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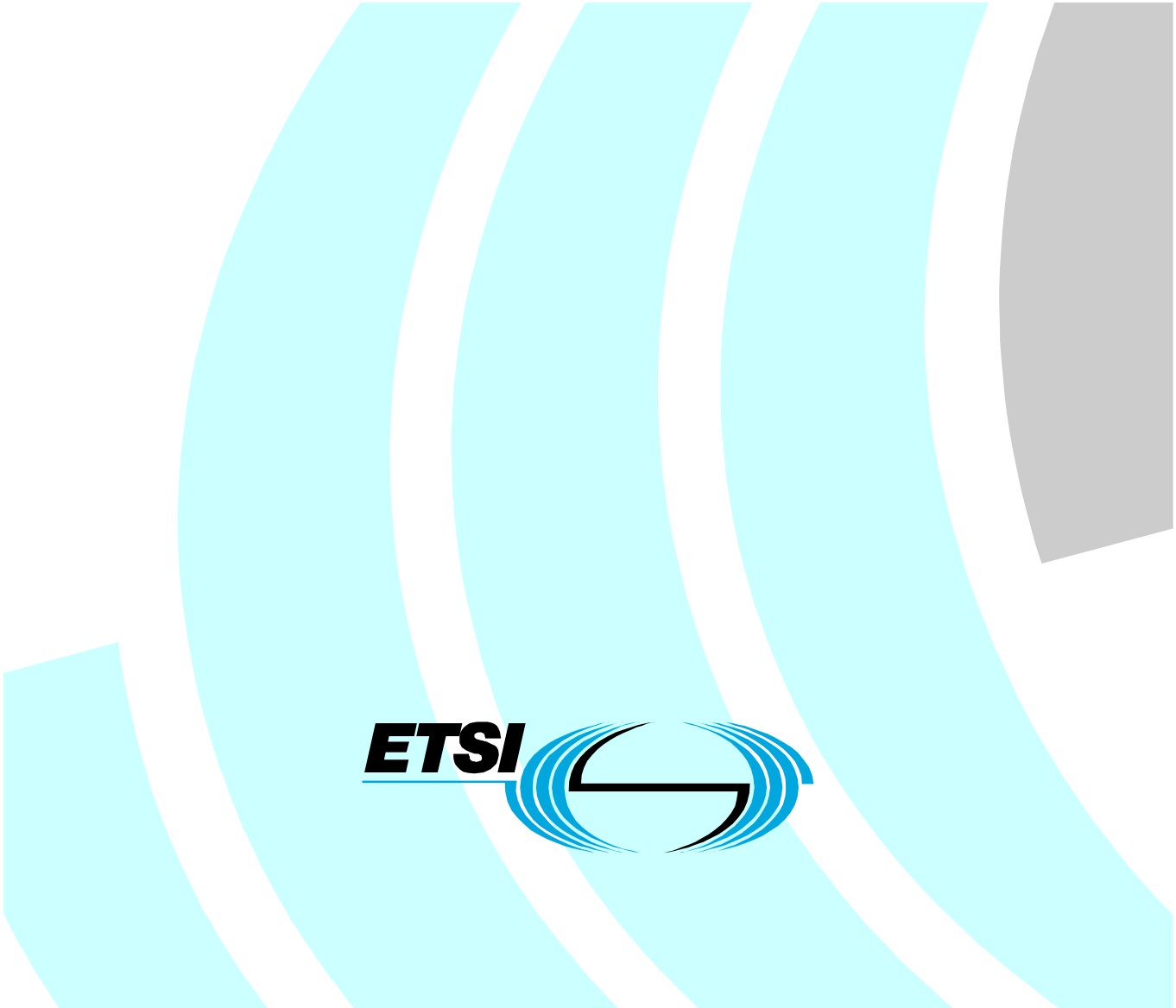
Technical Specification

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



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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) for Profile A and B";

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) for Profile C";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) for Profile A and B";

Part 5: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) for Profile C".

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.

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.

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

[2] ITU-T Recommendations Q.1902.1 to Q.1902.4 (2001): "Bearer Independent Call Control Protocol (BICC)".

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

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

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

[6] 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)".

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

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

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

[10] ETSI EN 383 001: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Interworking for SIP/SIP-T (BICC, ISUP) [ITU-T Recommendation Q.1912.5, modified]".

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

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

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

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

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

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

[17] 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)".

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

[19] 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".

