restriction Indicator set to "presentation restricted" if no P-Asserted - Identity header field has not been received or not in the format '+'CC+NDC+SN?	Table 3 [20]	o	
11	The SUT send a Calling Party Number with an Number Presentation restriction Indicator set to "address not available" if no P-Asserted - Identity header field has not been received or not in the format '+'CC+NDC+SN?	Table 3 [20]	o	
12	The SUT 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?	Table 3 [20]	o	

Table 7: COnnected Line identification (COL)

Item	Item description column	Reference	Status	Support
1	The SUT discard the connected number in case of bilateral agreements if it is "presentation restricted "?	Clause 5.5.2.4.1 of ITU-T Rec. Q.731.5 [16]	o	
2	The SUT discard the additional connected number in case of bilateral agreements if it is "presentation restricted"?	Clause 5.5.2.4.1 of ITU-T Rec. Q.731.5 [16]	o	
3	The SUT discard the connected number in case of bilateral agreements if it is "presentation allowed"?	Network option	o	
4	The SUT discard the additional connected number in case of bilateral agreements if it is "presentation allowed"?	Network option	o	
5	The SUT is adding a prefix to an international connected number?	Clause 5.5.2.3.1 of ITU-T Rec.Q.731.5 [16]	o	
6	The SUT invokes the COLP service by setting the "Connected Line Identity Request indicator" parameter of the "Optional forward call indicator" of the IAM to "requested"	7.4.2.1.1 [20]	o	

Table 8: HOLD

Item	Item description column	Reference	Status	Support
1	The SUT support that a party can put the other party on hold after alerting has commenced?	7.4.10 [20]	o	
2	The SUT support 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?	7.4.10 [20]	o	
3	Does the network support the hold and resume of media streams using the UPDATE method in the confirmed dialogue?	5.1/ RFC 3264 [30]	o	
4	Does the SUT support the temporarily stops sending one or more unicast media streams	7.4.10 [20]	o	

Table 9: Malicious Call Identification (MCID)

Item	Item description column	Reference	Status	Support
1	The SUT returns an **IRS** with bit A of the MCID response indicator set to 0 "MCID not included", if the network does not support the MCID service?	Clause 7.5.2.3.2 of ITU-T Rec. Q.731.7 [2]	o	

Table 10: Call DIVersion service (CDIV)

Item	Item description column	Reference	Status	Support
1	The SUT discard the **original called number** if case of bilateral agreements?	Clause 3.5.2.3.1 of ITU-T Rec. Q.732.2 [3]	o	
2	The SUT discard the **redirecting number** if case of bilateral agreements?	Clause 3.5.2.3.1 of ITU-T Rec. Q.732.2 [3]	o	
3	The SUT add a prefix to an international **original called number**?	Clause 3.5.2.4.1 of ITU-T Rec. Q.732.2 [3]	o	
4	The SUT add a prefix to an international **redirecting number?**	Clause 3.5.2.4.1 of ITU-T Rec. Q.732.2 [3]	o	
5	The SUT discard the **redirection number** in case of bilateral agreements?	Clause 3.5.2.3.1 of ITU-T Rec. Q.732 [3]	o	
6	Te SUT supports the mapping if History-Info header into the ISUP relevant parameters and messages	4.7.1.1 [20]	o	
7	The SUT supports the mapping of ISUP messages and parameters into SIP messages and History-Info header	4.7.1.1 [20]	o	

Table 11: User-to-user service

Item	Item description column	Reference	Status	Support
1	The SUT understand an explicit user-to-user request?	Clauses 1.1.5.2.5.2.2, 1.2.5.2.5.2.1 and 1.3.5.2.5.2.1 of ITU-T Rec. Q.737.1 [5]	o	
2	The SUT support the rejection procedure of an explicit service request or discarding of user-to-user information as described in clause 1.1.5.x.5.2 of ITU-T Rec. Q.737.1 [5]?	Clause 1.1.5.2.2.2 of ITU-T Rec. Q.737.1 [5]	o	
3	The SUT reject an user-to-user request service 3 not essential after call set-up using the FRJ message?	1.3.5.2.5.2.2/ITU-T Rec. Q.737 [5]	o	

Table 12: ECT

Item	Item description column	Reference	Status	Support
1	The SUT return a **LOP** (response) message with the indication "insufficient information"?	Clause 7.7 of ITU-T Rec. Q.732.7 [4]	o	

5.3.7 IMS simulation services

Table 13: Simulation services

Item	Item description column	Reference	Status	Support
1	The SUT support the IMS simulation service Terminating Identificatio Presentatio/Restriction	7.5.2.3 [20]	o	
2	The SUT support the HOLD simulation service	4/ [22]	o	
3	The SUT support the ECT simulation service	4/ [23]	o	
4	The SUT support the CONF simulation service	4/ [24]	o	
5	The SUT support the CDIV simulation service	4/ [24]	o	

5.3.8 Timers

Table 14: Timers

Item	Use of ...	Reference	Status	Support	Values in seconds	
					allowed	supported
1	T_{oiw1}	7.2.3.3 [20]	m		4 - 6	
2	T_{oiw2}	7.2.3.3 [20]	m		4 - 14	
3	T_{oiw3}	7.2.3.3 [20]	m		4 - 6	
4	ISUP T6	Annex A of ITU-T Rec. Q.764 [1]	o		ITU-T Rec. Q.118 [17]	
5	ISUP T7	Annex A of ITU-T Rec. Q.764 [1]	o		20 - 30	
6	ISUP T9	Annex A of ITU-T Rec. Q.764 [1]	o		ITU-T Rec. Q.118 [17]	
7	T_{TIR1}	7.2.3.3 [20]	o		0,1 - 2	

5.4 Additional information for PICS

This clause contains all additional comments provided by the supplier of the implementation (see clause 5.1.1).

Annex A (informative): Bibliography

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History

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