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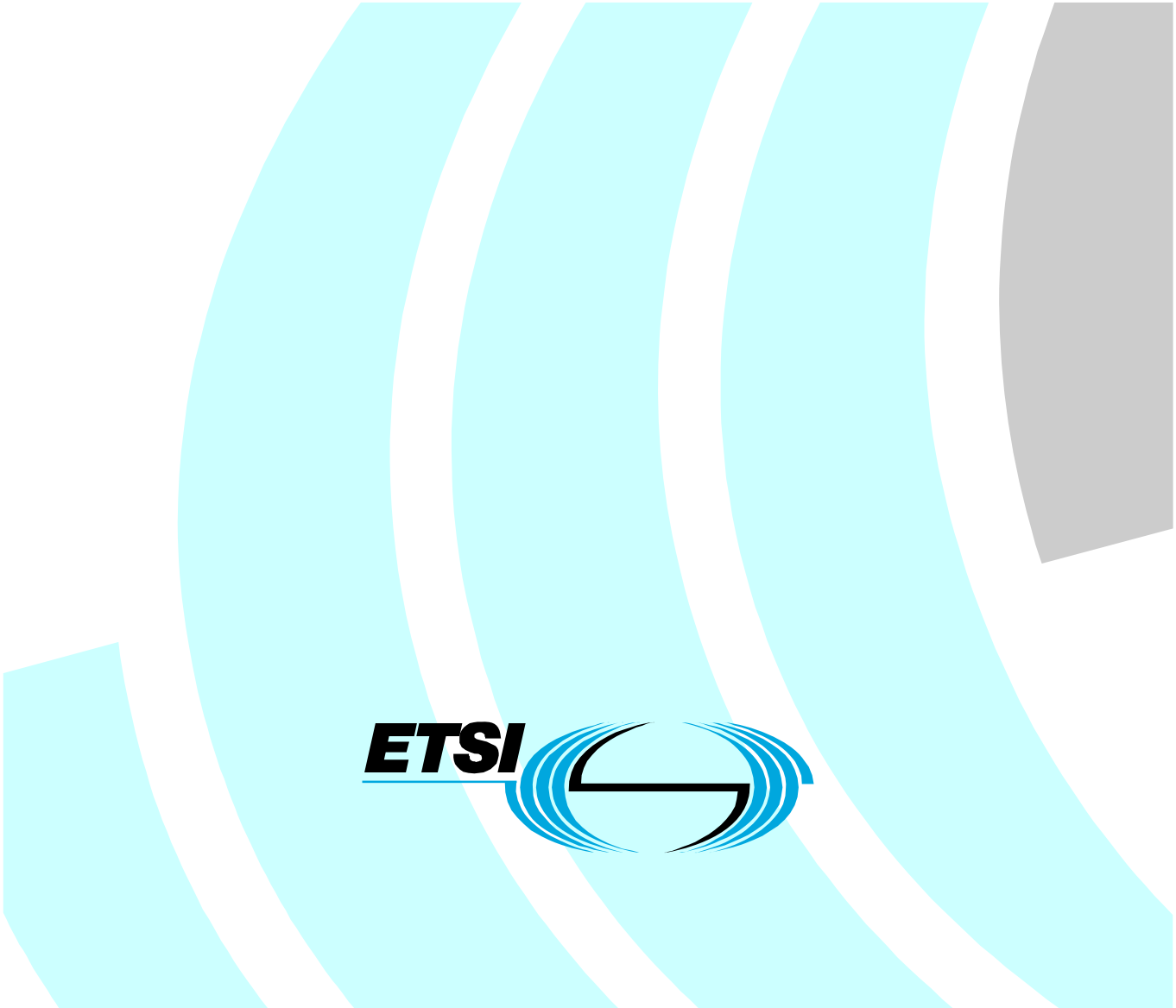
Technical Specification

**Technical Committee for IMS Network Testing (INT);
Network Integration Testing;
IMS specific use of Session Initiation Protocol (SIP) and Session Description Protocol (SDP);
Conformance Testing;
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 IMS Network Testing (INT).

The present document is part 1 of a multi-part deliverable covering the IMS specific use of Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Conformance Testing, as identified below:

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

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

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

Introduction

To evaluate protocol conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the IP Multimedia core network Subsystem (IMS) equipment supporting the Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) as specified in ES 283 003 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4] and ETS 300 406 [5].

The supplier of a protocol implementation which is claimed to conform to ES 283 003 [1] is required to complete a copy of the PICS proforma provided in annex A of the present document and is required to provide the information necessary to identify both the supplier and the implementation.

2 References

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.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
  - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
  - for informative references.

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] ETSI ES 283 003 (V2.5.1): "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]".

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

[3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[4] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

[5] ETSI ETS 300 406: "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[6] IETF RFC 5009: "Private Header (P-Header) Extension to the Session Initiation Protocol (SIP) for Authorization of Early Media".

[7] IETF RFC 5389: "Session Traversal Utilities for NAT (STUN)".

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 terms and definitions given in ES 283 003 [1] and the following apply:

PICS proforma: document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which, when completed for an OSI implementation or system, becomes the PICS

NOTE: See ISO/IEC 9646-1 [3].

Protocol Implementation Conformance Statement (PICS): statement made by the supplier of an Open Systems Interconnection (OSI) implementation or system, stating which capabilities have been implemented for a given OSI protocol

NOTE: See ISO/IEC 9646-1 [3].

static conformance review: review of the extent to which the static conformance requirements are met by the IUT, accomplished by comparing the PICS with the static conformance requirements expressed in the relevant standard(s)

NOTE: See ISO/IEC 9646-1 [3].

3.2 Abbreviations

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

AS	Application Server
B2BUA	Back-to-Back User Agent
CSCF	Call Session Control Function
E-CSCF	Emergency CSCF
FQDN	Fully Qualified Domain Name
IBCF	Interconnection Border Control Function
I-CSCF	Interrogating CSCF
IMS	IP Multimedia Subsystem
IMS-AKA	IMS-Authentication and Key Agreement
IP	Internet Protocol
P-CSCF	Proxy CSCF
PICS	Protocol Implementation Conformance Statement
S-CSCF	Serving CSCF
SDP	Session Description Protocol
SIP	Session Initiation Protocol
TLS	Transport Layer Security
UE	User Equipment

4 Conformance

A PICS proforma which conforms to this PICS proforma specification shall be technically equivalent to annex A, and shall preserve the numbering and ordering of the items in annex A.