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

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

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

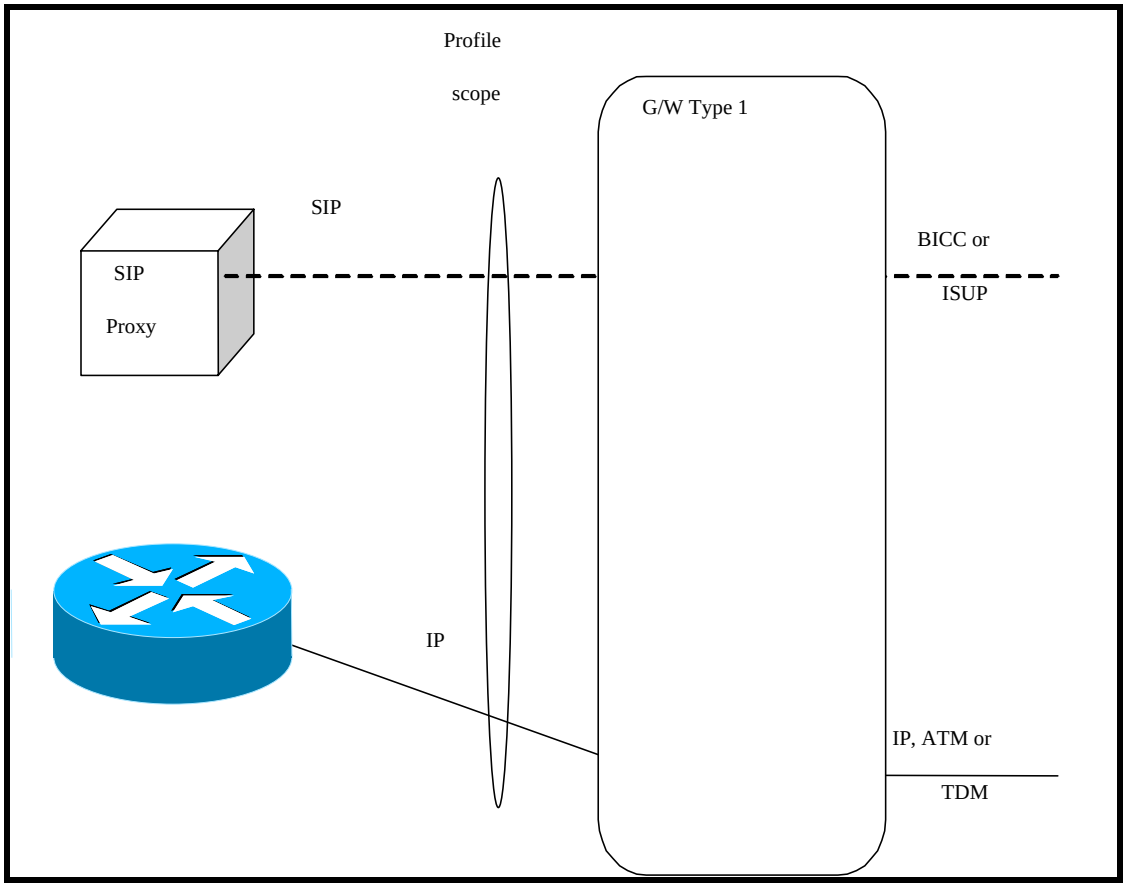

Figure 1: Profile Scope for SIP Interworking with BICC/ISUP with a Type 1 Gateway

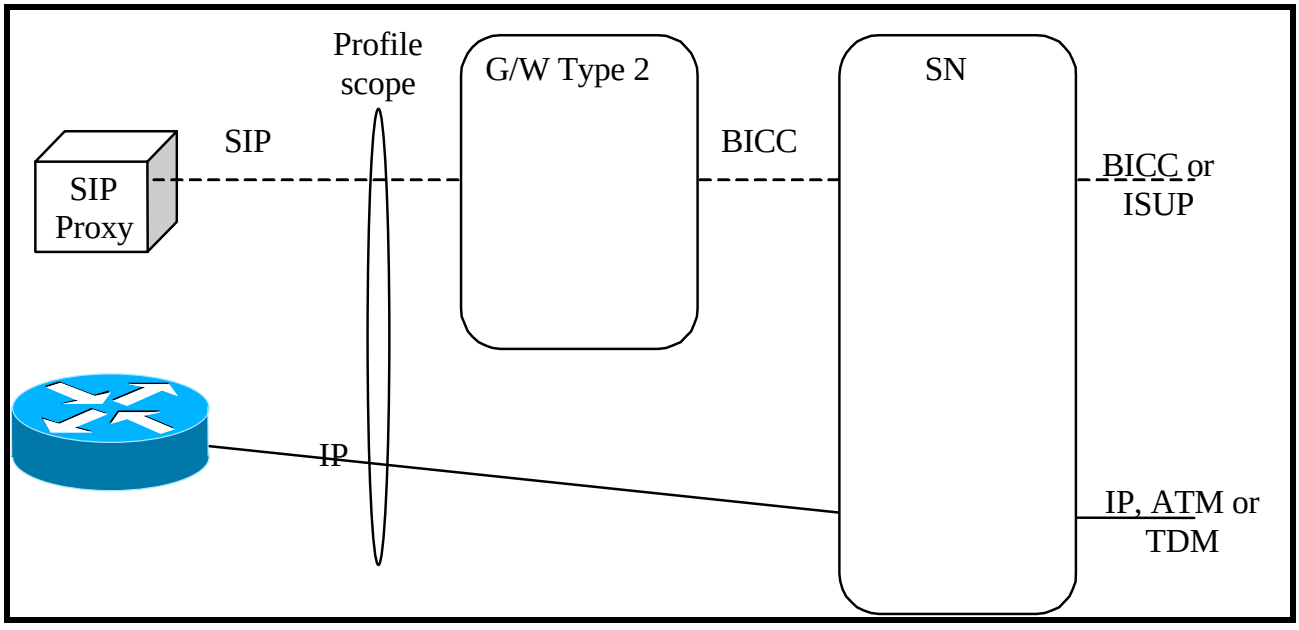

Figure 2: Profile Scope for SIP Interworking with BICC/ISUP with a Type 2 Gateway

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

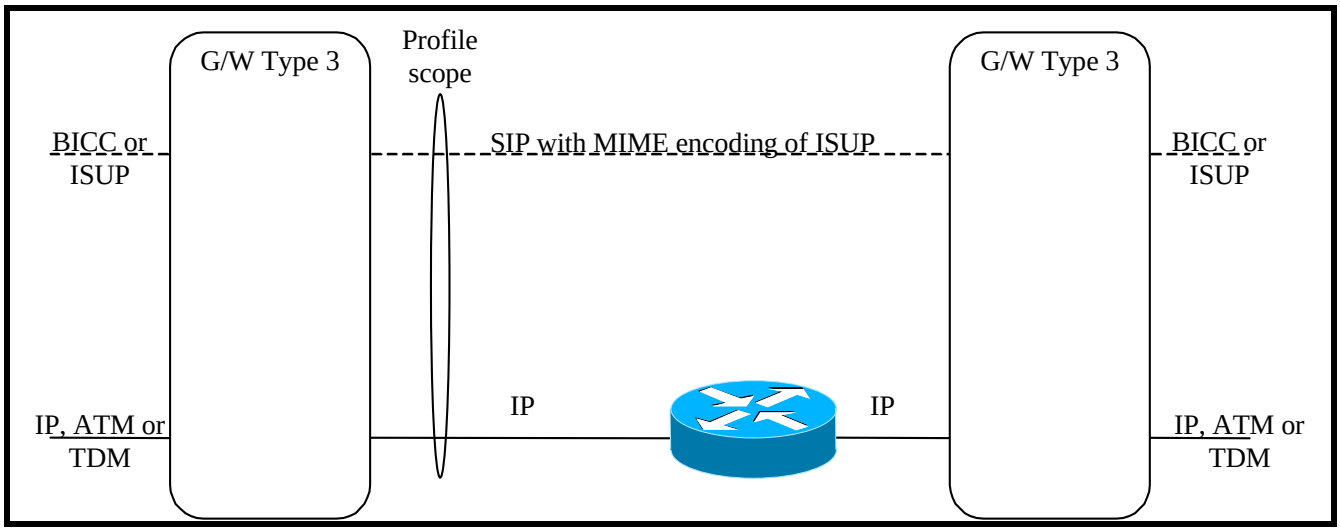

Figure 3: Profile Scope for SIP with MIME encoding of ISUP Interworking with BICC/ISUP with Type 3 Gateways