A PICS which conforms to this PICS proforma specification shall:

a) describe an implementation which claims to conform to ES 283 003 [1];

b) be a conforming ICS proforma which has been completed in accordance with the instructions for completion given in clause A.1;

c) include the information necessary to uniquely identify both the supplier and the implementation.

Annex A (normative): PICS proforma

A.1 Guidance for completing the ICS proforma

A.1.1 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 relevant specifications may provide information about the implementation in a standardised 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 protocol;
- PICS proforma tables (for example: Major capabilities, etc).

A.1.2 Abbreviations and conventions

This annex does not reflect dynamic conformance requirements but static ones. In particular, a condition for support of a PDU parameter does not reflect requirements about the syntax of the PDU (i.e. the presence of a parameter) but the capability of the implementation to support the parameter.

In the sending direction, the support of a parameter means that the implementation is able to send this parameter (but it does not mean that the implementation always sends it).

In the receiving direction, it means that the implementation supports the whole semantic of the parameter that is described in the main part of this specification.

As a consequence, PDU parameter tables in this annex are not the same as the tables describing the syntax of a PDU in the reference specification.

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Reference column

The reference column gives reference to the relevant sections in core specifications.

Status column

The various status used in this annex are in accordance with the rules in table A.1.

Table A.1: Key to status codes

Status code	Status name	Meaning
m	mandatory	the capability shall be supported. It is a static view of the fact that the conformance requirements related to the capability in the reference specification are mandatory requirements. This does not mean that a given behaviour shall always be observed (this would be a dynamic view), but that it shall be observed when the implementation is placed in conditions where the conformance requirements from the reference specification compel it to do so. For instance, if the support for a parameter in a sent PDU is mandatory, it does not mean that it shall always be present, but that it shall be present according to the description of the behaviour in the reference specification (dynamic conformance requirement).
o	optional	the capability may or may not be supported. It is an implementation choice.
n/a	not applicable	it is impossible to use the capability. No answer in the support column is required.
c.<integer>	conditional	the requirement on the capability ("m", "o", "n/a") depends on the support of other optional or conditional items. <integer> is the identifier of the conditional expression.
o.<integer>	qualified optional	for mutually exclusive or selectable options from a set. <integer> is the identifier of the group of options, and the logic of selection of the options.

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

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 [4], are used for the support column:

Y or y supported by the implementation

N or n not supported by the implementation

N/A, n/a or - no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status)

References to items

For each possible item answer (answer in the support column) within the PICS proforma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table.

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

A.1.3 Instructions for completing the PICS proforma

The supplier of the implementation may complete the PICS proforma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the PICS proforma.

A.2 Identification of the Network Equipment

Identification of the Network Equipment 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 PICS should be named as the contact person.

A.2.1 Date of the statement

.....

A.2.2 Network Equipment Under Test identification

Name:

.....

.....

Hardware configuration:

.....

.....

.....

Software configuration:

.....

.....

.....

A.2.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.4 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

A.2.5 PICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

A.3 Identification of the protocol

This PICS proforma applies to the following specification:

ES 283 003 [1].

A.4 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced standard?

[ ] Yes

[ ] No

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming. Explanations may be entered in the comments field at the bottom of each table or on attached pages.

In the tabulations which follow, all references are to ES 283 003 [1] unless another numbered reference is explicitly indicated.

A.5 PICS proforma tables

A.5.1 Roles

Table A.2: Roles

Item	Roles	Reference	Status	Support
1	P-CSCF	Clause 5.2	o.1	
2	I-CSCF	Clause 5.3	o.1	
3	S-CSCF	Clause 5.4	o.1	
4	IBCF	Clause 5.10	o.1	
5	E-CSCF	Clause 5.11	o.1	
o.1	At least one of these capabilities shall be supported.			

A.5.2 P-CSCF Role

The tables provided in this clause need only to be completed for P-CSCF implementations, where item A.2/1 above is supported.

A.5.2.1 P-CSCF Capabilities

Table A.3: P-CSCF Capabilities

Item	Major capability: Does the implementation support...	Reference	Status	Support
General Capabilities (clause 4)				
1.1	the proxy role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.2	m	
1.2	the proxy role with IMS related exceptions and additional capabilities to SDP?	Clauses 4.1, 6.2	m	
1.3	the proxy role with IMS related exceptions and additional capabilities to SigComp?	Clauses 4.1, 8.2	m	
2	the UA role with IMS related exceptions and additional capabilities?	Clauses 4.1, 5.2	m	
3.1	the loose routeing policy?	Clause 4.3, RFC 3261 [2]	m	
3.2	interoperability with strict routers?	Clause 4.3, RFC 3261 [2] Clauses 12.2.1.1, 16.4	m	
4	procedures related to charging?	Clause 4.5	m	
P-CSCF specific application usage of SIP (clause 5.2)				
5	registration with security association set-up?	Clause 5.2.2	m	
5.1	procedures that apply on receipt of a REGISTER request from the UE?	Clause 5.2.2, first numbered list	m	
5.1.1	rejection of the request in case of failure of the verification of the content of the **Security-Verify headers** and **Security-Client headers**?	Clause 5.2.2, first 6) a)	o	
5.2	procedures that apply on receipt of a 401 response to a REGISTER request?	Clause 5.2.2, second numbered list	m	
5.3	procedures that apply on receipt of a 200OK response to a REGISTER request?	Clause 5.2.2, third numbered list	m	
5.4	parallel management of old and newly established security associations?	Clause 5.2.2, Table 5.2.2-1	m	
6	registration without security association set-up?	Clause 5.2.2A	m	
6.1	procedures that apply on receipt of a REGISTER request from the UE?	Clause 5.2.2A, first numbered list	m	
6.2	procedures that apply on receipt of a 200OK response to a REGISTER request?	Clause 5.2.2A, second numbered list	m	
7	subscription procedures to a user's registration state? (see note 1)	Clause 5.2.3	m	
8	procedures of registering additional public user identities? (see note 2)	Clause 5.2.4	m	
9.1	procedures for user-initiated deregistration?	Clause 5.2.5.1	m	
9.2	procedures for network-initiated deregistration?	Clause 5.2.5.2	m	
10	handling of requests (other than REGISTER) initiated by the UE?	Clause 5.2.6.3	m	
10.1	handling of initial requests?	Clause 5.2.6.3, first numbered list	m	
10.1.1	in case of failure of the verification of the **URIs** in the **Route headers (**Clause 5.2.6.3 first 1)) …			
10.1.1.1	rejection of the request?	Clause 5.2.6.3 first 1) a)	o.1	
10.1.1.2	replacement of the **Route headers** with stored values?	Clause 5.2.6.3 first 1) b)	o.1	
10.1.2	when building the **Via header** (Clause 5.2.6.3 first 3)) …			
10.1.2.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.3 first 3) a)	o.2	
10.1.2.2	insertion of the P-CSCF IP address?	Clause 5.2.6.3 first 3) b)	o.2	
10.1.3	when building the **Record-Route header** (Clause 5.2.6.3 first 4)) …			
10.1.3.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.3 first 4) a)	o.3	