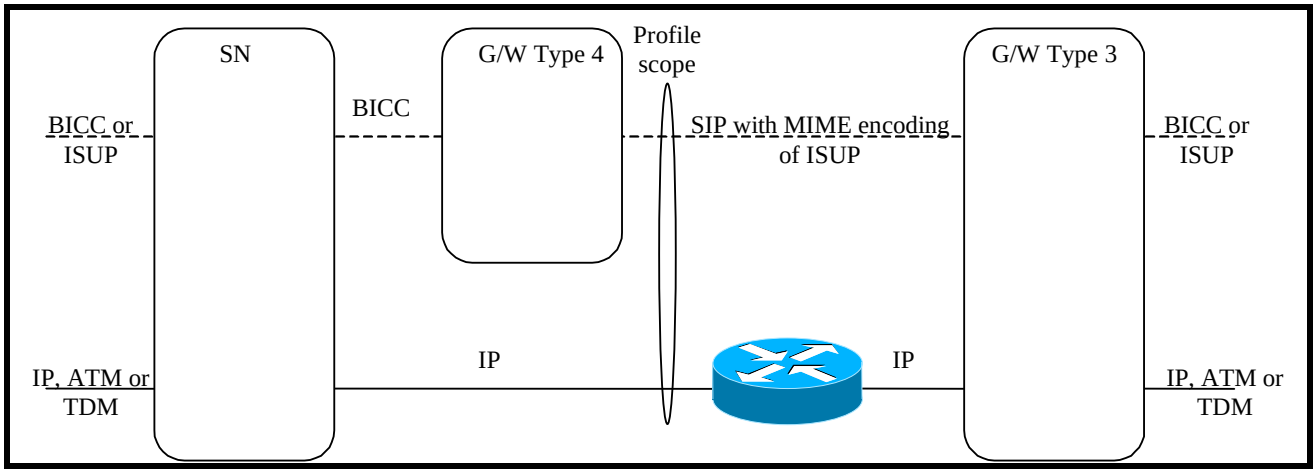

Figure 4: Profile Scope for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 3 & 4 Gateways

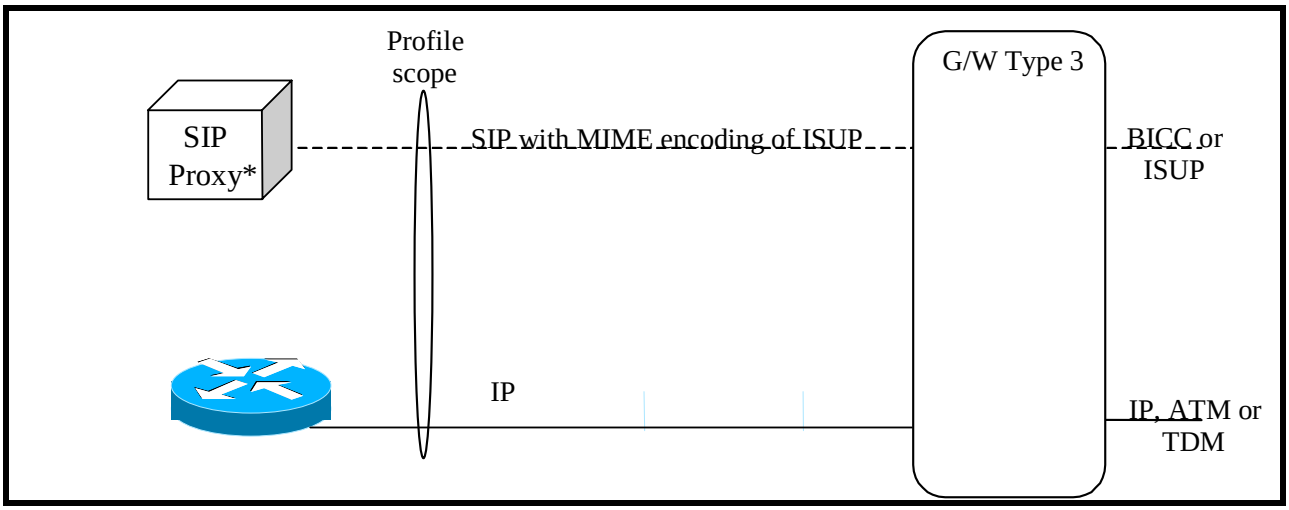

Figure 5: Profile Scope for SIP with MIME encoding of ISUP Interworking with BICC/ISUP with Type 3 Gateways