Item	Major capability: Does the implementation support...	Reference	Status	Support
10.1.3.2	insertion of the P-CSCF IP address?	Clause 5.2.6.3 first 4) b)	o.3	
10.2	handling of 1xx and 2xx responses to initial requests?	Clause 5.2.6.3, second numbered list	m	
10.2.1	in case a security association exists, when rewriting its own Record Route entry (clause 5.2.6.3 second 4)) …			
10.2.1.1	insertion of the P-CSCF FQDN that resolves to the IP address of the security association?	Clause 5.2.6.3 second 4) a)	o.4	
10.2.1.2	insertion of the P-CSCF IP address of the security association?	Clause 5.2.6.3 second 4) b)	o.4	
10.3	handling of target refresh requests?	Clause 5.2.6.3, third numbered list	m	
10.3.1	in case of failure of the verification of the **URIs** in the **Route headers** (clause 5.2.6.3 third 2)) …			
10.3.1.1	rejection of the request?	Clause 5.2.6.3 third 2) a)	o.5	
10.3.1.2	replacement of the **Route headers** with stored values?	Clause 5.2.6.3 third 2) b)	o.5	
10.3.2	when building the **Via header** (clause 5.2.6.3 third 3)) …			
10.3.2.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.3 third 3) a)	o.6	
10.3.2.2	insertion of the P-CSCF IP address?	Clause 5.2.6.3 third 3) b)	o.6	
10.3.3	when building the **Record-Route header** (clause 5.2.6.3 third 4)) …			
10.3.3.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.3 third 4) a)	o.7	
10.3.3.2	insertion of the P-CSCF IP address?	Clause 5.2.6.3 third 4) b)	o.7	
10.4	handling of responses to target refresh requests?	Clause 5.2.6.3, fourth numbered list	m	
10.5	handling of requests for a standalone transaction?	Clause 5.2.6.3, fifth numbered list	m	
10.5.1	in case of failure of the verification of the **URIs** in the **Route headers** (clause 5.2.6.3 fifth 1)) …			
10.5.1.1	rejection of the request?	Clause 5.2.6.3 fifth 1) a)	o.8	
10.5.1.2	replacement of the **Route headers** with stored values?	Clause 5.2.6.3 fifth 1) b)	o.8	
10.6	handling of responses to standalone requests?	Clause 5.2.6.3, sixth numbered list	m	
10.7	handling of subsequent (other than target refresh) requests?	Clause 5.2.6.3, sixth numbered list	m	
10.7.1	in case of failure of the verification of the **URIs** in the **Route headers** (clause 5.2.6.3 seventh 1)) …			
10.7.1.1	rejection of the request?	Clause 5.2.6.3 seventh 1) a)	o.10	
10.7.1.2	replacement of the **Route headers** with stored values?	Clause 5.2.6.3 seventh 1) b)	o.10	
11	handling of requests terminated by the UE?	Clause 5.2.6.4	m	
11.1	handling of initial requests?	Clause 5.2.6.4, first numbered list	m	
11.1.1	when building the **URI** (clause 5.2.6.4 first 3)) …			
11.1.1.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.4 first 3) a)	o.11	
11.1.1.2	insertion of the P-CSCF IP address?	Clause 5.2.6.4 first 3) b)	o.11	
11.1.2	when building the **Via header** (clause 5.2.6.4 first 4)) …			
11.1.2.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.4 first 4) a)	o.12	
11.1.2.2	insertion of the P-CSCF IP address?	Clause 5.2.6.4 first 4) b)	o.12	
11.2	handling of 1xx and 2xx responses to initial requests?	Clause 5.2.6.4, second numbered list	m	
11.2.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 second 2)) …			
11.2.1.1	discarding the response?	Clause 5.2.6.4 second 2) a)	o.13	

Item	Major capability: Does the implementation support...	Reference	Status	Support
11.2.1.2	replacement of the **Via header** values with stored values?	Clause 5.2.6.4 second 2) b)	o.13	
11.2.2	in case of failure of the verification of the **URIs** in the **Route headers** (clause 5.2.6.4 second 3)) …			
11.2.2.1	discarding the response?	Clause 5.2.6.4 second 3) a)	o.14	
11.2.2.2	replacement of the **Record-Route header** values with stored values?	Clause 5.2.6.4 second 3) b)	o.14	
11.3	handling of responses (other than 1xx and 2xx) to initial requests?	Clause 5.2.6.4, third numbered list	m	
11.3.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 third 1)) …			
11.3.1.1	discarding the response?	Clause 5.2.6.4 third 1) a)	o.15	
11.3.1.2	replacement of the **Via header** values with stored values?	Clause 5.2.6.4 third 1) b)	o.15	
11.4	handling of target refresh requests?	Clause 5.2.6.4, fourth numbered list	m	
11.4.1	when building the **Via header** (clause 5.2.6.4 fourth 1)) …			
11.4.1.1	insertion of the P-CSCF FQDN that resolves to the IP address of the security association?	Clause 5.2.6.4 fourth 1) a)	o.16	
11.4.1.2	insertion of the P-CSCF IP address of the security association?	Clause 5.2.6.4 fourth 1) b)	o.16	
11.4.2	when building the **Record-Route header** (clause 5.2.6.4 fourth 2)) …			
11.4.2.1	insertion of the P-CSCF FQDN that resolves to the IP address?	Clause 5.2.6.4 fourth 2) a)	o.17	
11.4.2.2	insertion of the P-CSCF IP address?	Clause 5.2.6.4 fourth 2) b)	o.17	
11.5	handling of 1xx and 2xx responses to target refresh requests?	Clause 5.2.6.4, fifth numbered list	m	
11.5.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 fifth 1)) …			
11.5.1.1	discarding the response?	Clause 5.2.6.4 fifth 1) a)	o.18	
11.5.1.2	replacement of the **Via header** values with stored values?	Clause 5.2.6.4 fifth 1) b)	o.18	
11.6	handling of responses (other than 1xx and 2xx) to target refresh requests?	Clause 5.2.6.4, sixth numbered list	m	
11.6.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 sixth 1)) …			
11.6.1.1	discarding the response?	Clause 5.2.6.4 sixth 1) a)	o.19	
11.6.1.2	replacement of the **Via header** values with stored values?	Clause 5.2.6.4 sixth 1) b)	o.19	
11.7	handling of requests for standalone transactions or unknown methods?	Clause 5.2.6.4, seventh numbered list	m	
11.7.1	when building the **Via header** (clause 5.2.6.4 seventh 1)) …			
11.7.1.1	insertion of the P-CSCF FQDN that resolves to the IP address of the security association?	Clause 5.2.6.4 seventh 1) a)	o.20	
11.7.1.2	insertion of the P-CSCF IP address of the security association?	Clause 5.2.6.4 seventh 1) b)	o.20	
11.8	handling of all responses to requests for standalone transactions or unknown methods?	Clause 5.2.6.4, eighth numbered list	m	
11.8.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 eighth 1)) …			
11.8.1.1	discarding the response?	Clause 5.2.6.4 eighth 1) a)	o.21	
11.8.1.2	replacement of the **Via** values with stored values?	Clause 5.2.6.4 eighth 1) b)	o.21	
11.9	handling of subsequent (other than target refresh) requests?	Clause 5.2.6.4, ninth numbered list	m	
11.9.1	when building the **Via header** (clause 5.2.6.4 ninth 1)) …			
11.9.1.1	insertion of the P-CSCF FQDN that resolves to the IP address of the security association?	Clause 5.2.6.4 ninth 1) a)	o.22	
11.9.1.2	insertion of the P-CSCF IP address of the security association?	Clause 5.2.6.4 ninth 1) b)	o.22	
11.10	handling of 1xx and 2xx responses to subsequent requests?	Clause 5.2.6.4, tenth numbered list	m	

Item	Major capability: Does the implementation support...	Reference	Status	Support
11.10.1	in case of failure of the verification of the **Via headers** (clause 5.2.6.4 tenth 1)) …			
11.10.1.1	discarding the response?	Clause 5.2.6.4 tenth 1) a)	o.23	
11.10.1.2	replacement of the **Via header** values with stored values?	Clause 5.2.6.4 tenth 1) b)	o.23	
12.1	additional requirements for UE-originated INVITE requests?	Clause 5.2.7.2	m	
12.1.1	application of periodic session refreshment on receipt of UE-originated INVITE requests?	Clause 5.2.7.2	o	
12.2	additional requirements for UE-terminated INVITE requests?	Clause 5.2.7.3	m	
12.2.1	application of periodic session refreshment on receipt of UE-terminated INVITE requests?	Clause 5.2.7.3	o	
13.1	P-CSCF initiated call release?	Clause 5.2.8.1	m	
13.2	call release initiated by other entities?	Clause 5.2.8.2	m	
13.3	call release due to session expiry?	Clause 5.2.8.3	m	
14.1	additional requirements for subsequent requests (UE-originating case)?	Clause 5.2.9.1	m	
14.2	additional requirements for subsequent requests (UE-terminating case)?	Clause 5.2.9.2	m	
15	the emergency service?	Clauses 5.2.10, 5.2.10.1, 5.2.10.5	m	
15.1	requests for all dialogs and standalone transactions (other than REGISTER) from an unregistered user?	Clause 5.2.10.2	m	
15.1.1	when building the **URI** (clause 5.2.10.2 1)) …			
15.1.1.1	inclusion of the **URI** received from the UE?	Clause 5.2.10.2 1) first -	o.24	
15.1.1.2	inclusion of a **URI** deduced from the **URI** received from the UE?	Clause 5.2.10.2 1) second -	o.24	
16.1	requests for all dialogs and standalone transactions (other than REGISTER) from an emergency-registered user?	Clause 5.2.10.3	m	
16.1.1	when building the **URI** (clause 5.2.10.3 1)) …			
16.1.1.1	inclusion of the **URI** received from the UE?	Clause 5.2.10.3 1) first -	o.25	
16.1.1.2	inclusion of a **URI** deduced from the **URI** received from the UE?	Clause 5.2.10.3 1) second -	o.25	
17.1	requests for all dialogs and standalone transactions (other than REGISTER) from an non-emergency-registered user?	Clause 5.2.10.4	m	
17.1.1	when building the **URI** (clause 5.2.10.4 1)) …			
17.1.1.1	inclusion of the **URI** received from the UE?	Clause 5.2.10.4 1) first -	o.26	
17.1.1.2	inclusion of a **URI** deduced from the URI received from the UE?	Clause 5.2.10.4 1) second -	o.26	
P-CSCF specific application usage of SDP (clause 6.2)				
18.1	handling of requests including SDP offers?	Clause 6.2	m	
18.1.1	rejection of requests including encrypted SDP offers?	Clause 6.2, first paragraph	o	
18.2	handling of responses (other than 200OK) including SDP offers?	Clause 6.2, second paragraph	m	
18.2.1	rejection of requests following non-200OK responses including encrypted SDP offers?	Clause 6.2, second paragraph	o	
18.3	handling of 200OK responses including SDP offers?	Clause 6.2, third paragraph	m	
18.3.1	session termination on receipt of encrypted SDP offers in 200OK responses?	Clause 6.2, third paragraph	o	
18.4	inspection of b=RS and b=RR lines within an SDP offer?	Clause 6.2, eighth paragraph	o	
SIP compression (clause 8.2)				
19	SIP compression?	Clauses 8.2.1, 8.2.2	o	
19.1.1	SigComp compression including additional requirements?	Clause 8.2.1	c.1	