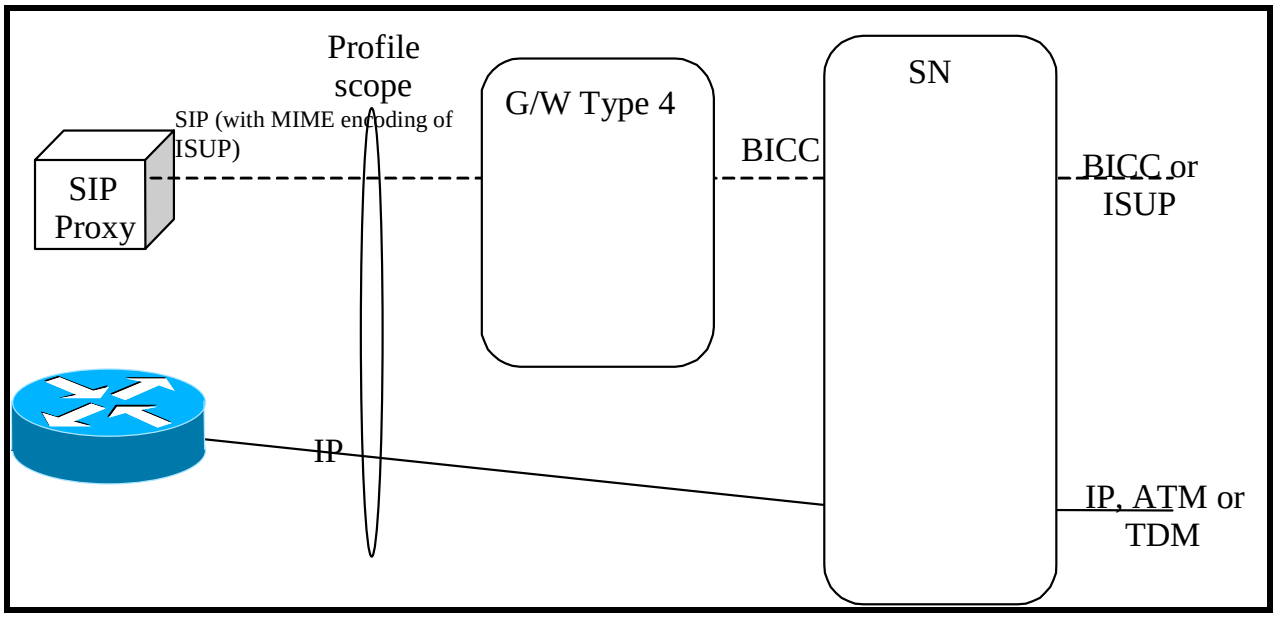

Figure 6: Profile Scope for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 4 Gateway

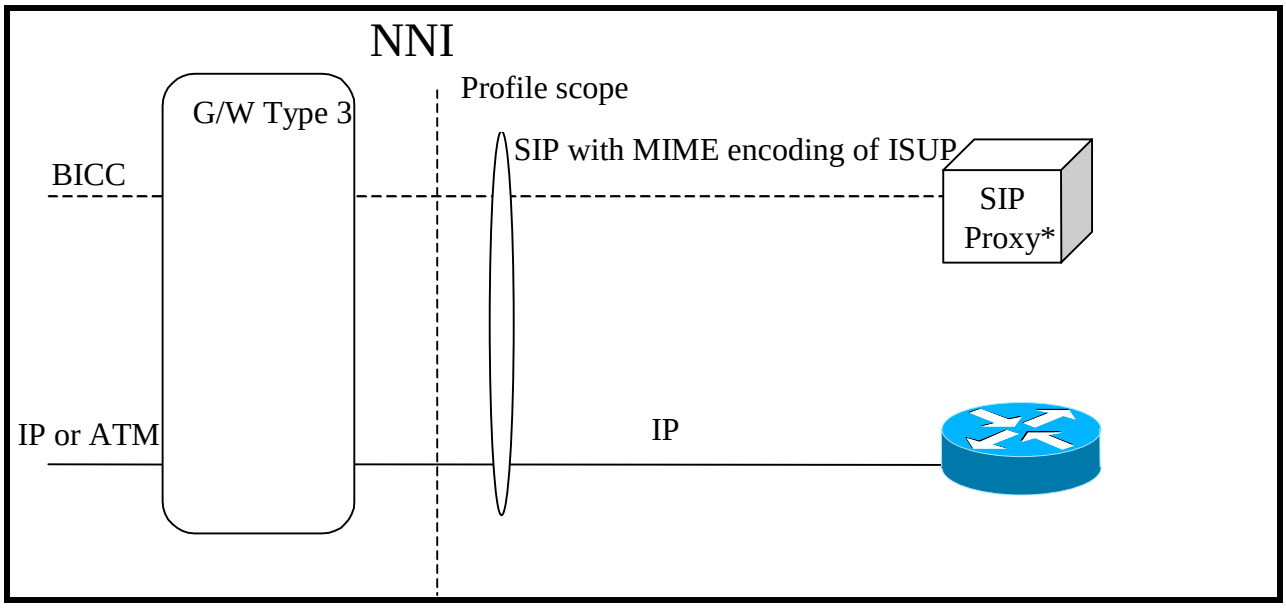

Figure 7: Profile for SIP, with MIME Encoding of ISUP, Interworking with BICC/ISUP with Type 3 Gateway

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 ISDN User Part (ISUP) 92 reference specification [1] to [20] 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 [9].