Item	Major capability: Does the implementation support...	Reference	Status	Support
19.1.2	the negative acknowledgement mechanism for compression?	Clause 8.2.1	o	
19.2.1	SIP dictionary for compression?	Clause 8.2.1	c.1	
19.2.2	the presence specific dictionary for compression?	Clause 8.2.1	o	
20	decompression of requests and responses from the UE?	Clause 8.2.3	m	
IP-Connectivity Access Network specific concepts when using xDSL to access IM CN subsystem (Annex E)				
21	P-CSCF usage of SIP for xDSL access to IM CN subsystem?	Clause E.3.2	m	
21.1	insertion of the **P-Access-Network-Info header** for location information handling?	Clause E.3.2.2	o	
Additional procedures in support for hosted NAT (Annex F)				
22	P-CSCF usage of SIP in support for hosted NAT?	Clause F.2.2	m	
22.1	rejection of integrity protected REGISTER requests in case the comparison of the **Security-Verify header** and the **Security-Server header** with stored values fails?	Clause F.2.2, first numbered list (6, third -	o	
23	P-CSCF usage of SDP in support for hosted NAT?	Clause F.3.2	m	
24	P-CSCF usage of SIP in support for hosted NAT in case UDP encapsulated IPsec is not employed?	Clause F.4	m	
Additional procedures in support of NA(P)T and NA(P)T-PT controlled by the P-CSCF (Annex G)				
25	P-CSCF usage of SDP in support of NA(P)T and NA(P)T-PT?	Clause G.2	m	
DOCSIS aspects when connected to the IM CN subsystem (Annex H)				
26	P-CSCF usage of SIP for connection to the IM CN subsystem?	Clause H.3.2	m	
26.1	insertion of the **P-Access-Network-Info header** for location information handling?	Clause H.3.2.2	o	
Additional procedures in support of UE managed NAT traversal (Annex K)				
27	additional procedures to registration with security association set-up for UE managed NAT traversal?	Clauses 5.2.2, K.2.2.2	m	
28.1	additional procedures to handling of requests (other than REGISTER) initiated by the UE for UE managed NAT traversal?	Clauses 5.2.6.3, K.2.2.3.1	m	
28.2	additional procedures to handling of requests (other than REGISTER) terminated by the UE for UE managed NAT traversal?	Clauses 5.2.6.4, K.2.2.3.2	m	
29	requirements for a STUN server?	Clause K.2.2.4, RFC 5389 [7]	m	
30	additional procedures to the emergency service for UE managed NAT traversal?	Clause 5.2.10, K.2.2.5	m	
31	P-CSCF usage of SDP for UE managed NAT traversal?	Clause K.3.2	m	
31.1	modification of SDP offers without a candidate attribute received from a UE located behind a hosted NAT?	Clause K.3.2.1, K.3.2.3	o	
31.2	modification of SDP answers without a candidate attribute received from a UE located behind a hosted NAT?	Clause K.3.2.1, K.3.2.3	o	
SIP Digest (Annex L)				
32	SIP Digest?	Clause L.1, L.2.2	o	
33	Transport Layer Security (TLS)?	Clause L.1	c.2	
34	additional procedures to registration with security association set-up for SIP Digest?	Clauses 5.2.2, L.2.2.2	c.2	
35.1	additional procedures to handling of requests (other than REGISTER) initiated by the UE for SIP Digest?	Clauses 5.2.6.3, L.2.2.3	c.2	
35.2	additional procedures to handling of requests (other than REGISTER) terminated by the UE for SIP Digest?	Clauses 5.2.6.4, L.2.2.4	c.2	
36	additional procedures to the emergency service for SIP Digest without TLS?	Clauses 5.2.10.1, L.2.2.5	c.3	

NOTE 1: The P-CSCF has to send a SUBSCRIBE request to the home domain in which the user's public user identity resides.
NOTE 2: The P-CSCF is informed of additional public user identities by the registrar via NOTIFY requests.

Item	Major capability: Does the implementation support...	Reference	Status	Support
o.n	At least one of these capabilities shall be supported.			
c.1	m, if A.3/19 is supported, else o			
c.2	o, if A.3/32 is supported, else n/a			
c.3	m, if A.3/34 is supported, else n/a			

A.5.2.2 P-CSCF header handling

Table A.4: P-CSCF Header Handling

Item	Header handling: Does the implementation support...	Reference	Status	Support
1	the **Path header** in REGISTER request and related 200OK response messages?	Clause 5.2.1	m	
2	the **Service-Route header** in 200OK response messages to REGISTER requests?	Clause 5.2.1	m	
3.1	removal of the **P-Charging-Function-Addresses header** from requests and responses to be sent to the UE?	Clause 5.2.1	m	
3.2	removal of the **P-Charging-Vector header** from requests and responses to be sent to the UE?	Clause 5.2.1	m	
4.1.1	removal of the **P-Charging-Function-Addresses header** from requests and responses received from the UE?	Clause 5.2.1	m	
4.1.2	insertion of saved **P-Charging-Function-Addresses header** into requests and responses from the UE to be forwarded?	Clause 5.2.1	o	
4.2.1	removal of the **P-Charging-Vector header** from requests and responses received from the UE?	Clause 5.2.1	m	
4.2.2	insertion of saved **P-Charging-Vector header** into requests and responses from the UE to be forwarded?	Clause 5.2.1	o	
4.3.1	removal of the **P-Access-Network header** with "network provided" parameter?	Clause 5.2.1	m	
4.3.2	insertion of the **P-Access-Network header** with "network provided" parameter?	Clause 5.2.1	o	
5	removal of the **P-Media-Authorization header** from requests and responses to be sent to the UE?	Clause 5.2.1	m	
6	removal, insertion and modification of the **P-Early-Media header**?	Clause 5.2.1, RFC 5009 [6]	m	

A.5.3 I-CSCF Role

The tables provided in this clause need only to be completed for I-CSCF implementations, where item A.2/2 above is supported.

A.5.3.1 I-CSCF Capabilities

Table A.5: I-CSCF Capabilities

Item	Major capability: Does the implementation support...	Reference	Status	Support
General Capabilities (clause 4)				
1.1	the proxy role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.3	m	
1.2	the UA role when providing server functionality to return a final response?	Clause 4.1	o	
2.1	the loose routeing policy?	Clause 4.3, RFC 3261 [2]	m	
2.2	interoperability with strict routers?	Clause 4.3, RFC 3261 [2] Clauses 12.2.1.1, 16.4	m	
3	procedures related to charging?	Clause 4.5	m	
I-CSCF specific application usage of SIP (clause 5.3)				
4.1	procedures that apply on receipt of a REGISTER request? (see note 1)	Clause 5.3.1.2	m	
4.2	procedures that apply on receipt of a user registration status query response? (Note 2)	Clause 5.3.1.2 first and second numbered list	m	
4.2.1	insertion of the Redirect-Host AVP into the **P-User-Database header** of the REGISTER request to be sent to the S-CSCF?	Clause 5.3.1.2 first 2), second 3)	o	
4.3.1	procedures that apply in case the user registration status query procedure fails?	Clause 5.3.1.3	m	
4.3.2	procedures that apply on receipt of no response or a response other than 200OK from the S-CSCF?	Clause 5.3.1.3	m	
5.1	stateful proxy behaviour for initial requests?	Clause 5.3.2.1 first sentence	o.1	
5.2	stateless proxy behaviour for initial requests?	Clause 5.3.2.1comple ment of first sentence	o.1	
5.3	handling of initial requests not containing the "orig" parameter in the topmost **Route header**?	Clause 5.3.2.1	m	
5.3.1	application of periodic session refreshment on receipt of INVITE requests?	Clause 5.3.2.1	o	
5.3.2	insertion of the Redirect-Host AVP into the **P-User-Database header** of INVITE requests to be forwarded to the S-CSCF?	Clause 5.3.2.1 second 3)	o	
5.4	originating procedures for requests containing the "orig" parameter in the topmost **Route header**?	Clause 5.3.2.1A	m	
5.4.1	application of periodic session refreshment on receipt of INVITE requests?	Clause 5.3.2.1A	o	
5.4.2	insertion of the Redirect-Host AVP into the **P-User-Database header** of INVITE requests to be forwarded to the S-CSCF?	Clause 5.3.2.1A first 3)	o	
5.5	procedures for unsuccessful outcome of request processing?	Clause 5.3.2.2	m	

NOTE 1: The I-CSCF has to start the user registration status query procedure on receipt of the REGISTER request from the P-CSCF. The I-CSCF shall behave as a stateful proxy.
NOTE 2: If the user registration status query procedure succeeds, the I-CSCF has to forward the REGISTER request to the S-CSCF. The 200OK response from the S-CSCF has to be proxied to the P-CSCF.
o.n At least one of these capabilities shall be supported.

A.5.4 S-CSCF Role

The tables provided in this clause need only to be completed for S-CSCF implementations, where item A.2/3 above is supported.

A.5.4.1 S-CSCF Capabilities

Table A.6: S-CSCF Capabilities

Item	Major capability: Does the implementation support...	Reference	Status	Support
General Capabilities (clause 4)				
1.1	the proxy role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.4	m	
1.2	the proxy role with IMS related exceptions and additional capabilities to SDP?	Clauses 4.1, 6.3	m	
2	the UA role with IMS related exceptions and additional capabilities? (see note)	Clauses 4.1, 5.4	m	
3.1	the loose routeing policy?	Clause 4.3, RFC 3261 [2]	m	
3.2	interoperability with strict routers?	Clause 4.3, RFC 3261 [2] and clauses 12.2.1.1, 16.4	m	
4	procedures related to charging?	Clause 4.5	m	
S-CSCF specific application usage of SIP (clause 5.4)				
5	initial registration and user-initiated re-registration with IMS-AKA authentication including the abnormal cases?	Clauses 5.4.1.2, 5.4.1.2.3	m	
5.1	procedures that apply on receipt of an unprotected REGISTER request for an already registered public user identity?	Clause 5.4.1.2.1 first numbered list	m	
5.2	procedures that apply on receipt of an unprotected REGISTER request for a not yet registered public user identity?	Clause 5.4.1.2.1 second numbered list	m	
6	initial registration and user-initiated re-registration for non IMS-AKA authentication including the abnormal cases?	Clauses 5.4.1.2A, 5.4.1.2A.1	m	
6.1	procedures that apply on receipt of an unprotected REGISTER request for an already registered public user identity?	Clause 5.4.1.2A first numbered list	m	
6.2	procedures that apply on receipt of an unprotected REGISTER request for a not yet registered public user identity?	Clause 5.4.1.2A second numbered list	m	
7.1	procedures that apply on receipt of a protected REGISTER request for which authentication is currently ongoing?	Clause 5.4.1.2.2 first numbered list	m	
7.1.1	authentication for all received protected REGISTER requests even if authentication is currently ongoing?	Clause 5.4.1.2.2 first 1)	o	
7.2	procedures that apply on receipt of a protected REGISTER request for which no authentication is currently ongoing?	Clause 5.4.1.2.2 second numbered list	m	
8	user-initiated deregistration?	Clause 5.4.1.4	m	
9	network-initiated deregistration?	Clause 5.4.1.5	m	
10	network-initiated re-authentication?	Clause 5.4.1.6	m	
11	notification of AS about registration status?	Clause 5.4.1.7	m	
11.1	when building the **To header** of the REGISTER request to the AS (clause 5.4.1.7 c))…			
11.1.2	Insertion of a public user identity as contained in the REGISTER request received from the UE?	Clause 5.4.1.7 c)	o.1	
11.1.2	Insertion of an implicitly registered public user identities from the service profile?	Clause 5.4.1.7 c)	o.1	
12	service profile updates?	Clause 5.4.1.8	m	