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 [xx], except where explicitly stated otherwise.

Status column

The following notations, defined in ISO/IEC 9646-7 [9], 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 [xx].

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 [9], are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- 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	Is the implementation ...	Reference	Status	Support
1	Profile A?	ITU-T TRQ.2815 [19]	o.1	
2	Profile B?	ITU-T TRQ.2815 [19]	o.1	
3	Profile C?	ITU-T TRQ.2815 [19]	o.1	
4	BICC Network?	ITU-T Q.1902.2 [2]	o.2	
5	ISUP Network?	ITU-T Q.764 [1]	o.2	
6	connected with a µ-law network?	Clauses 6.1 and 7.1 of ITU-T TRQ.2815 [19]	o	
7	an outgoing international exchange?	ITU-T Rec Q.764 [1]	o	
8	an incoming international exchange?	ITU-T Rec Q.764 [1]	o	
9	an implementation according EN 383 001 [10]?	EN 383 001 [10]	o	
NOTE: o.1: It is mandatory to support at least one of these items. o.2: It is mandatory to support one of these items.				

5.3.3 Connection types

Table 2: Connection types

Item	Is the exchange able to ...	Reference	Status	Support
1	support the media type "audio" and media format 0, 8?	Clauses 6.1.3.5.1 and 7.1.1.1 of ITU-T Rec Q.1912.5 [11]	o.21	
2	support the media type "audio" and media format 9	Clauses 6.1.3.5.1 and 7.1.1.1 of ITU-T Rec Q.1912.5 [11]	o.21	
3	support the media type "audio" and attribute value CLEARMODE?	Clauses 6.1.3.5.1 and 7.1.1.1 of ITU-T Rec Q.1912.5 [11]	o.21	
4	support the media type "image" and media format t38?	Clauses 6.1.3.5.1 and 7.1.1.1 of ITU-T Rec Q.1912.5 [11]	o.21	
5	support the dynamic assignment for codec?	Clauses 6.1.3.5.1 and 7.1.1.1 of ITU-T Rec Q.1912.5 [11]	o.21	
6	[PICS 2/4] use the transport protocol udptl?	RFC 768 [13]	o.22	
7	[PICS 2/4] use the transport protocol tcptl?	RFC 761 [14]	o.22	
NOTE: o.21: It is mandatory to support at least one of these items. o.22: It is mandatory to support one of these items.				

5.3.4 Forward address signalling

Table 3: Forward address signalling

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	SIP use the *en bloc* operation in the forward address signalling (sending)?	Clause 7.1 of ITU-T Rec Q.1912.5 [11]	o.31	
2	SIP use the overlap operation in the forward address signalling (sending)?	Clause 7.1 of ITU-T Rec Q.1912.5 [11]	o.31	
3	SIP support the *en bloc* operation in the forward address signalling (receiving)?	Clause 6.1 of ITU-T Rec Q.1912.5 [11]	o	
4	SIP support the overlap operation in the forward address signalling (receiving)?	Clause 6.1 of ITU-T Rec Q.1912.5 [11]	o	
5	ISUP use the *en bloc* operation in the forward address signalling (sending)?	Clause 6.1 of ITU-T Rec Q.1912.5 [11]	o.32	
6	ISUP use the overlap operation in the forward address signalling (sending)?	Clause 6.1 of ITU-T Rec Q.1912.5 [11]	o.32	
7	ISUP support the *en bloc* operation in the forward address signalling (receiving)?	Clause 7.1 of ITU-T Rec Q.1912.5 [11]	o	
8	ISUP support the overlap operation in the forward address signalling (receiving)?	Clause 7.1 of ITU-T Rec Q.1912.5 [11]	o	
NOTE: o.31: It is mandatory to support at least one of these items. o.32: It is mandatory to support one of these items.				