Item	Major capability: Does the implementation support...	Reference	Status	Support
12.1	when receiving a service profile modifying Push-Profile-Request (clause 5.4.1.8 "dashed" list) …			
12.1.1	procedures for notification of the reg-event subscribers about the registration state?	Clause 5.4.1.8 first -	o.2	
12.1.2	shortening the life time of the current registration?	Clause 5.4.1.8 second -	o.2	
13	subscription and notification?	Clause 5.4.2	m	
13.1	procedures that apply on receipt of Subscribe requests?	Clause 5.4.2.1.1	m	
13.2	transmission of notifications about the registration state?	Clause 5.4.2.1.2	m	
14	handling of requests initiated by the served user?	Clause 5.4.3.2	m	
14.1	handling of the receipt of initial requests for a dialog or a standalone transaction from the served user?	Clause 5.4.3.2, first numbered list	m	
14.2	handling of the receipt of initial requests for a dialog or a standalone transaction from an AS acting on behalf of an unregistered user?	Clause 5.4.3.2, second numbered list	m	
14.3	handling of the responses (or the absence of responses) to initial requests?	Clause 5.4.3.2 third numbered list	m	
14.4	handling of the receipt of target refresh requests from the served user?	Clause 5.4.3.2, fourth numbered list	m	
14.5	handling of the 1xx and 2xx responses to target refresh requests?	Clause 5.4.3.2, fifth numbered list	m	
15	handling of requests terminated by the served user?	Clause 5.4.3.3	m	
15.1	handling of the receipt of initial requests for a dialog or a standalone transaction for the served user?	Clause 5.4.3.3, first numbered list	m	
15.2	handling of the responses (or the absence of responses) to initial requests?	Clause 5.4.3.3, third and fourth numbered list	m	
15.3	handling of the receipt of initial requests for a dialog or a standalone transaction for an unregistered user?	Clause 5.4.3.3, second numbered list	m	
15.4	handling of the receipt of target refresh requests for the served user?	Clause 5.4.3.3, fifth numbered list	m	
15.5	handling of the 1xx and 2xx responses to target refresh requests?	Clause 5.4.3.3, sixth numbered list	m	
15.6	handling of the receipt of subsequent requests (other than target refresh) for the served user?	Clause 5.4.3.3, seventh numbered list	m	
15.7	handling of the 1xx and 2xx responses to subsequent requests?	Clause 5.4.3.3	m	
16	encoding of the original dialog identifier?	Clause 5.4.3.4	m	
17.1	additional requirements for INVITE requests from the served user?	Clause 5.4.4.1	m	
17.2	additional requirements for INVITE requests for the served user?	Clause 5.4.4.1	m	
17.2.1	application of periodic session refreshment on receipt of INVITE requests?	Clause 5.4.4.1	o	
17.2.2	examination of the contents of the SDP offer within the INVITE requests for the served user?	Clause 5.4.4.1	o	
17.2.2.1	on detection of an unsupported IP address type (clause 5.4.4.1)…			
17.2.2.1.1	rejection of the requests with a305 response towards the I-CSCF?	Clause 5.4.4.1, first -	c.1	
17.2.2.1.2	acceptance and forwarding of the request towards the IBCF?	Clause 5.4.4.1, second -	c.1	
18.1	additional requirements for subsequent requests (UE-originating case)?	Clause 5.4.4.2.1	m	
18.1.1	insertion of previously saved values into the **P-Charging-Vector header** and **P-Charging-Function-Addresses header** of requests and responses (other than ACK and CANCEL)?	Clause 5.4.4.2.1, third paragraph	o	
18.2	additional requirements for subsequent requests	Clause 5.4.4.2.2	m	

Item	Major capability: Does the implementation support...	Reference	Status	Support
	for the served user (UE-terminating case)?			
18.2.1	insertion of previously saved values into the **P-Charging-Vector header** and **P-Charging-Function-Addresses header** of requests and responses (other than ACK and CANCEL)?	Clause 5.4.4.2.2, third paragraph	o	
19.1	S-CSCF initiated call release?	Clause 5.4.5.1	m	
19.2	call release initiated by other entities?	Clause 5.4.5.2	m	
19.3	call release due to session expiry?	Clause 5.4.5.3	m	
20.1	additional requirements for ReINVITE and UPDATE requests (UE-originating case)?	Clause 5.4.6.1.2	m	
20.2	additional requirements for ReINVITE and UPDATE requests for the served user (UE-terminating case)?	Clause 5.4.6.1.3	m	
21	GRUU management?	Clause 5.4.7A	m	
21.1	public GRUUs?	Clause 5.4.7A.2	m	
21.2	temporary GRUUs?	Clause 5.4.7A.3	m	
21.2.1	temporary GRUUs without the need for extra states?	Clause 5.4.7A.3	o.4	
21.2.2	stateful representation of temporary GRUUs?	Clause 5.4.7A.3	o.4	
22	emergency services?	Clause 5.4.8	m	
S-CSCF specific application usage of SDP (clause 6.3)				
23.1	handling of requests including SDP offers?	Clause 6.3	m	
23.1.1	rejection of requests including encrypted SDP offers?	Clause 6.3, first paragraph	o	
23.2	handling of responses (other than 200OK) including SDP offers?	Clause 6.2, second paragraph	m	
23.2.1	rejection of requests following non-200OK responses including encrypted SDP offers?	Clause 6.3, second paragraph	o	
23.3	handling of 200OK responses including SDP offers?	Clause 6.2, third paragraph	m	
23.3.1	session termination on receipt of encrypted SDP offers in 200OK responses?	Clause 6.2, third paragraph	o	
CPC parameter definition (Annex J)				
24	procedures at the S-CSCF at the terminating network	Clause J.9A	m	
Additional procedures in support of UE managed NAT traversal (Annex K)				
25.1	additional procedures to initial registration and user-initiated re-registration using unprotected REGISTER for UE managed NAT traversal?	Clauses 5.4.1.2.1, K.2.3.2.1	m	
25.2	additional procedures to initial registration and user-initiated re-registration using protected REGISTER for UE managed NAT traversal?	Clauses 5.4.1.2.2, K.2.3.2.2	m	
26	additional procedures to handling requests terminated by the served user for UE managed NAT traversal?	Clauses 5.4.3.3, K.2.3.3	m	
SIP digest (Annex L)				
27.1	additional procedures to initial registration and user-initiated re-registration using unprotected REGISTER for SIP digest?	Clauses 5.4.1.2.1, L.2.3.1.1 and L.2.3.1.3	m	
27.2	additional procedures to initial registration and user-initiated re-registration using protected REGISTER for SIP digest?	Clauses 5.4.1.2.2, L.2.3.1.2 and L.2.3.1.3	m	
28	additional procedures to User-initiated deregistration for SIP digest?	Clauses 5.4.1.4, L.2.3.2	m	
29	additional procedures to handling of the receipt of UE-initiated requests (other than REGISTER) for SIP digest?	Clauses 5.4.3, L.2.3.4	o	
29.1	In case of mismatch of the received with the registered public user identity (Clause L.2.3.4.1 2) …			
29.1.1	reject the request with a 400 response?	Clause L.2.3.4.1 2) option before "or"	c.2	
29.1.2	silently discard the request?	Clause L.2.3.4.1 2) option after "or"	c.2	

Item	Major capability: Does the implementation support...	Reference	Status	Support
NOTE:	The S-CSCF shall provide the UA role when acting as registrar or notifier of event information, when providing a messaging mechanism by sending the MESSAGE method and when performing S-CSCF initiated dialog release.			
o.n	At least one of these capabilities shall be supported.			
c.1	o.3, if A.6/17.2.2 is supported, else n/a			

A.5.4.2 S-CSCF header handling

Table A.7: S-CSCF Header Handling

Item	Header handling: Does the implementation support...	Reference	Status	Support
1	the **Path header** in REGISTER request and related 200OK response messages?	Clause 5.4.1.1	m	
2	the **Service-Route header** in 200OK response messages to REGISTER requests?	Clause 5.4.1.1	m	

A.5.5 IBCF Role

The tables provided in this clause need only to be completed for IBCF implementations, where item A.2/4 above is supported.

A.5.5.1 IBCF Capabilities

Table A.8: IBCF Capabilities

Item	Major capability: Does the implementation support...	Reference	Status	Support
General Capabilities (clause 4)				
1.1	the proxy role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.10	m	
1.2	the proxy role with IMS related exceptions and additional capabilities to SDP?	Clauses 4.1, 6.7	m	
2	provision of application level gateway functionality?	Clause 4.1	o	
3	provision of screening functionality?	Clause 4.1	o	
4.1	the UA role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.10	c.1	
4.2	the UA role with IMS related exceptions and additional capabilities to SDP?	Clauses 4.1, 6.7	c.1	
5.1	the loose routeing policy?	Clause 4.3, RFC 3261 [2]	m	
5.2	interoperability with strict routers?	Clause 4.3, RFC 3261 [2] and clauses 12.2.1.1, 16.4	m	
IBCF specific application usage of SIP (clause 5.10)				
6	procedures that apply on receipt of a REGISTER request when acting as exit point?	Clause 5.10.2.1	m	
7	procedures that apply on receipt of a initial requests (other than REGISTER) when acting as exit point?	Clause 5.10.2.2	m	
7.1	application of periodic session refreshment on receipt of INVITE requests when acting as exit point?	Clause 5.10.2.2	o	
8	procedures that apply on receipt of a subsequent requests (other than REGISTER) when acting as exit point?	Clause 5.10.2.3	m	
9.1	provision of transport plane control functionality?	Clauses 5.10.2.4, 5.10.3.4	o	

Item	Major capability: Does the implementation support...	Reference	Status	Support
9.2	IBCF-initiated call release in case of receipt of an indication of a transport plane related error?	Clauses 5.10.2.4, 5.10.3.4	o	
10	procedures that apply on receipt of a REGISTER request when acting as entry point?	Clause 5.10.3.1	m	
11	procedures that apply on receipt of a initial requests (other than REGISTER) when acting as entry point?	Clause 5.10.3.2	m	
11.1	application of periodic session refreshment on receipt of INVITE requests when acting as entry point?	Clause 5.10.3.2	o	
12	procedures that apply on receipt of a subsequent requests (other than REGISTER) when acting as entry point) when acting as entry point?	Clause 5.10.2.3	m	
13	procedures for network topology hiding?	Clause 5.10.4	m	
13.1	inclusion of a direction identifier to the SIP **URI**?	Clauses 5.10.4.1, 5.102.1 and 5.10.3.1	o	
13.2	encryption for network topology hiding?	Clause 5.10.4.2	m	
13.3	decryption for network topology hiding?	Clause 5.10.4.3	m	
14	IMS-ALG functionality?	Clauses 5.10.5, 6.7	o	
15.1	B2BUA functionality when performing screening of the SIP signalling?	Clauses 5.10.6.1, 5.10.5	o	
15.2	omission or modification of received **SIP headers** prior to forwarding SIP messages? (see note)	Clause 5.10.6.2	o	
15.3	omission or modification of received SDP bodies prior to forwarding SIP messages?	Clause 5.10.6.3	o	
NOTE: The modification of the following headers is discouraged by ES 283 003 [1]: **Authorization**, **WWW-Authenticate**, **Path** and **Service-Route headers**.				

A.5.6 E-CSCF Role

The tables provided in this clause need only to be completed for E-CSCF implementations, where item A.2/5 above is supported.

A.5.6.1 E-CSCF Capabilities

Table A.9: E-CSCF Capabilities

Item	Major capability: Does the implementation support...	Reference	Status	Support
General Capabilities (clause 4)				
1.1	the proxy role with IMS related exceptions and additional capabilities to SIP?	Clauses 4.1, 5.11	m	
1.2	the UA role when providing server functionality to return a final response?	Clause 4.1	o	
2.1	the loose routeing policy?	Clause 4.3, RFC 3261 [2]	m	
2.2	interoperability with strict routers?	Clause 4.3, RFC 3261 [2] and clauses 12.2.1.1, 16.4	m	
E-CSCF specific application usage of SIP (clause 5.11)				
3.1	acceptance and onwards routeing of requests for emergency services?	Clause 5.11.2	m	
3.2	rejection and onwards routeing of requests for non-emergency services? (see note)	Clause 5.11.2	m	
3.3	insertion of previously saved values into the **P-Charging-Vector** and **P-Charging-Function header** of requests and responses (other than CANCEL and ACK) to be forwarded?	Clause 5.11.2	o	
3.4	application of periodic session refreshment on receipt of INVITE requests?	Clause 5.11.2	o	
NOTE: Request for emergency services contain an URN with a top-level service type of "sos".				

History

Document history		
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