5.3.5 Role independent capabilities

Table 4: Role independent capabilities

Item	Is the exchange able to ...	Reference	Status	Support
1	use the Continuity check procedures during call setup?	Clause 6.1.2 of ITU-T Rec Q.1912.5 [11]	o	
2	support the Continuity check procedures during call setup?	Clause 2.1.8 of ITU-T Rec Q.764 [1]; clauses 7.2 and 7.3 of ITU-T Rec Q.1902.4 [20]	m	
3	use **CCR** message to test for proper CIC-alignment?	Annex G.3 of ITU-T Rec Q.764 [1]	o	
4	support **CCR** message to test for proper CIC-alignment?	Annex G.3 of ITU-T Rec Q.764 [1]	m	
5	support hop counter procedure?	Clauses 6.1.3.9 and 7.1.4	c41	
6	support internal resource reservations (preconditions used)?	Clause 6.1.2 2)	o	
7	support the reliability of provisional responses?	RFC 3262 [8]	o	
8	perform the automatic repeat attempt?	Clause 2.8.1 of ITU-T Rec Q.764 [1]; Clause 12.4 of ITU-T Rec Q.1902.4 [20]	o	
9	support the propagation delay determination procedure?	Clause 2.6 of ITU-T Rec Q.764; clause 8.5 of ITU-T Rec Q.1902.4 [20]	o	
10	support the simple (ITU-T Rec Q.767 [15]) echo control procedure?	Clause D.2.8 of ITU-T Rec Q.767 [15]	o	
11	support calls switched via a satellite?	Clauses 2.1.1 and 2.1.2 of ITU-T Rec Q.764 [1]; clauses 7.2 and 7.3 of ITU-T Rec Q.1902.4 [20]	o	
12	perform the automatic repeat attempt in case of dual seizure?	Clause 2.9.1 of ITU-T Rec Q.764 [1]; clause 13.2 of ITU-T Rec Q.1902.4 [20]	o	
13	act according to the instruction in the compatibility instruction indicator?	Clause 2.9.5.3 of ITU-T Rec Q.764 [1] clause 13.4.3 of ITU-T Rec Q.1902.4 [20]	m	
14	send ACM after determination of end of address signalling?	Clause 7.1 1)	o	

Item	Is the exchange able to ...	Reference	Status	Support
15	mapp the REL cause value into the reason header field of a SIP message (BYE, CANCEL or SIP final response)?	Clauses 6.11.2 and 7.7.1	c41	
16	map a received reason header fields included in a SIP message (BYE, CANCEL or SIP final response) to the ISUP cause value in the sent REL?	Clauses 6.11.1 and 7.7.2	c41	
17	interwork the SIP Failure response to ISUP?	Note 1 of table 40 in ITU-T Rec Q.1912.5 [11]	o	
18	derive the Display-name in the "From header field" from the "additional calling party number" or "calling party number"?	Clause 7.1.3/Table 28	c41	
19	control exchange for the Suspend procedure?	Clause 6.9	o	
20	use internal resource reservations (preconditons used)?	Clause 6.1.1 1) b) and 7.1 B, D	o	
21	control charging?	Clause 2.1.4.2 of ITU-T Rec Q.764 [1]	o	
22	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 [7]	o	
23	perform transcoding of media stream at the I-IWU?	Clause 6.1.3.5.1	c42	
24	Refuse an offer with a 415 Unsupported media type response if more than one media type is received in a SDP?	Clause 6.1.3.5.4 of EN 383 001 [10]	c41	
25	derive the Display-name in the "P-Asserted-Identity header field" from the "calling party number" or "additional calling party number"?	Clause 7.1.3/Table 29	o	
26	redirect to a new destination according the BICC/ISUP requirements if a REL is received with cause 23?	Clause 6.11.2/Table 21	o	
NOTE: c41: IF 1/9 THEN m ELSE o. c42: IF 1/2 (THEN IF 1/9 THEN n/a ELSE o) ELSE n/a.				

5.3.6 Supplementary Services Major Capabilities

Table 5: Supplementary Services Major Capabilities

Item	Is the exchange able to ...	Reference in ITU-T Rec Q.1912.5 [11]	Status	Support
1	support the service Calling Line Identification Presentation (CLIP)?	Annex B.1	m	
2	support the service Calling Line Identification Restriction (CLIR)?	Annex B.1	m	
3	support the service Connected Line Identification Presentation (COLP)?	Annex B.2	o	
4	support the service Connected Line Identification Restriction (COLR)?	Annex B.2	o	
5	support the service Call Hold (HOLD)?	Annex B.10	o	
6	support the service Terminal Portability (TP)?	Annex B.13	o	
7	support the service Closed User Group (CUG)?	Annex B.16	o	
8	support the service Sub-addressing (SUB)?	Annex B.5	o	
9	support the service Malicious Call Identification (MCID)?	Annex B.4	o	
10	support the service Conference Call, add-on (CONF)?	Annex B.14	o	
11	support the service Explicit Call Transfer (ECT)?	Annex B.8	o	
12	support the service Call Forwarding Busy (CFB)?	Annex B.6	o	
13	support the service Call Forwarding No Reply (CFNR)?	Annex B.6	o	
14	support the service Call Forwarding Unconditional (CFU)?	Annex B.6	o	
15	support the service Call Deflection (CD)?	Annex B.6	o	
16	support the service Call Waiting (CW)?	Annex B.9	o	
17	support the service Completion Call to busy subscriber (CCBS)?	Annex B.11	o	
19	support the Three-Party (3PTY) service?	Annex B.15	o	
20	support the service Completion Call on No Reply (CCNR)?	Annex B.12	o	
21	support the service Anonymous Call Rejection (ACR)?	Annex B.22	c.51	
NOTE: c.51: IF 1/9 THEN o ELSE n/a.				

Table 6: Calling Line Identification (CLI)

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	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 7	o	
2	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 7	o	
3	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 7	o	
4	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 [16]	o	
5	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 [16]	o	
6	discard the calling party number, if the address is marked not available?		o	
7	discard the additional calling party number in case of bilateral agreements if it is "presentation allowed"?		o	
8	discard the calling party number in case of bilateral agreements if it is "presentation allowed"?		o	
9	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 7	o	
10	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 7	c.61	
11	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 7	o	
12	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 7	c.62	
NOTE: c.61: IF 1/9 THEN n/a ELSE o. c.62: IF 1/9 THEN o ELSE n/a.				

Table 7: COnnected Line identification (COL)

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	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 [17]	o	
2	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 [17]	o	
3	discard the connected number in case of bilateral agreements if it is "presentation allowed"?		o	
4	discard the additional connected number in case of bilateral agreements if it is "presentation allowed"?		o	

Table 8: HOLD

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	support that a party can put the other party on hold after alerting has commenced?	Annex B.10	o	
2	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?	Annex B.10	o	

Table 9: Malicious Call Identification (MCID)

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	return 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 [3]	o	
2	held the IP bearer after the release of the call?	Annex B.4	o	

Table 10: Call DIVersion service (CDIV)

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	discard the **original called number** if case of bilateral agreements?	Clause 2.5.2.3.1 of ITU-T Rec Q.732.2 [4]	o	
2	discard the **redirecting number** if case of bilateral agreements?	Clause 2.5.2.3.1 of ITU-T Rec Q.732.2 [4]	o	
3	add a prefix to an international **original called number**?	Clause 2.5.2.4.1 of ITU-T Rec Q.732.2 [4]	o	
4	add a prefix to an international **redirecting number?**		o	
5	discard the **redirection number** in case of bilateral agreements?	Clause 2.5.2.3.1 of ITU-T Rec Q.732.2 [4]	o	

Table 11: User-to-user service

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	understand an explicit user-to-user request?	Clauses 1.1.5.2.5.2.2, 1.2.5.2.5.2.1 and 1.3.5.2.5.2.1of ITU-T Rec Q.737.1 [6]	o	
2	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 [6]?	Clause 1.1.5.2.2.2 of ITU-T Rec Q.737.1 [6]	o	

Table 12: ECT

Item	Is the exchange [role] able to ...	Reference	Status	Support
1	return a **LOP** (response) message with the indication "insufficient information"?	Clause 7.7 of ITU-T Rec Q.732.7 [5]	o	

5.3.7 Timers

Table 13: Timers

Item	Use of ...	Reference	Status	Support	Values in seconds	
					allowed	supported
1	T_{oiw1}	Clause 7.8/Table 41 of ITU-T Rec Q.1912.5 [11]	m		4 - 6	
2	T_{oiw2}	Clause 7.8/Table 41 of ITU-T Rec Q.1912.5 [11]	m		4 - 14	
3	T_{oiw3}	Clause 7.8/Table 41 of ITU-T Rec Q.1912.5 [11]	m		4 - 6	
4	ISUP T6	Annex A of ITU-T Rec Q.764 [1]	o		ITU-T Rec Q.118 [18]	
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 [18]	

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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